Alfred Bader Writing - Talks by Bader [Publicity for talks by Alfred Bader]

MINISTERIO DE CULTURA

EL DIRECTOR DEL MUSEO DEL PRADO

Se complace en invitarle a la conferencia que sobre el tema

"La Química y el Arte"

pronunciará el Dr. ALFRED BADER, de la Queen's University de Kingston, Canadá.

el Viernes 6 de Junio, a las 19,30 horas.

Museo del Prado
Sala Juan de Villanueva
Entrada por la puerta de Velázquez

Madrid, 1986

La conferencia se pronunciará en inglés con traducción simultanea.

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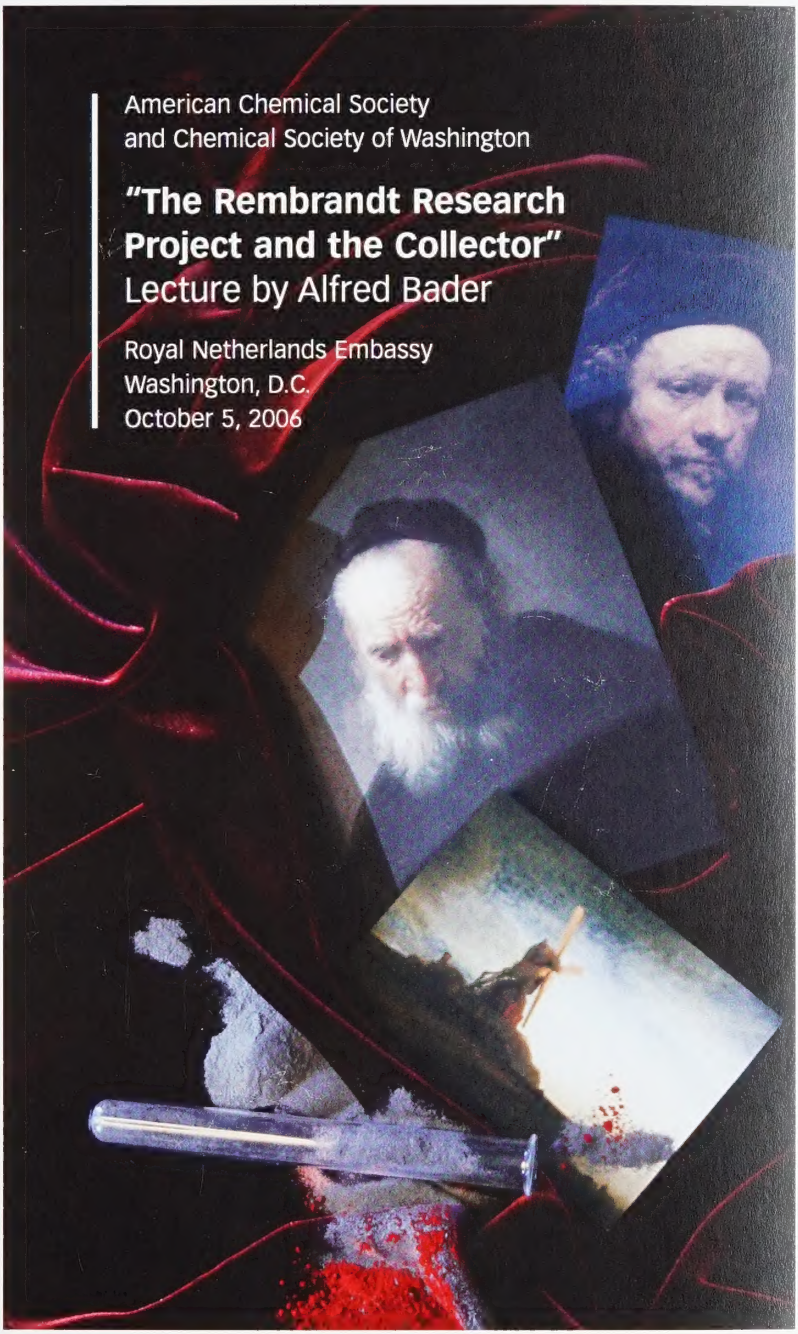

American Chemical Society
and Chemical Society of Washington
"The Rembrandt Research Project and the Collector"
Lecture by Alfred Bader
Royal Netherlands Embassy
Washington, D.C.
October 5, 2006

Rembrandt

Reception

Welcome

René van Hell
Head of the Economic Department
Minister, Royal Netherlands Embassy

Edwin D. Becker
President, Chemical Society of Washington

Introduction of Alfred Bader

Arthur Wheelock
Curator of Northern Baroque Painting
National Gallery of Art

Lecture

"The Rembrandt Research Project and the Collector"
Alfred Bader

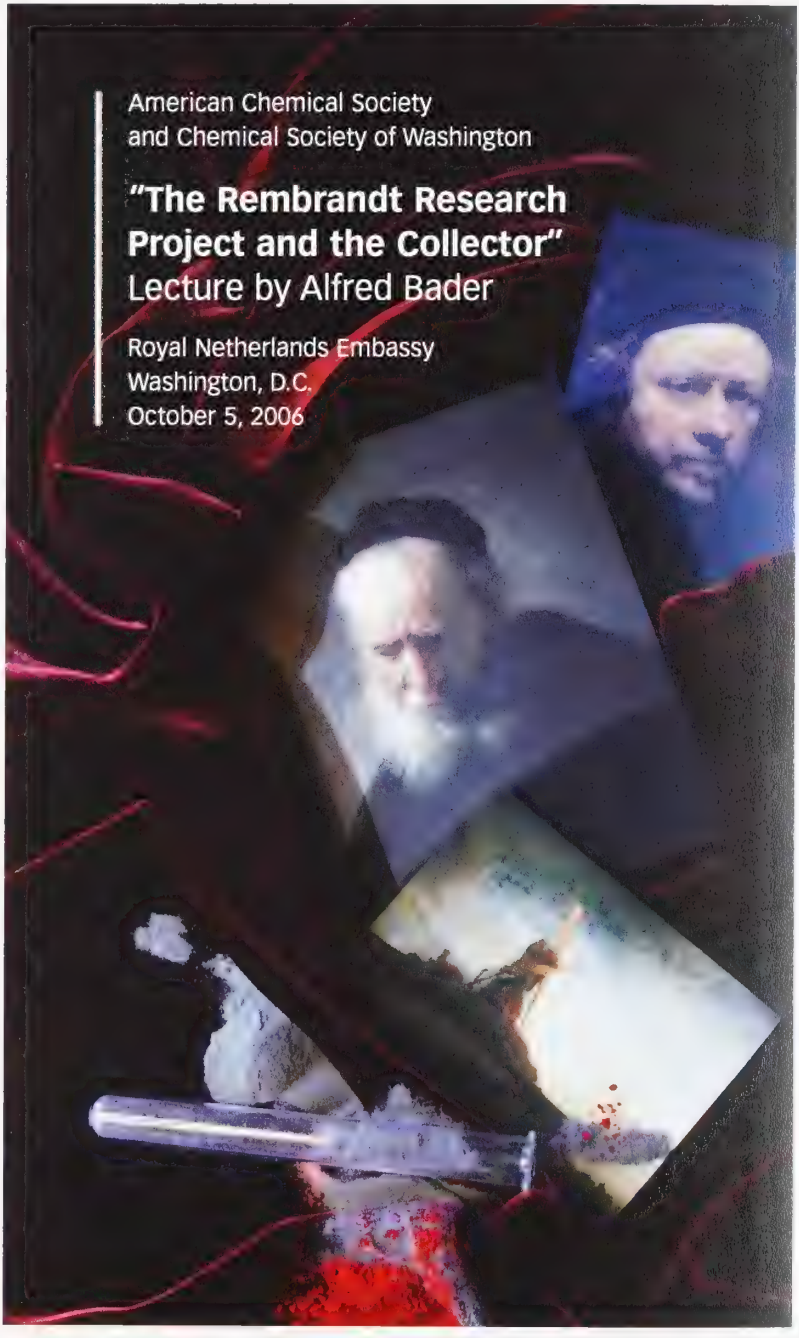
Closing Remarks

Madeleine Jacobs
Executive Director and CEO
American Chemical Society

Special thanks to the Royal Netherlands Embassy for graciously providing their beautiful space for this evening's reception and lecture.

1155 Sixteenth Street, NW
Washington, DC 20036

www.chemistry.org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BADER LECTURES ON REMBRANDT

Cofounder of ALDRICH CHEMICAL has a 'fierce' reputation in the art world

ALFRED BADER was working on a Ph.D. in stry at Harvard University in the late when he learned about Rembrandt. lashed to a lecture about the Dutch r, his adviser asked, "Have you made mind about being a chemist or an

y years later, I still haven't de he told a crowd at the Royal Neth s Embassy, in Washington, D.C.

r cofounded Aldrich Chemical. ater became Sigma-Aldrich, the largest supplier of research chemi ne way this self-proclaimed "chem ctor" combined his passions for art mistry was to put paintings from ction on the company's catalog

e preceding two days, Bader had about chemical history and given young scientists at the University and, College Park, and the Na nstitutes of Health. He shared his se in art as he spoke

about the Rembrandt Research Project, an ongoing effort with the goal of determining once and for all —which paintings were painted by Rembrandt himself and which could be attributed to others. Rembrandt was born 400 years ago this year.

GOING DUTCH

Bader is accomplished in the chemistry community, and "his reputation in the art world is fierce," said Arthur K. Wheelock Jr., curator of northern baroque painting at the National Gallery of Art in Washington, D.C., as he introduced Bader.

The American Chemical Society and the Chemical Society of Washington sponsored the event. In closing remarks, Madeleine Jacobs, ACS executive director and chief executive officer, thanked Bader and his wife, Isabel, for their contributions to science, art, and culture and for their generous support of ACS awards and scholarships.—RACHEL PETKEWICH

GRADUATE STUDENT POSTER COMPETITION

GRADUATE STUDENTS are invited to submit abstracts for poster presentations national meeting in Chicago, , on topics addressing stry of biorenewable materials particularly those relating to sed and natural product biomass ions for biofuel and biomateri lards and metrology, storage and rtation, and by-products.

bmitted posters will be des "Best of Biorenewables Student t the ACS meeting. Students will rtificates to acknowledge their plishments. Top posters will be se by an advisory group of prominent Brazilian chemists working in the f biorenewable materials and fuels. dent with the best poster presented o will be invited to participate in June 2007 visit to top research labs zil and a joint presidential sympo innual meeting of the Brazilian ical Society. Brazil is recognized as a ler in developing biorenewable ls and fuels. Travel, accommoda l expenses in Brazil will led by ACS through a Discovery Fellowship grant from the National undation.

oster session content also dered for presentation in Web ations for U.S. and Brazilian audi ributions are invited pertaining es research related to five areas:

- d feedstocks: Crops contain nts of sugars and starches— ane, corn, and wheat—can ass feedstocks. These feed be thermochemically and bio rted to biofuel and bio Posters are invited that explore nce yields by manipulating the erties of crops.

- Natural product feedstocks: Most cur gies allow for the production from grain-based feedstocks, hnologies are being developed the production of biofuels materials from nonfood plants ain cellulose. Posters are invited how to expand the range of cks (including wood, switch grass, dues, and municipal and

THE INSTITUTE FOR THE HISTORY & PHILOSOPHY OF SCIENCE & TECHNOLOGY

PRESENTS

ALFRED BADER

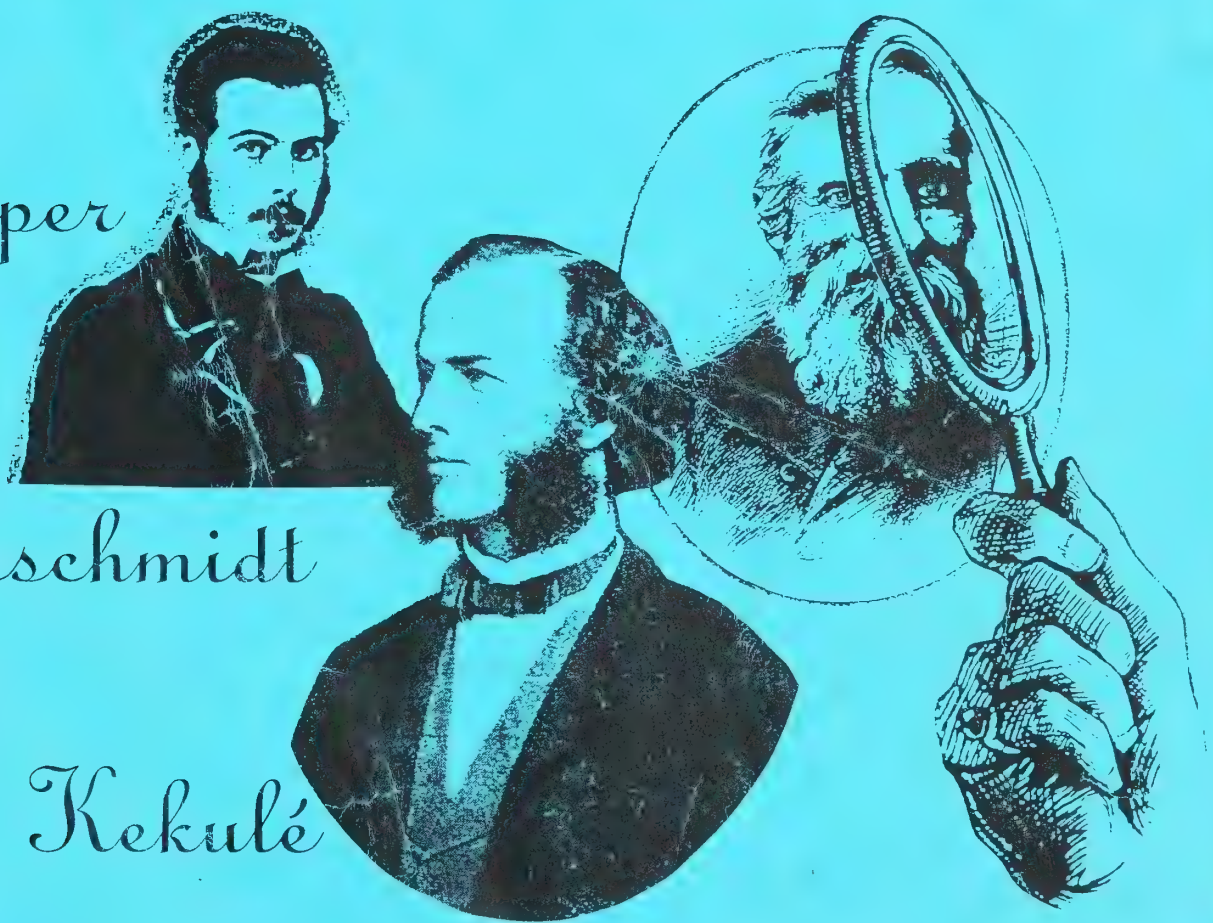
FOUNDER, ALDRICH CHEMICAL COMPANY

A Detective at Work:

Couper

Loschmidt

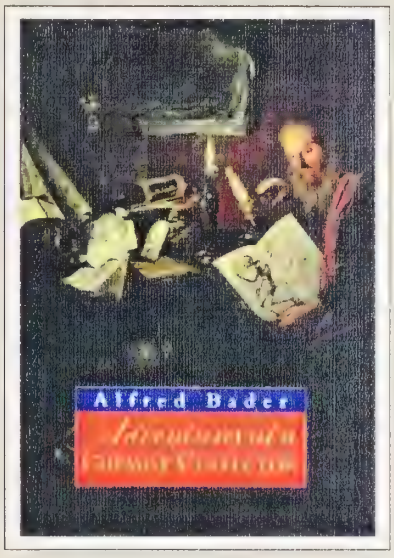
and Kekulé



WEDNESDAY, OCTOBER 29, 1997 AT 4:00 P.M.
ROOM 323 OLD VICTORIA COLLEGE, 91 CHARLES ST. W.
UNIVERSITY OF TORONTO

Featured Guest:

Dr. Alfred Bader



on the

University Roundtable

WUWM-FM 89.7

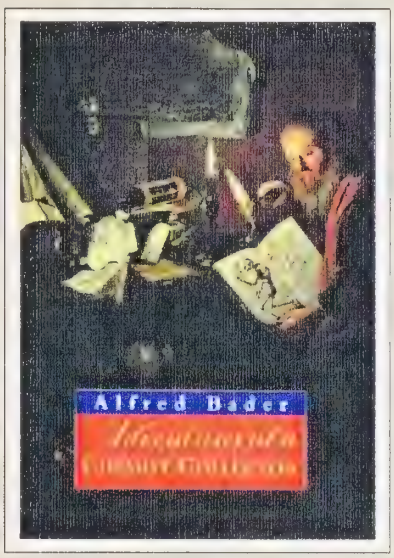
Thursday, December 12, 1996
at 10:30 a.m.

Sunday, December 15, 1996
at 6:30 a.m.

with
Dean Marshall Goodman

Featured Guest:

Dr. Alfred Bader



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at 6:30 a.m.

with
Dean Marshall Goodman

Subject: Rembrandt and the Jews
From: Institute for Jewish Literacy <rabbimendel@milwaukeechabad.com>
Date: Thu, 27 Apr 2006 17:39:45 -0400 (EDT)
To: baderfa@execpc.com

The Bible Through Dutch Eyes

Rembrandt and the Jews

Lecture by Dr. Alfred Bader

THE DETECTIVE'S EYE
INVESTIGATING THE OLD MASTERS

Milwaukee Art Museum
750 North Lincoln Memorial Drive, Milwaukee, Wisconsin 53202
414.271.9508

Exhibition continues through March 19, 1989.

Gallery Talk
Tuesday, January 24
1:30 p.m., Journal/Lubar Galleries
by James Mundy, Chief Curator

Panel Discussion
Thursday, February 9
6:15 p.m., Multi-Media Theater

Panel
Dr. Alfred Bader, Guest Curator of Exhibition
Charles Munch, Paintings Conservator
Martha Wolff, Curator of European Paintings,
Art Institute of Chicago

Moderator
James Mundy, Chief Curator, Milwaukee Art Museum

Sponsored by the Fine Arts Society

Cover: Reinier Nooms (called Zeeman), *Ships in the Amsterdam Harbor*, circa 1623-1667, with magnified detail of artist's signature.
Gift of Elisabeth Plankinton Mackintosh

The Board of Trustees
of the Milwaukee Art Museum
cordially invites you to attend
the members' opening reception for

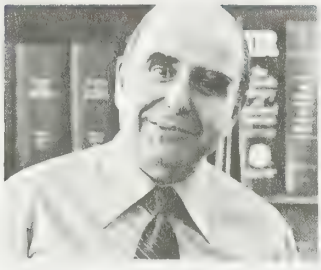
THE DETECTIVE'S EYE INVESTIGATING THE OLD MASTERS

Thursday, January 19

Exhibition Opens
5:30 p.m. - Journal/Lubar Galleries

Lecture
6:15 p.m. - Memorial Hall, War Memorial
by John M. Brealey, Chairman, Paintings Conservation,
The Metropolitan Museum of Art, New York, New York

Please bring this invitation or membership card for admittance.



Post: Sept. 24, 1984
Remove: October 8, 1984

SIGMA XI
THE SCIENTIFIC RESEARCH SOCIETY OF NORTH AMERICA
ROCHE RESEARCH CHAPTER
340 KINGSLAND STREET, NUTLEY, NEW JERSEY 07110

OCTOBER 1984 PROGRAM

The Pennington Club
181 Pennington Avenue
Passaic, N.J.

"CHEMISTRY IN ART"

Dr. Alfred Bader
Chairman, Aldrich Chemical Co., Inc.

Wednesday, October 10, 1984

Cocktails:	5:30 p.m.	- Reservations Required
Dinner:	7:00 p.m.	- " "
* Lecture:	6:00 p.m.	- Reservations NOT Required
Price:	$ 8.00	- Sigma Xi Members & Family
	$10.00	- Non-members & Guests

Dr. Bader is well known for his research on and restoration of paintings of 17th century Dutch Masters. He has acquired an extensive private collection of paintings and has donated numerous paintings to major art institutions. His efforts to identify and restore paintings of the 17th century Dutch masters have brought him worldwide acclaim.

Dr. Bader received his Ph.D. from Harvard University and has authored and co-authored 24 scientific publications and 27 patents. His leadership at Aldrich Chemical Co., where he has progressed from Chief Chemist to President and Chairman, has resulted in the formation of one of the nation's largest chemical manufacturing and vending corporations which now holds 30 to 40% of the market for research and specialty chemicals.

Dr. Bader will discuss the criteria for evaluating antique paintings and techniques for their restoration. The lecture will be illustrated with specific examples. Anyone having old paintings about which they would like advice regarding identification and restoration are encouraged to bring them for evaluation by Dr. Bader.

DINNER RESERVATION FORM

A special menu will be provided by the Pennington Club.

Please make ( ) reservation(s) for the Sigma Xi Dinner on Wednesday, October 10, 1984. Make checks payable to Hoffmann-La Roche Inc. Send reservation form to Sandy DiGiacomo, Bldg. 76, no later than Friday, October 5, 1984.

NO TELEPHONE CALLS ACCEPTED

List Guest(s) Name _____

Name _____

Bldg. No. _____ Ext. _____ Floor _____

* PLEASE NOTE CHANGE IN TIME SCHEDULE FOR LECTURE AND DINNER.

New York University
A private university in the public service

Institute of Fine Arts

1 East 78th Street
New York, N.Y. 10021
Telephone: (212) 772-5800

Alfred – this is an invitation I have sent to junior and senior colleagues and friends. I am looking forward to seeing you both and hearing Jr Egbert

Dr. Alfred Bader

Chairman of Sigma Aldrich Chemical Company Inc., Milwaukee

"CHEMISTRY IN ART"

January 14, 1985
4:00 p.m.
Lecture Hall, Institute of Fine Arts, One East 78th St.

As chemist and avid collector of paintings, Dr. Bader will speak about his experiences in judging and investigating works of art, particularly paintings. The lecture includes a large number of examples where information was revealed, damages were restored, and authorship was established by means of the chemist's - and physicist's - tools. These cases came to Dr. Bader's attention during his many years as chemist-collector.

An impressive selection of Dutch paintings from the collection of Dr. and Mrs. Bader is at present on view at Queen's University in Kingston, Ontario ("The Age of Rembrandt" with an extensive and well illustrated catalogue).

This lecture should be of interest to students and faculty both in conservation and in history of art.

Tea will follow.

COME ONE AND ALL!

The Art History Committee

presents

The Adventures of a Chemist Collector

a talk by

ALFRED BADER

Chemist and Chairman Emeritus of
Sigma Aldrich Corporation

Thursday, February 6
5:00 p.m.
D248 Porter College

remove 2/7/92

London Jewish Cultural Centre

Monday 4 December, 7.30pm | Tickets £8 (£5 concession)
The Bible Through Dutch Eyes: Rembrandt and the Jews With Alfred Bader

To mark the 400th 'Birthday' anniversary of Rembrandt

"I am an inveterate collector. It may be a sickness, and it began with stamps at eight, drawings at 10, paintings at 20, and rare chemicals at 30."
- Alfred Bader

Alfred Bader's love affair with fine art began during the difficult pre-World War II years, when, as a young boy in Austria, he began collecting stamps.: *" hoping to earn a little money, most of which I used to buy basic foods."* Given money to purchase a camera for his tenth birthday, he bought an Old Master drawing instead, which he has since donated to the Minneapolis Institute of Art.

Bader was interned with other "enemy aliens" in a Canadian POW camp, where he bought his first oil painting, a portrait of himself painted by a fellow prisoner, for the price of one dollar. This early appreciation for fine art became a life's mission, including years of devotion to the study of art history with preeminent experts, art dealers, collectors, and historians of Old Master paintings. *Alfred Bader Fine Arts* has earned an international reputation, selling to such esteemed museums as the Rijksmuseum in Amsterdam, the National Gallery of Scotland, and the Getty. Bader has curated special exhibits, become a renowned lecturer, and was named a fellow of the Royal Society of Arts in London.

020 8457 5000 | admin@ljcc.org.uk | www.ljcc.org.uk
Ivy House, 94-96 North End Road, London, NW11 7SX

WISCONSIN ACADEMY OF SCIENCES, ARTS AND LETTERS

The Rembrandt Research Project and the Collector

Detail from *The Artist's Father* by Rembrandt Harmensz van Rijn, from collection of Alfred Bader

DR. ALFRED BADER

ELVEHJEM MUSEUM OF ART
MADISON, WISCONSIN
SEPTEMBER 25, 1996

Lecturer's Biography

DR. ALFRED BADER, A WISCONSIN ACADEMY FELLOW, WAS BORN IN VIENNA, AUSTRIA. HE COMPLETED DEGREES AT QUEEN'S UNIVERSITY IN KINGSTON, ONTARIO, AND RECEIVED HIS M.A. AND PH.D. AT HARVARD UNIVERSITY. HE HAS RECEIVED HONORARY DEGREES FROM THE UNIVERSITY OF WISCONSIN-MILWAUKEE, UNIVERSITY OF WISCONSIN-MADISON, PURDUE UNIVERSITY, QUEEN'S UNIVERSITY, UNIVERSITY OF SUSSEX, AND NORTHWESTERN UNIVERSITY. HE WAS A RESEARCH CHEMIST AND ORGANIC GROUP LEADER AT PITTSBURGH PLATE GLASS COMPANY, A CHIEF CHEMIST AND PRESIDENT OF ALDRICH CHEMICAL COMPANY, AND PRESIDENT OF SIGMA ALDRICH CORPORATION. AN AMERICAN CHEMICAL SOCIETY AWARD WINNER IN 1971, HE IS ALSO A FELLOW OF THE ROYAL SOCIETY OF ARTS, A WINNER OF THE WINTHROP-SEARS MEDAL, AND THE ENGINEERS AND SCIENTISTS OF MILWAUKEE'S ENGINEER OF THE YEAR. DR. BADER IS A MEMBER OF THE AMERICAN CHEMICAL SOCIETY AND THE CHEMICAL SOCIETY OF LONDON. AMONG HIS CREDITS IS AN EXTENSIVE LIST OF PATENTS AND PUBLICATIONS RELEVANT TO HIS FIELD. HE HAS LECTURED WIDELY ON OLD MASTER PAINTINGS AND WAS GUEST CURATOR OF OLD MASTER EXHIBITIONS AT THE MILWAUKEE ART MUSEUM IN 1976 AND 1989.

Program

WELCOME

ODY J. FISH

PRESIDENT

WISCONSIN ACADEMY OF SCIENCES, ARTS AND LETTERS

INTRODUCTION

RUSSELL PANCZENKO

DIRECTOR

ELVEHJEM MUSEUM OF ART

LECTURE

DR. ALFRED BADER

THE REMBRANDT RESEARCH PROJECT AND THE COLLECTOR

Lecturer's Notes

DURING THE LAST THIRTY YEARS, THE REMBRANDT RESEARCH PROJECT (RRP), MADE UP OF EMINENT REMBRANDT SCHOLARS, HAS BEEN EXAMINING PAINTINGS AROUND THE WORLD ATTRIBUTED TO REMBRANDT. THUS FAR, THEY HAVE SEEN ALL OF THE WORKS SUPPOSEDLY PAINTED BY THE ARTIST BETWEEN HIS EARLIEST DAYS IN LEIDEN IN THE 1620s AND THE PAINTING OF *THE NIGHT WATCH* IN AMSTERDAM IN 1642.

THE RRP HAS PUBLISHED THREE VOLUMES, GIVING THE PAINTINGS EXAMINED *A*, *B* AND *C* RATINGS—*A* FOR ACCEPTED, *B* IN DOUBT, AND *C* NOT BY REMBRANDT. DURING THE LAST TEN YEARS, THE SCHOLARS HAVE CHANGED THEIR MINDS ON SOME PAINTINGS, TRANSFERRING SOME *A* RATINGS INTO THE *C* CATEGORY AND AT LEAST ONE *C* RATING INTO THE *A* CATEGORY.

MANY BEAUTIFUL PAINTINGS PREVIOUSLY THOUGHT TO HAVE BEEN DONE BY REMBRANDT HIMSELF NOW HAVE *C* RATINGS, AND SOME OF THESE HAVE COME ON THE MARKET AND HAVE BEEN PURCHASED AT RELATIVELY LOW PRICES. THUS, THE RRP'S DECISIONS HAVE MADE WONDERFUL PAINTINGS AVAILABLE TO COLLECTORS AT AFFORDABLE PRICES.

SPONSORS

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WILLIAM WARTMANN APPRAISAL ASSOCIATES

WISCONSIN ACADEMY FOUNDATION

LECTURE SPONSORED BY WISCONSIN ACADEMY OF SCIENCES, ARTS AND LETTERS

The Rembrandt Research Project and the Collector

Detail from *The Artist's Father* by Rembrandt Harmensz van Rijn, from collection of Alfred Bader.

DR. ALFRED BADER

4:30 PM · WEDNESDAY · SEPTEMBER 25, 1996

ELVEHJEM MUSEUM OF ART · ROOM 160 · 800 UNIVERSITY AVENUE · MADISON

RSVP (608) 263-1692

Department of Chemistry and Biochemistry
University of South Carolina

Presents:

Alfred Bader

Adventures of a Chemist Collector

History of the Aldrich Chemical Company (4:00 PM)

Richard Anschütz, Archibald Scott Couper and Jose Loschmidt: A Detective at Work (8:00 PM)

Biographical Sketch: Born in Vienna, Alfred Bader fled to England at the age of fourteen, ten months before the outbreak of World War II. Although a Jewish refugee from the Nazis, he was interned in 1940, along with other 'enemy aliens', and sent to a Canadian prisoner-of-war camp. Today, Bader is one of the most respected men in his field. In 1941, he was accepted at Queen's University in Kingston, Ontario where he studied engineering chemistry. There followed a fellowship in organic chemistry at Harvard. He worked in Milwaukee as a research chemist for the Pittsburgh Plate Glass Company and in 1951 co-founded Aldrich, which today, as Sigma-Aldrich, is the world's largest supplier of research chemicals. He spent forty years building Aldrich's distinctive reputation, and the extraordinary story of how he was eventually thrown off the board of Sigma-Aldrich will be of key interest to people in the chemical industry worldwide, as well as to students of business. After leaving Sigma-Aldrich, he continued a fruitful career as an art collector and dealer, and he has some very pertinent and amusing things to say about his experiences in the art world. Alfred Bader and his family have earned a reputation as generous benefactors, notably in the fields of chemistry, education and Jewish interests. Bader's personal philanthropy has been particularly directed towards helping students of chemistry and art history.

Wednesday, September 15, 1999
Physical Sciences Center, 006
(Refreshments served 15 minutes before 4:00 PM seminar)

New ammunition for the fight against genetic diseases

NOW IT'S AN 800 MHz NMR

Following the report in the Autumn issue of *Chem@Cam*, which announced a new 400 MHz NMR that Professor Ley's group has acquired, we now have news than another leading-edge machine has become available – an 800 MHz NMR. The machine was acquired for Professor Alan Fersht's group in collaboration with the Laboratory of Molecular Biology, where the machine is located. The dept already has a share in the national 800 MHz instrument based in Biochemistry, and under the capable guidance of Peter Grice and Nick Bampos it began to produce exciting spectra in November.

'Last year we got a 600 MHz, and we also have two 500 MHz machines, all equipped to the highest standard. And now this – which must surely make Chemistry at Cambridge the densest source of MHz in existence!' quipped Alan to our reporter.

SHANKAR WINS GLAXO WELLCOME AWARD

Four Glaxo Wellcome Awards for Innovative Organic Chemistry are made each year and among the 1998 winners was Dr Shankar Balasubramanian. His work on combinatorial chemistry, nucleic acids and DNA polymerases was featured in the previous issue of *Chem@Cam*, and it has now earned him a 'no strings attached' cheque for £5,000 to support his research. Nominations are made by people working in the Glaxo Wellcome group and then voted for by all chemists working for the company. Speaking to our reporter, Shankar said: 'I am very pleased to be a recipient of this award from Glaxo Wellcome, and share the credit with my colleagues. The money will be used towards supporting numerous research activities in our group.' [The other winners of the 1998 Glaxo Wellcome Awards are based in Manchester: Drs Jonathan Clayden and Tim Donohoe, of Manchester University, and Dr Barry Lygo of Salford University.]

SCIENCE WRITER WINS JOHN JEYES AWARD

The Royal Society of Chemistry has chosen the dept's science writer in residence, Dr John Emsley, to be the next John Jeyes Lecturer for the Millennium session (1999/2000). The award carries with it a silver medal and an honorarium of £500 and was made for John's contributions to the environmental debate, and his consistent portrayal of the beneficial aspects of modern chemistry.

The award was set up by John Jeyes of Thetford in Norfolk who, in the last century, pioneered the use of chemicals as disinfectants. He founded the world-renowned company that still bears his name, and which today specialises in horticultural products.

John will deliver his lecture at a half-day symposium 'Communicating Chemistry: Cracking the Barrier' on Monday 1 February, to he held at the Scientific Societies' Lecture Theatre in London, along with Professor Peter Atkins, of Oxford, who had been nominated the Nyholm Lecturer for 1999/2000. John's talk is entitled 'False alarms: a closer look at some environmental scares', Peter's talk is 'The book, the disc and the future'.

Distinguished Visitor – 1

ALFRED BADER'S CHRISTMAS LECTURE

On 30 November Dr Alfred Bader CBE gave his talk 'Credit where credit is due: Kekulé, Couper and Anschütz' to a large audience in Lecture Theatre 3, at the end of which he gave away reproductions of famous paintings, copies of *Aldrichimica Acta*, the journal he started as founder of the Aldrich Chemical Company, and he also signed copies of his famous autobiography, *Adventures of a Chemist Collector.*

His talk was based on his historical researches into exactly who first put forward the idea of molecules having structures and especially the cyclic nature of the benzene molecule, which as every

Dave King congratulates Alfred Bader

schoolchild knows, was literally dreamt up by the great German chemist, Kekulé, as he dozed in front of the fire, or on the top of a London bus in the 1860s. Not so said Alfred; the two men who should get the credit for suggesting molecules were three-dimensional with definite structures were a Scot, Archibald Scott Couper and an Austrian, Josef Loschmidt.

For an hour Alfred had his audience spellbound as he recounted the twists and turns in the detective story that finally led him to the truth, that in 1861 Loschmidt, a Viennese school teacher, had published a book in which he had put forward scores of correct structural formulas, including aromatic rings, double bonds (with cis and trans isomers), triple bonds, and heterocycles, that are perfectly in line with structures that we recognise today. Although Kekulé never admitted to seeing the book, Alfred was able to prove that he had consulted it. Loschmidt was the chemist who got it all right, but then went on to make his name in physics as the man who first calculated the number of molecules in a mole, the Loschmidt-Avogadro number.

Credit where credit is due: the 1998 dept Christmas lecture really was a great gift.

It's even better than recycling it as waste paper...

If you take your *Chem@Cam* home to read, why not bring it back the next day and leave it in the foyer for someone else to take.

Remember: every little helps the war effort!

was back talking about the three arrangements that he thought would be most interesting. He then set about calculating their structures and energy using localised bond density functions of his own devising, and which he found gave much better results. The work was published with Prof. Handy in *J. Chem. Soc. Faraday Transactions* (1996, 92, 3015) and much of this remarkable paper was written by Garnet himself.

Having completed his BA, Garnet then embarked on his PhD at an age when most of his contemporaries were just starting their first degree. Within a few months he and Handy were in print again, reporting this time in *J. Chem. Phys.* (1997, 107, 1536). But such was the pace of Garnet's work, that when he next came up with work worth publishing, Prof. Handy declined to add his name on the paper on the grounds that he had had no input. To date Garnet has had seven papers published and has several more planned.

Interviewed by our reporter, Professor Handy praised Garnet's work, and spoke of his future in chemistry: 'I can see a bright future for him in theoretical chemistry, and a career that will surely lead to his becoming a professor. The question is: where is that likely to be?'

£58,000 TO MODEL KEY REACTION STEPS

Dr Michiel Sprik, whose research into computational methods for modeling large molecules has won him international acclaim (see *Chem@Cam* no.3), has been awarded an EPSRC grant of £58,000 to look at activation of electronic states in molecular reactions. The aim is to develop methods based on density functional theory (DFT) that allow for the destabilization of electronic states enhancing the reactivity of a system.

'I am delighted to be have been awarded this money,' Michiel told our reporter, 'because recent developments in DFT have shown us how the intuitive concepts used by chemists to describe reactivity, can be translated into mathematically well-defined functionals.' Michiel will now be in a position to model rare reactive molecular encounters using ab initio methods that incorporate the new approach, and he has already found an enthusiastic collaborator, Rodolphe Vuilleumier, who will be starting work on the project in February.

Jeremy

Got problems? Then Jeremy Sanders may be the man to turn to.

NEW DEPUTY, NEW RESPONSIBILITIES

In 1997-98 Jeremy Sanders had a sabbatical year during which he published more than 20 papers on inorganic and organic chemistry. On the first of October he became the new Deputy Head of Dept, a role that is assuming much greater responsibility due to the increasing demands on the Head of Dept, Professor Dave King.

'Dave is doing a tremendous job in fund-raising for the Millennium Campaign, as is apparent from the success of the Unilever Centre' said Jeremy when he met our reporter, 'but other demands on the Head must not detract from these efforts, and this is where I come in.'

Jeremy now has overall responsibility for five areas: teaching; finance; support staff; internal communications; and future academic developments. The area of internal communications is a new initiative, aimed at improving links between the various sectors and will involve Jeremy attending some sector staff meetings. Jeremy was keen to stress that his new role does not affect the status of those already in charge of these areas, such as James Keeler, who organises undergraduate teaching, Howard Jones, who implements the dept's finance policy, and David Watson who looks after support staff.

One important area that he will have to deal with will be future academic developments: 'During 1999 I want to get a dept-wide debate going on whether the present structure of inorganic, organic, physical and theoretical is really the best way forward for the next century. Perhaps the time has come to sweep these old boundaries away and construct something new.'

Recently Jeremy has been heavily involved in the JIF exercise. 'If we can pull off a big grant from JIF then it will be a fitting reward for all the effort academic and support staff have put into our bid' he said. 'We have 78 support staff, such as technicians and secretaries, and their contribution to teaching, research and the smooth running of the dept is always not fully appreciated. I am keen to see improved recognition for those who make a bigger contribution than that demanded by their job description.'

And of course it will fall to Jeremy to get our submissions ready for the next Research Assessment Exercise which is already on the horizon.

CV Confidential Update Jeremy Sanders

(see also *Chem@Cam* issue no.1)

Research: now extending into atomic force microscopy and polymer beads. Jeremy's group comprises 5 PhD students and 8 post-docs.

Awards: RSC Pedler Medal 1996, which is the premier award for organic chemistry in the UK. (Previous dept recipients have been Steve Ley, Ralph Raphael, Alan Battersby and Lord Todd.)

Hobbies and sport: cooking 'it's the only practical chemistry I'm any good at.'

Contact: room M12; phone 01223-336-411; e-mail jkms@cam.ac.uk

THE SPIRO INSTITUTE
For the Study of Jewish History & Culture

The Old House
c/o King's College London
Kidderpore Avenue,
London NW3 7SZ
Telephone: 071–431 0345
Facsimile: 071–431 0361

The Bible Through Dutch Eyes

- A lecture by Alfred Bader PhD

One of the remarkable aspects of life in 17th century Holland was the study of Bible and the identification of the Dutch with the People of the Book. This was amply depicted by the artists of the time and especially by Rembrandt and his School. Dr Alfred Bader, who combines his interest in Bible studies and art, presents, with the help of slides, a fascinating review of the Bible in Dutch art in a manner appreciated both by those with a general interest as well as by the scholar.

Dr Bader, the owner of an important collection of paintings mainly of the period of Rembrandt and his pupils, is an internationally recognised authority on the paintings of the Bible. He has spoken extensively throughout North America and Europe as well as at the National Gallery, Oxford, Cambridge and many other universities.

Sun, 6th December, 8pm

Admission: £4 (Friends £3)

The world's Top 20 chemistry depts

USA AND JAPAN DOMINATE CHEMISTRY RESEARCH

In the Autumn edition of *Chem@Cam* we reported that the dept was ranked no. 5 in the world in terms of citations, based on a ten-year survey carried out for *Science Watch* the influential newsletter of the Institute for Scientific Information, of Philadelphia USA. Now the ISI has sent us a more extensive list of the best 200 depts, and the table below shows the top 20 ranked in order of the number of times that papers published by members of the dept have been cited in the past ten years. (The total number of papers published is also given.)

Rank	Department	Citations	Papers
1	California, Berkeley	61,144	3976
2	Kyoto	61,111	7483
3	Tokyo	60,975	7,004
4	Texas	53,814	4181
5	**Cambridge**	**51,630**	**4418**
6	Illinois	51,000	3845
7	MIT	49,079	2971
8	ETH, Zurich	47,662	4015
9	Tokyo Inst. Technol.	47,225	6347
10	Minnesota	46,656	3135
11	Osaka	45,245	6004
12	Harvard	44,746	2074
13	Caltech	40,685	1950
14	Tohoku	37,133	5243
15	Tech. Univ. Munich	36,330	3321
16	Stanford	36,279	2029
17	Cornell	35,269	2291
18	Wisconsin	34,356	3017
19	Purdue	33,484	2958
20	Hokkaido	32,946	3815

Other UK university chemistry depts to appear in the World Top 200 were Oxford (ranked no. 21), Imperial (45), Manchester (68), Bristol (84), Sussex (95), Leeds (116), Nottingham (118), Birmingham (135), Durham (143), UCL (146), Southampton (162), and Liverpool (168).

The highly-respected editor of *Science Watch*, Chris King, told our reporter "there are many ways of evaluating places where chemistry research is carried out, such as by the size of a department or institution, by the numbers of staff and students, or by the funding they attract. However, it is the *quality* of their research which really matters, and the extent to which it is viewed as noteworthy and used by fellow chemists is surely the best yardstick. In that respect, citation counts provide a direct measurement of research quality as judged by scientists themselves."

Isabel and Alfred Bader

Christmas Lecture surprise

THE RICH REWARDS OF CHEMISTRY

Wednesday 5th December saw Dr Alfred Bader deliver the dept's Christmas Lecture on 'The History of Aldrich and Advice to Chemist Entrepreneurs' to an appreciative audience in Lecture Theatre 2. There, ably assisted by his wife Isabel, he told the story of how he started out as a young chemist, doing his first degree at Queen's University in Canada, and his PhD at Harvard under the direction of the famous Fieser.

It was at Harvard that he became frustrated with the delivery times of the then major chemical supplier, Eastman Kodak, and soon after he left university, to work in industry, he and a friend set up their own company to supply chemicals. The company was called Aldrich, after his friend's fiancée, but it was launched in the face of well-meaning advice that Alfred would never make it work!

The success of his venture can now be judged by the fact that those who bought one of his original shares, issued at $10 in 1965, would by now have 48 shares, because they have been split several times, and today each of these is worth $42. The company, now called Sigma-Aldrich, has an annual turnover in excess of $1billion.

Alfred also recounted how the company's catalogues became famous for the old masters depicted on their covers; something he said he opposed when it was first suggested. This seems strange, considering that Alfred is a leading collector of Dutch paintings of the 17th century, a subject on which he spoke earlier that day in the History of Art dept when he gave a scholarly talk entitled 'The Rembrandt Research Project and the Collector.'

During his visit to the dept, Alfred and Isabel were entertained to a 'working' lunch with postgraduates, and in the evening he and Isabel were the special guests at a dinner, where he surprised his host, Jeremy Sanders, by writing a cheque for $33,000 to fund an archivist for the dept.

How time flies

300 YEARS OF CHEMISTRY!

Yes, 2002 is our tercentenary year and we're planning to celebrate in style this coming December when we'll be holding a two-day event of talks, tours and toasts. *Whatever else you put into your New Year's diary, note the dates for this once-in-a-lifetime event: Friday 6th December and Saturday 7th December 2002.*

Yet another well-deserved honour

STEVE LEY AWARDED CBE

Professor Steve Ley received national recognition for his services to chemistry by being made a Commander of the British Empire in the Queen's New Year Honours List announced on 1st January. Steve, who is now in the final six months as President of the Royal Society of Chemistry, told *Chem@Cam*: "I was extremely pleased to have been one of the few chemists honoured in the recent List. I shall continue to fight chemistry's corner and to see that it receives recognition at Government level for the vital role it plays in the UK, both academically and industrially. I should also like to take this opportunity to thank all those at Cambridge and at the RSC who work so hard to achieve our goals. The CBE clearly rewards its recipient, but I know that without their help my job would be so much more difficult, and to them I would like to say a heartfelt thank-you."

News

State school entrants to get £1,000 bursaries

SIMON AND JILL CAMPBELL FOUNDATION LAUNCHED

Simon and Jill Campbell have established a Foundation that will annually award up to 20 bursaries—each of £1,000—to students from state schools who want to study science or mathematics and are enrolled at either Christ's College or Sidney Sussex College. Simon and Jill chose to endow their Foundation at Cambridge because of its strong traditions in science and their personal links with both colleges.

Dr Simon Campbell is a distinguished chemist who joined the pharmaceutical company Pfizer in 1972. He did his BSc and PhD at Birmingham, then spent time as a post-doc at Chile and Stanford Universities, before being appointed a National Academy of Sciences Visiting Professor in Sao Paulo, Brazil.

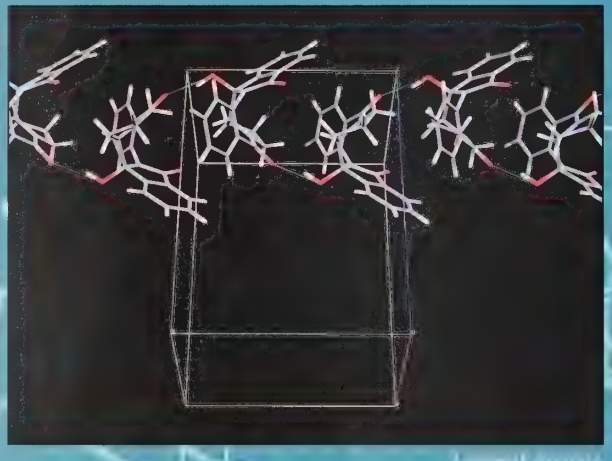
During his time at Pfizer, Simon rose to become Senior Vice President for Worldwide Discovery and Medicinals and he was a key member of the teams that discovered Cardura, Norvasc (the world's best-selling drug for controlling high blood pressure) and Viagra. He is the author of more than 110 publications and patents and was elected an FRS in 1999. He was also a member of the Chemistry Panel for the 2001 Research Assessment Exercise.

Jill Campbell has extensive teaching experience in physical education and yoga. She was trained in Birmingham and has taught in the UK, Chile and California.

Interviewed by *Chem@Cam*, Simon explained why he had taken this remarkable step to help young people: "I left school when I was 17 and worked in industry for a year, and was only able to go to university when I was awarded a full grant for maintenance and fees. Without that support, or a Foundation like ours to turn to, my life would have been completely different. Unfortunately, funding for higher education has very much shifted to families and individuals and we hope that our Foundation will alleviate some of the financial difficulties that might discourage bright students from state schools from studying science and mathematics at Cambridge. I have enjoyed every day of my research career and we strongly believe such opportunities should be available as widely as possible.

Steve Ley, who has known Simon for many years, said: "Simon is a good friend of the dept and I welcome his and Jill's initiative and generosity in setting up this wonderful scheme."

Jill and Simon Campbell plan to help young people.



What an achievement!

250,000th STRUCTURE ON CSD DATABASE

On October 5th, 2001, the 250,000th crystal structure was archived in the Cambridge Structural Database (CSD), marking another milestone in the ever-accelerating growth of the world's repository of organic and metal-organic crystal structures. The structure in question—as above—is the product of a photocyclization reaction. It has been assigned the CSD reference code IBEZAQ and was one of two structures published by A.G. Griesbeck, W. Kramer and J. Lex, of the University of Cologne, and appeared in *Angewandte Chemie International Edition*, (vol. 40, p. 3771).

"This is a landmark achievement not only for the CSD, but also for small-molecule crystallography world-wide" claimed Frank Allen, Scientific Director of the Cambridge Crystallographic Data Centre (CCDC), the organisation which compiles, evaluates and distributes the CSD. "The CSD began in 1965 with just a few hundred structures. We passed the 200,000 mark early in 1999, and we expect to reach half a million structures by 2010."

You can visit the CSD website on http://www.ccdc.cam.ac.uk/

The Cambridge Structural Database is a unique research resource, with around 800 published papers describing how it has been used to study chemical bonding, molecular conformations, hydrogen bonding, etc, with particular emphasis on molecular and drug design. The CSD has subscribers at 120 industrial sites and 1000 academic institutions, in 56 countries.

The CCDC itself is an independent non-profit organisation which compiles and distributes the CSD System. This also includes companion software systems for information retrieval and data analysis, and structural knowledge bases derived from CSD information.

Related applications programs are SuperStar and GOLD, for investigating protein ligand interactions and for protein ligand docking, and DASH, a program for structure solution from powder diffraction data. A parallel database system, Relibase+, is available for the analysis of protein-ligand structures in the Protein Data Bank.

Want to know more?
Then contact Dr. S.J. Maginn, 12 Union Road, Cambridge CB2 1EZ, UK; phone +44 1223 762534, e-mail maginn@ccdc.cam.ac.uk .

#001/002

FAX TRANSMISSION

[illegible] Ms Cheryl Weiss

FROM: Ivanka Franjkovic
Branch Development Coordinator
Department of Alumni Affairs
Queen's University
Kingston, Ontario
K7L 3N6
Phone: (613) 545-2060 Fax: (613) 545-6777

[illegible]
Number of Pages: (including this one) 2

[illegible]

[illegible] forwarded your fax to me as she is not involved with [illegible] Dr. Bader's [illegible] next week. I sent [illegible] for all the alumni [illegible] I would like to confirm that the [illegible] remain [illegible] and are as follows:

[illegible] will have Drs. Alfred and Isabel Bader taken back to their hotel, the Holiday Inn.

[illegible] will pick up Drs. Alfred and Isabel Bader at the Holiday Inn and take them to dinner with the Guelph Branch President and a few other guests (about [illegible] people will be present at [illegible]).

[illegible] featuring coffee/tea and seasonal [illegible]

Dr. Bader's presentation of the "Detective's Eye" (two slide projectors and a microphone will be provided). Question/answer period will follow the [illegible]

Ivanka Franjkovic will take the Drs. Bader back to their hotel. The departure time as indicated is flexible and is entirely at the discretion of the [illegible]

Queen's

TODAY 1:30pm
CH 250

In Celebration of the
80th Birthday of

Dr. Alfred Bader

May 12-13, 2004

Featuring Lectures by

Gilbert Stork, Columbia University

&

Barry Sharpless, Scripps Research Institute

Wednesday, May 12, 2004
Chernoff Hall
Queen's University
Please contact baderadm@chem.queensu.ca for further details

Art, Science and Autobiography

A discussion with Alfred Bader

B 127

Tuesday 30 November 2004 at 4.30 p.m. in Arts B 127

Dr Alfred Bader, who was born in Vienna and came to Britain on the Kindertransport, is currently working on the second volume of his autobiography. In the first volume, *Adventures of a Chemist Collector* (London, 1995), he recalled his experiences as a refugee in Brighton and Hove, before going on to describe his successful career in north America, first as an industrial chemist and later as a collector of Dutch paintings.

'The Alchemist' by David Ryckaert (detail)

At this Open Seminar hosted by the Centre for German-Jewish Studies, Dr Bader will be invited to reflect on his formative experiences and on the principles that have prompted him to support educational projects, including (most recently) the reinauguration of the Ignaz Lieben Prize for Chemistry at the Austrian Academy of Sciences.

The discussion will be introduced by Edward Timms, who is an advisor to the Biography Research Project at the Austrian National Library. Refreshments will be served after the seminar in the Humanities Common Room in Arts A.

UNIVERSITY OF
SUSSEX
AT BRIGHTON

Centre for German-Jewish Studies
University of Sussex, Falmer, Brighton, BN1 9QN
Please reply to

Professor Edward Timms
Tel/Fax 01273 678495
e.timms@sussex.ac.uk

24 November 2004

Just a note to say how much we are looking forward to your visit on Tuesday 30 November and the Discussion we have arranged. I will expect you at my office, Arts B 142 (next to the Porter's Lodge) and hope that we shall be joined for tea by my successor as Director of the Centre for German-Jewish Studies, Dr Raphael Gross.

As you know, the event has been advertised under the heading 'Art, Science and Autobiography: A Discussion with Dr Alfred Bader'. This framework gives us plenty of flexibility, and as you will see from the enclosure I would like to follow a three-part structure, allowing approximately 15-20 minutes for each part:

1. Looking back: One of our most interesting recent projects, funded over two years by the British Academy, has been on 'The Kindertransport Children: Identity, Adaptation and Trauma'. With this in mind, I would like to explore with you a number of questions about your early experiences, arising from your autobiography.

2. Current Aims and Activities: This will provide an opportunity for you and Isabel to give an account of your more recent aims and achievements.

3. Questions from the Audience: The Centre's new Meeting Room in Arts B is intended to create a fairly informal atmosphere and to encourage audience participation.

With your permission we would like to record the proceedings and make a transcript that might be of value for future researchers.

Please note that only a minority of those present are likely to have read *Adventures of a Chemist Collector*, so it may be helpful during the Discussion for you to repeat (and elaborate on) some of the details recorded in the book. You have kindly said that you will bring further copies of the book with you, in case anyone wishes to purchase it.

Edward Timms
(home telephone 01273 685629)

Art, Science and Autobiography: A Discussion with Dr Alfred Bader

Centre for German-Jewish Studies Meeting Room, Arts B 127
Tuesday 30 November 2004 at 4.30 pm

Introduction by Edward Timms, based on *Adventures of a Chemist Collector* (1995)

Part 1: Looking Back: We might then explore a number of questions arising from the book, including some of the following:

family history: the Baders (middle-class Jews) and the Serényis (Catholic aristocrats)

upbringing by Muttili (Aunt Gisela): 'brought up with a love of Judaism'

memories of childhood (as Bobby) in Vienna

the Sperlgymnasium

the collecting impulse (starting with stamps)

the Kindertransport: Bobby becomes Alfred

experiences with the Scharff family and schooldays in Hove

internment, 1940

education in science at Queen's and Harvard

early days in Milwaukee (1950): chemistry, the Bible and art

Part 2: Current Aims and Activities:

Alfred and Isabel Bader will be invited to talk about their more recent aims and achievements, including (for example) Art Collecting, Educational Priorities (Herstmonceux, the Lieben Prize), the Helen Bader Foundation, etc.

Part 3: Questions from the Audience:

The audience is likely to include a mixture of academics associated with the Sussex Centre for German-Jewish Studies and local people with an interest in Jewish history.

Refreshments will be served after the event in the Arts A Humanities Common Room.

CHEMICAL
HERITAGE
FOUNDATION

WITH COMPLIMENTS

6 Nov 97

Dear Alfred

For your files —

and again, our thanks

Just re-read your very kind words in your [illegible] article — and your help for a wonderful exhibit! Cheers, Arnold

315 Chestnut Street
Philadelphia PA 19106-2702 USA
Telephone (215) 925-2222
Fax (215) 925-1954

CHEMLUMINARY AWARDS RECOGNIZE VOLUNTEERS

THE FIFTH ANNUAL CHEMLUMINARY Awards, which recognize the efforts of volunteers on behalf of the American Chemical Society, were given at a special gala celebration on Tuesday, Sept. 9, at the national meeting in New York City. Thirteen groups presented a total of 48 awards at the ceremony.

Detailed information about the award winners, which are listed below, can be found at http://www.cen-online.org.

Listed are the award sponsor, the name of the award, and the section or division receiving the award. Local section size categories are determined by the number of members: small, fewer than 200; medium small, 200–399; medium, 400–799; medium large 800–1,599; large 1,600–3,199; very large, more than 3,199.

COMMITTEE AWARDS

Chemistry & Public Affairs

ACS President's Award for Local Section Government Affairs: Georgia

Divisional Activities

Recognition of Innovation & Outstanding Service to Members of a Division: Chemistry & the Law, Colloid & Surface Chemistry, History of Chemistry, Industrial & Engineering Chemistry, and Organic Chemistry

Economic & Professional Affairs

Best Local Section Career Program: small to medium large, Indiana-Kentucky Border; large to very large: Delaware

Local Section Activities

Best Activity or Program Stimulating Membership Involvement: Inland Northwest
Most Innovative New Activity or Program: Delaware
Most Innovative Use of Technology: Rochester
Local Section Outstanding Performance Awards: small, Indiana-Kentucky Border; medium small, Peoria; medium, Nashville; medium large, Cleveland; large, St. Louis; very large, North Jersey

Membership Affairs

Grassroots Award: Division of Chemical Technicians, Chemical Society of Washington (ACS Washington D.C. Section)

Minority Affairs

Best Overall Local Section Committee on Minority Affairs: Chicago
Outstanding ACS Scholars Program: Northeastern

Project SEED

Outstanding Project SEED Program: North Jersey

Public Relations & Communications

Helen M. Free Award: Lee Marek, Naperville, Ill.
Local Section Public Relations Awards: small to medium, Idaho; medium large to very large, Cincinnati

Society Committee on Education

ACS Student Affiliate Chapter Interaction: Kentucky Lake
Outstanding High School Student Program: Indiana
Outstanding Kids & Chemistry Program: St. Louis

Women Chemists

Best Overall Local Section Women Chemists Committee: California
Best Single Event in a Local Section Promoting Women in the Chemical Sciences: Pittsburgh
Most Innovative Recognition of Women in the Chemical Sciences: Indiana

Younger Chemists

Most Creative Local Section Younger Chemists Committee (YCC) Event: North Jersey
Outstanding Local Section YCC: North Carolina
Outstanding Local Section YCC Event: Northeastern
Outstanding New Local Section YCC: Columbus

OTHER CHEMLUMINARY AWARDS

Division of Chemical Technicians

Best Local Section Technician Affiliate Group (TAG) Interaction: Rochester
Best Overall TAG: Mid-Michigan
Most Innovative TAG: Western Pennsylvania

National Chemistry Week Task Force

National Chemistry Week (NCW) Best Event with Underrepresented Minority Groups: Pittsburgh
Best NCW Contest: Peoria Local Section
NCW Best Student Affiliate Event: Western New York
Greatest Community Involvement in NCW: Indiana
Greatest Industrial Involvement in NCW: Brazosport
NCW Most Original Hands-On Activity or Chemical Demonstration: Mid-Hudson
NCW Outstanding Event for a Specific Audience: Michigan State University
NCW Outstanding Event for the General Public Using the Yearly [NCW] Theme: Northeastern
Outstanding Ongoing NCW Event: Cleveland
NCW Outstanding Teacher Program: Cleveland

Bader lectures CHF on the rocky road to success

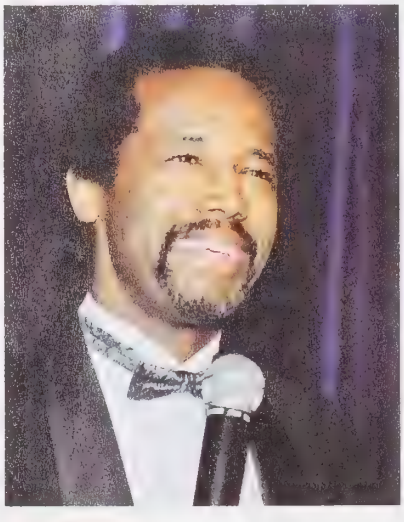
HURRICANE ISABEL DIDN'T PREVENT Aldrich Chemical founder Alfred Bader from giving the 2003 Ullyot Public Affairs Lecture in Philadelphia at the Chemical Heritage Foundation (CHF). Though the bad weather cut attendance to about 100, half of what had been expected, Bader—shown here (left) with his wife, Isabel, and 1997 Public Affairs Lecturer and retired Merck CEO P. Roy Vagelos—regaled the audience with the story of the "rocky road to success" for the chemical supplier known since the 1970s as Sigma-Aldrich.

PHOTO BY STUART WATSON

CHF President Arnold Thackray introduced Bader and "the real Isabel," whom he complimented as both lovelier and much better tempered than the storm then brewing outside. As the real Isabel projected images for the audience on an overhead screen, Bader described such artifacts as his first advertisement: It appeared in the C&EN issue of June 1, 1953, and cost $29.

While working toward his Ph.D. at Harvard in 1949, Bader said, Eastman Kodak—then the main source of research compounds—was unable to fill an order he

NITROGEN & GOLD The Degussa Fine Chemicals table (left) and the Albany Molecular Research table.



ALL SMILES Benjamin S. Carson Sr. (left), director of pediatric neurosurgery at Johns Hopkins Medical Institutions, was the keynote speaker for the evening. Taking a break from greeting guests are, from left, Centcom's Benjamin W. Jones and Gerard Lecoeur, C&EN's Madeleine Jacobs, and SNPE's Bernard Roussel and his wife, Christiane.

HOSTS & GUESTS C&EN's Jacobs (left, from left) and Rudy M. Baum and ACS President Elsa Reichmanis; author Oliver Sacks (above, left) and Chemistry Nobelist Ahmed H. Zewail.

sent. The disappointment led him to reason he could be "a chemist's chemist" and supply building blocks and reagents to the research community. Bader had many successes and some setbacks, including his ejection from Sigma-Aldrich in 1992. He is again welcomed back at the company he helped make a $1.2 billion success today.

2003 Midwest award to Bowman-James

KRISTIN BOWMAN-JAMES, OF THE UNIversity of Kansas, will recieve the 59th ACS Midwest Regional Award on Nov. 6 in Columbia, Mo.

A colleague notes that Bowman-James is "one of the world's leading experts" in supramolecular chemistry who has had a "valuable impact on my own thinking and that of many others." Her work on metal-based phosphate cleavage has "set a standard for artificial enzyme efficiency that has rarely been surpassed," the colleague says. Others point out that Bowman-James jump-started research in this area by the fruitful analogy between ligand-anion and metal-anion recognition.

Bowman-James has also contributed to public understanding and support of chemistry and chemical education through service to the Council on Chemical Research, ACS, and research support agencies of the U.S. government.

She was educated at Temple University, Israel Institute of Technology, and Ohio State University. She joined the chemistry faculty of the University of Kansas in 1975.

NIEHS's Olden receives achievement award

KENNETH OLDEN, DIRECTOR OF THE National Institute of Environmental Health Sciences (NIEHS), has received the 2003 Council of Environmental Professionals Achievement Award.

Olden, a cell biologist and biochemist, has been active in cancer research for almost three decades. Before joining NIEHS, he was director of the Howard University Cancer Center and professor and chairman of the department of oncology at Howard University Medical School, Washington, D.C. He has been elected to membership in the Institute of Medicine and has received several awards for distinguished public service, including two presidential citations.

Olden holds a bachelor's degree in biology from Knoxville College, a master's degree from the University of Michigan, and a Ph.D. from Temple University. He held postdoctoral fellowships and was a Macy Faculty Fellow as an instructor at Harvard Medical School.

Wender to deliver Lind Lectures

PAUL A. WENDER, BERGSTROM PROfessor of Chemistry and professor of molecular pharmacology at Stanford University, will deliver the S. C. Lind Lectures in early November. These lectures, which have been sponsored annually by the ACS East Tennessee Section since 1948, will be presented at the University of Tennessee, Knoxville, and Oak Ridge National Laboratory.

Wender's research involves studies in chemistry, biology, and medicine with a special emphasis on the synthesis of novel structures with unique modes of action and therapeutic potential. His group has pioneered or invented new reactions for synthesis and has achieved more than 50 total syntheses of a wide range of molecules, including phorbol, taxol, bryologs, and resiniferatoxin. His work has resulted in compounds now in clinical trials or in preclinical development. He has pioneered new drug delivery approaches that have led to two new companies and compounds in preclinical and clinical development.

David Harpp named Norris awardee

DAVID N. HARPP, THE SIR WILLIAM C. Macdonald Professor of Chemistry at McGill University, will receive the James Flack Norris Award for Outstanding Achievement in the Teaching of Chemistry.

The award, which includes a citation and an honorarium, will be presented to Harpp on Nov. 13. His scheduled talk is titled "Communicating Chemistry: From Large Classes to the Larger Public."

Harpp received his bachelor's degree from Middlebury College in 1959, a master's degree from Wesleyan University, and a Ph.D. degree from the University of North Carolina in 1965. After a postdoctoral year at Cornell, he joined the department of chemistry of McGill. Harpp's area of research is organosulfur chemistry.

Harpp has made notable contributions in the teaching of chemistry, including introductory organic chemistry, as well as a suite of highly popular courses at McGill entitled "The World of Chemistry." These courses deal with such subjects as the practical considerations of food, drugs, and modern technology, including environmental aspects. He was instrumental in organizing a chemistry program of demonstrations and lectures for the UNESCO pavilion at the "Man and His World" world exhibition in Montreal in 1980 and 1981, and he spearheaded one of the largest chemical exhibitions in history in 1995 in Montreal; it attracted 370,000 people.

Nominations wanted for green chemistry awards

THE ENVIRONMENTAL PROTECTION Agency is now accepting nominations for the 2004 Presidential Green Chemistry Challenge Awards. These awards recognize innovative chemical technologies that incorporate green chemistry into chemical design, manufacture, and use and that have broad application in industry. Nominated technologies should reduce or eliminate the use or generation of hazardous substances from a chemical product or process.

Any individual, group, or organization, both nonprofit and for profit, including academia, government, and industry, may nominate a green chemistry technology for these awards. Self-nominations are welcome and expected. Typically, five awards are given each year: one to an academic researcher, one to a small business, and the rest in specific areas of green chemistry. Each nominated technology must have reached a significant milestone within the past five years in the U.S. Nominations must be postmarked by Dec. 31 to be eligible for the 2004 awards, which will be presented at the National Academy of Sciences in Washington, D.C., on June 29, 2004. For more information, go to http://www.epa.gov/greenchemistry/howto.html. ■

The Aldrich Story

How Aldrich Came to be
As told by Aldrich's Founder, Alfred Robert Bader

The notion that I might have a niche in the fine-chemical business first came to me in 1949 while a graduate student at Harvard. In those days when you needed a research organic, you looked into one catalog, Eastman Kodak's. If it was in there, you bought it; if not, you made it. The starting material I needed for the last product needed to complete my research under Professor Louis Fieser was 2-isopropylphenol, in order to make 2-isopropylnaphthoquinone. The Eastman catalog listed 2-isopropylphenol, and so I ordered 500g. Six weeks later it still had not come, so I went to see Warren Stockwood, who oversaw the storeroom, to ask for advice. He handed me a sheet of Harvard Chemistry Department stationary and told me to write them. "See what happens," he said.

I received a form postcard - I wish I had kept it because today I'd have it framed. It simply said that my order had been received and would I not add to the paperwork; Eastman would ship the material whenever possible, "My gosh, if that's how the fine-chemical business is operated in the United States, maybe I have a place in it."

After graduating from Harvard I joined the research laboratories of the paint division of the Pittsburgh Plate Glass Company in Milwaukee and became good friends with the director of research, Dr. Howard Gerhart. I asked him whether I might not start a tiny division within PPG to make and sell research chemicals, and he just shook his head and said no, that wouldn't fly. He believed Eastman Kodak was so well entrenched that no one could compete.

I agreed that we could not compete with Kodak; however, we could compete with DPI, the Distillation Products Industries division of Kodak that sold fine chemicals. DPI offered only about 4,000 products, and research chemists would be interested in many more products if they were available. So a friend of mine, a Milwaukee attorney named Jack E., and I started a company to offer research chemicals. We incorporated on August 17, 1951, with the required capital of $500, each of us putting up $250. We tossed up for the name; I lost the toss. Jack was engaged to a charming girl, Betty Aldrich, and so the company was named the Aldrich Chemical Company. At first the paperwork, storage, weighing, labeling, packaging, and invoicing was done in Jack's office; later we rented a garage (on Farwell Avenue) on Milwaukee's east side for $25 a month. Our first product was one that I had learned to make for my M.Sc.: methylnitrosonitroguanidine (MNNG), which was first made by my professor at Queen's University, Arthur F. McKay. We contracted with Dr. McKay and with a small company in Milwaukee to make this product for us. MNNG is an excellent precursor for diazomethane. It is a stable crystalline solid that melts at 118 °C, and its great advantage over other precursors is that it yields diazomethane with aqueous rather than ethanolic alkali, as is the case with other precursors. I had told Prof. Fieser about this compound, and he had every student in Chemistry 20, the first organic chemistry course, make one batch. I then took all of these batches, crystallized them once from methanol to get rid of all of the cigarette butts and bobby pins, and the chemistry department then had a sufficient supply of MNNG to last for an entire year. We had a permanent diazomethane still in my lab so that anyone needing diazomethane could use it. What we didn't know at the time was that MNNG was one of the most powerful mutagenic agents known.

The first Aldrich catalog was a mimeographed sheet that we sent to some 2000 research chemists

around the country. Our mailing list consisted of the senior authors of organic papers in the *Journal of the American Chemical Society* and the *Journal of Organic Chemistry.*

Gradually, we added other compounds not listed by Kodak. Catalog number 2 was again a single mimeographed sheet, but unfortunately I don't have a copy of it. An appeal to readers of *Adrichimica Acta*, Vol. 17, No. 3, to exchange a fine English 19th century landscape for that single sheet if any customer should chance to find one, was unsuccessful. Sales in the first year were $1705, and as we paid no salaries, we actually showed a $20 profit. In the second year sales climed to $5400 and reached $15,000 by the third year.

I was very happy in my work at PPG and also had really grown to like the city of Milwaukee. Early in 1954 PPG decided to move its research laboratories from Milwaukee to Springfield, PA, near Pittsburgh. Hence, I told Howard Gerhart that I planned to leave PPG and work full time at Aldrich. He said, "Alfred, you are a very good chemist. You can make a great many things, but you are not a businessman. I am convinced that within a couple of years Aldrich will go bankrupt. When it does, please don't look for another job but come back to PPG; we need you. And in the meantime, will you please consult for us?" This I was happy to do.

Outside Money

Of course, Aldrich had no capital, and neither Jack nor I was in any position to put any money into the company. So we went to a friend, a Milwaukee businessman, and persuaded him to buy a third of the company for $25,000. The agreement was that he would put in $5000 immediately and then a thousand dollars a month for the next 20 months. To conserve capital, my salary was to drop from the $800 a month I had been making at PPG to $500 a month, and I was not to cash the salary checks for the first six months. Our investor had the option at any time to withdraw his capital in exchange for his stock. After seven months, in 1955 he came to me and said, "Look, Aldrich has been growing nicely, sales are up practically every month, but still, I don't think that the company will ever be worth $75,000 to justify a $25,000 investment for one third, so I want out. Please return my money."

In such decisions, people usually have good reasons and real reasons, and with ordinary human beings these are often quite different. When I pressed him for his real reason, he said, "Well, I was so disappointed in you. You will recall that some weeks ago you had a friend of yours, Martin Ettlinger, visit you, and you paid him a consulting fee of $100 without asking my consent." Martin Ettlinger had been my good friend since Harvard days. He helped enormously with the publication of papers, with making suggestions for Aldrich, with many chemical matters, and when he visited us, that small gift seemed entirely justifiable. Our investor, of course, was on our board of directors and there was tight control of expenses. For instance, the only action of the last board meeting before his departure was to empower me to buy another badly needed secondhand desk at a cost not to exceed $35! Still, a consulting payment to Martin of only $100 seemed so well deserved that I had quite unthinkingly, not asked for board approval.

We were now in a difficult position. Our investor had put $12,000 into the company and was entitled to receive that back over the next couple of years. Jack, the attorney who set up the company in 1951, had helped a great deal in the early days. But, since leaving PPG, I was working 12-14 hours a day, and with his law practice, Jack could help very little now. Moreover, every move, including minor purchases, required mutual agreement, making progress and decision making difficult. With the withdrawal of the only real capital, the only source of capital was to be that generated by our own efforts. Under the circumstances, a 50/50 interest between Jack and me

did not strike me as fair or workable, and so I went to an old friend, another attorney known for his uprightness and legal wisdom, Harry K., and explained the problem. Harry worked out three alternatives and suggested that I submit these to Jack: one was that I sell my 50% to Jack for $3000 and use that $3000 to start the Bader Chemical Company; the second was that Jack sell his 50% to me for $10,000, to be paid over two or three years; the third was that Jack sell 20% of the company to me for $6000, so that I would have 70% and he 30%. Jack did not like any of these alternatives and became very angry. Eventually he proposed that he sell me his half for $15,000, to be paid over three years, and I am sorry that he has not spoken to me since.

When I left PPG, Aldrich moved from the garage on Farwell to a thousand-square foot laboratory near Capitol Drive in Milwaukee and hired two secretaries and a full-time lab technician from PPG. By this time the debts were substantial: $12,000 to our former investor and $15,000 to Jack . Sales, however, skyrocketed to $39,000 by that fourth year, and just about that time we received our first really large order. Du Pont had written to a number of companies asking for quotations for 500 lb of suberic acid. I had never made suberic acid before, but the preparation seemed straightforward and the starting material, 1,6-hexanediol, was available very inexpensively from Union Carbide. I had no idea how to figure costs of production but felt that we couldn't go wrong if we got the order at $38 a pound. Believe it or not, we got that order for delivery by the end of the year. That $19,000 really helped.

Expanding Our Catalog

It became clear to me early that we couldn't succeed if we sold only what I knew how to make; we must combine production with resale, particularly of imports. I knew western Europe fairly well, spoke German fluently and French haltingly, so I decided to spend a month or two every year traveling from one country to the other, visiting small and medium-sized chemical companies asking what we might purchase from them. Of course, I knew what was in our own catalog. If they were, I declined - how could we compete with Kodak? - but if they were not, I bought $100 or $200 worth to ship to Milwaukee and add to our catalog.

A few years later, an interesting experience changed this policy. An old friend, Prof. John Sheehan of M.I.T., contacted me and urged me to offer a new peptide reagent that he had developed, dicyclohexylcarbodiimide, which was not in the Kodak catalog. The preparation is not particularly easy as it involves a mercuric oxide oxidation and the material is a strong eye and skin irritant. But we listed it, and sales did very nicely. Then one day, when I glanced at the Kodak catalog, I noticed to my great chagrin that Kodak was now offering DCC at a few pennies per bottle less than ours. Of course I figured that was the end for that product; no one would buy DCC from Aldrich. But I was mistaken: sales kept going up. Then I realized that we could compete with Kodak, and from then on we listed whatever useful products we could buy or make, regardless of the compounds listing in the Kodak catalog.

In the mid-50s I met another Milwaukee attorney, Marvin Klistner, who became my good friend and is really the man whose wisdom and help were instrumental in building Aldrich. He has remained with us, first as a director of Aldrich and then of Sigma-Aldrich.

By 1958, we had about a dozen people, most of whom are still with us, and we had outgrown the rented laboratory. We purchased an old 27,000 square foot shoe factory building, and within three years we bought another, much larger building, formerly the headquarters of the Badger Meter Company. I remember how we rattled around first in the old shoe company and then in the Badger Meter building, but within a few years we filled them up. We have never had a year in

which our sales or our profits were less than the year before, and of course at the beginning we plowed all our earnings back into the business.

Most of our sales were for catalog items, but gradually we became more involved in custom syntheses, particularly for pharmaceutical companies. Among these, Upjohn was by far our best customer in the early days, and many of the Upjohn chemists became good friends. For years I thought that Upjohn would, in time, purchase Aldrich. I found out later that a number of the chemists at Upjohn thought so too, but others in management counseled against it because we were, in their view, just a "one-man company".

In 1962 Aldrich's sales reached the first million, and by 1965 our total sales and research income reached $2 million. By this time some able chemists had joined us. Dr John Biel, director of laboratories at the Lakeside Laboratories in Milwaukee for a number of years, joined us in 1962 to head our research department. We had some 15 chemists, including 7 Ph.D.s working on various research contracts, principally for pharmaceutical companies and the government. Bernie Edelstein, a graduate chemist from the University of Wisconsin, graduated from the University of Michigan Law School and joined us in 1962.

By 1965, many of our chemist friends were asking how they could buy Aldrich stock. We felt that we had such a good record of steadily growing sales and revenues that it was time to go public - not on any grand scale but simply by offering 100,000 shares of the total 600,000 shares to a select list of chemists and friends who had often expressed an interest. We went to a small Milwaukee stockbroker, the Marshall Company, and asked what the minimum commission would be for selling the stock at $10 a share on what they called a best efforts basis. The minimum commission permitted by the S.E.C. was 17 cents, and so my family and I offered up to 100,000 shares at $10 a share. We had considerable difficulties with the Wisconsin regulatory agency, which protested that $10 a share for a company whose earnings were only 30 cents a share was very high. Of course we pointed out that the Marshall Company would sell the shares only on a best efforts basis, and finally we did receive permission. What we didn't realize was that when prospective stockholders called the Marshall Company to inquire, the individual stockbrokers were discouraging and suggested that if the buyer wanted to speculate, better stocks could be had in the $10 a share range - better, at least, in the commission that would be paid the stockbrokers. As a result, we sold few shares in Milwaukee and only about 16,000 total around the country to about 200 chemists and friends who knew us well. After the offering closed, the market generally went down, and the executives at the Marshall Company, who really didn't understand our business, began to sell the stock short, feeling that $10 a share had been too high. What they didn't realize, at least not at first, was that all our new stockholders had known the company for some years and had faith in it. In fact, during the first year only 45 shares were offered by these new stockholders, those owned by an investment club in Ann Arbor that folded. The Marshall Company merrily kept selling stock short - 4000 shares - until they realized that they couldn't deliver. They then came to me in some panic and pointed out that they had been most helpful in selling the stock and asked if I would please help them now. By that time, their offering of $14 a share had not elicited any sales, and I got them out of their misery by selling them the needed stock at that price.

During the next year, a stockbroker at a much more substantial Milwaukee brokerage house, William Schield at Robert W Baird, got to know me well personally and really became intrigued by the company. He persuaded Baird to offer 120,000 shares of Aldrich Stock at $23 a share (including a commission of $1.45 for Baird), again a sale by my family and me, not the company. The sale did well and Aldrich stock has never sold below that $23. One of those old shares has now been split into 12 Sigma-Aldrich shares, which in 1987 were traded between $30 and $50 per

share.

A Merger?

By the late 1960s, it was clear to me that the greatest growth in chemical research lay in biochemistry, and we were not biochemists. Organic chemistry seemed to have peaked with Woodward's synthesis of strychnine; Sharpless's chiral epoxidation and Brown's hydroboration were not yet with us. So we started a small biochemical department, with a small but eye catching catalog, and began considering a merger with a biochemical company. In Europe the biochemical companies were large companies like Boehringer-Mannheim, and they might consider buying Aldrich, but that would not be a true merger. In the United States there were three important biochemical companies. Calbiochem had just been purchased by Hoechst, and in my experience large companies usually ruin the entrepreneurial spirit of the smaller company, the spirit that is really the reason for the acquisition.

The second company, Nutritional Biochemicals, had been bought by ICN, which struck me as being a conglomerate acquiring companies here, there, and everywhere. For some years, one of their men called me regularly to inquire when we would join their "family of companies," and I just laughed and declined.

The third company, Sigma in St Louis, was the ablest and most interesting of the lot, presided over by a towering figure, Dan Broida. Dan was one of the most interesting men I have ever known. On graduation as a chemical engineer, he was employed by Midwest Consultants, a small company owned by two brothers, Aaron Fisher and Bernard Fishlowitz, in St Louis. Midwest Consultants was the forerunner of Sigma Chemical Company, set up first to make saccharin and then biochemicals. Dan, Aaron, Bernard, and their families each owned about a third of Sigma, at first just a small storefront operation.

Dan built Sigma into a singular company where service, purity of products, and lowest price in the marketplace were absolute musts. Employees could not leave Sigma at the end of the day until the last order was shipped. Advertisements were shunned; service and product quality spoke for themselves. Dan truly believed that any biochemist who was foolish enough to buy from a competitor deserved what he received.

Eyes are Opened

Sigma placed greater emphasis on production than Aldrich. In fact, Dan considered suppliers just a necessary evil.

If a purchased product sold well, Sigma would in time make it. And Dan treated many suppliers (including Aldrich) disdainfully. Purchased products were often rejected for good reasons, but Dan would not give the reasons to the suppliers, for they might then improve their product and sell the improved products also to competitors! Aldrich, on the other hand, worked hard to establish good relations with suppliers, and many of these became our good friends. By working with reliable suppliers, we were able to concentrate our efforts at Aldrich on new products. And when requirements for these became so large that Aldrich could no longer handle them, we would go to a supplier-friend with the right equipment and have our requirements filled. I am sure that our good relations with suppliers was a real eye-opener to Sigma on our merger, as was their insistence on same day service to Aldrich.

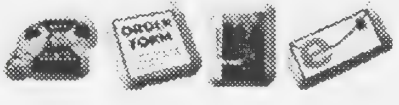
Correspondingly, Aldrich had good relations with its competitors, many of whom - like Fluka and Kodak - were also our suppliers and customers.

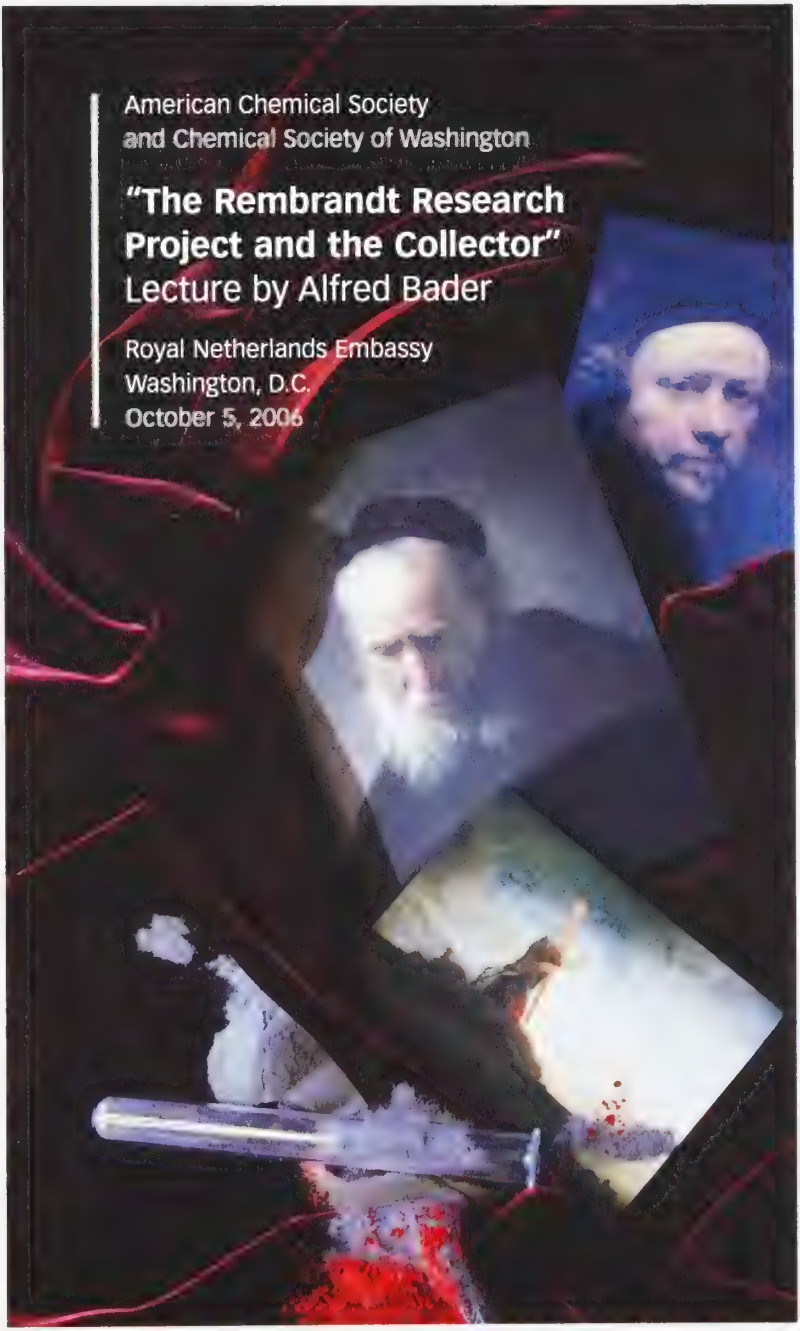
I approached Sigma in 1967 to suggest a merger between Sigma, then still family owned, and Aldrich, now a public company. I was quickly rebuffed. Sigma went public through Goldman Sachs in 1972.

Scientifically, the merger made excellent sense. By 1975 Sigma was the leading supplier of biochemicals, Aldrich of organics. The technical competence in both areas had become important as the two fields became more interrelated. None of our organic competitors had a substantial share in the biochemical market and none of Sigma's competitors knew as much organic chemistry as did Aldrich. To Aldrich stockholders it opened up the many opportunities for expansion afforded by biochemistry. To Sigma stockholders it was a sensible deal because it gave Sigma organic chemicals know-how, which was valuable in the development of many biochemical products, and a potential for a new balanced management - balance difficult to achieve with Dan alone at the helm.

The valuation of Sigma and Aldrich stock was fairly simple: neither of us had debt, and Sigma had long been about twice the size of Aldrich in sales and profits. Each had very conservative accounting policies and there was no doubt - so often present in merger negotiations - that neither had overstated its earnings.

We merged in August of 1975. Since the merger, corporate sales and net income have increased more than 15% annually, which translates into doubling our business every 5 years. Major factors contributing to our success are the dedication of our people, the aggressive addition of new products, and the technical support provided to our customers. Each year over one million Catalog/Handbooks, brochures, technical bullitins and advertisements are distributed to researchers around the world.




American Chemical Society
and Chemical Society of Washington
"The Rembrandt Research Project and the Collector"
Lecture by Alfred Bader
Royal Netherlands Embassy
Washington, D.C.
October 5, 2006

Rembrandt

Reception

Welcome

René van Hell
Head of the Economic Department
Minister, Royal Netherlands Embassy

Edwin D. Becker
President, Chemical Society of Washington

Introduction of Alfred Bader

Arthur Wheelock
Curator of Northern Baroque Painting
National Gallery of Art

Lecture

"The Rembrandt Research Project and the Collector"
Alfred Bader

Closing Remarks

Madeleine Jacobs
Executive Director and CEO
American Chemical Society

Special thanks to the Royal Netherlands Embassy for graciously providing their beautiful space for this evening's reception and lecture.

1155 Sixteenth Street, NW
Washington, DC 20036

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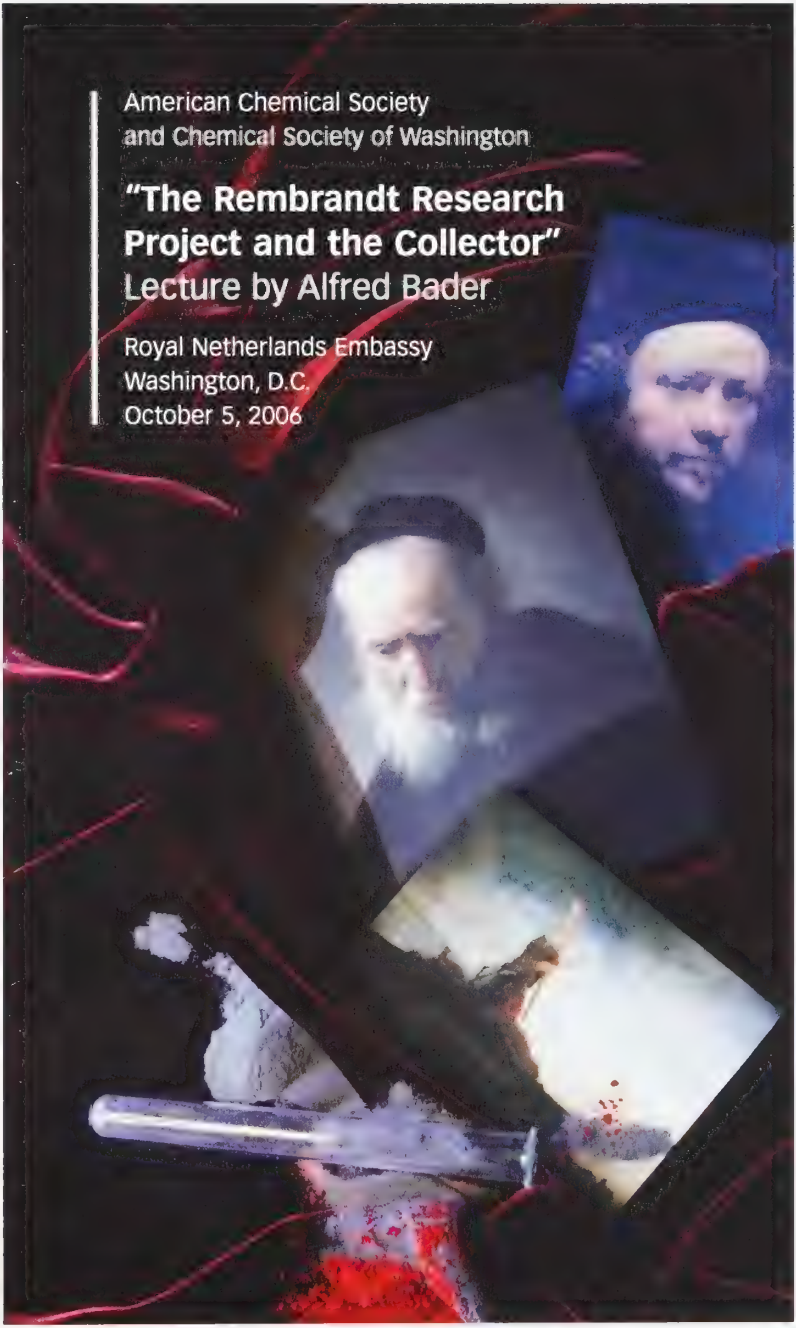

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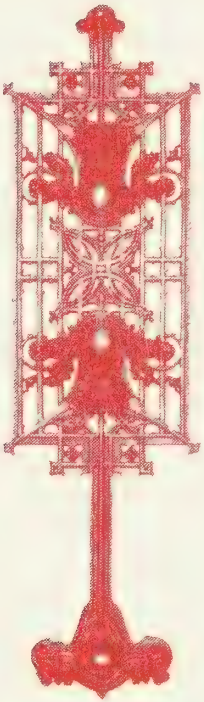

THE
ELVEHJEM
MUSEUM OF ART
LEAGUE

You are cordially invited to
Luncheon and the Annual Meeting
of The Elvehjem Museum
of Art League
Wednesday, May 8, 1985,
9:30 a.m.
Room 130, Elvehjem Museum
Speaker: Dr. Alfred Bader,
"Discoveries in Restoration"
Luncheon immediately following at
The University Club.

R.S.V.P. by May 1
Mrs. Brooks Becker
1132 University Bay Drive
Madison, WI 53705
238-4332

$7.50 per person
Guests welcome

Sullivan, Louis Henri (American, 1856-1924)
Stair Baluster, 1893-94
The Chicago Stock Exchange
Cast iron
Evjue Foundation Fund Purchase, 1983.57

One Jewish View of the Messiah

THE DONALD MATHERS MEMORIAL LECTURE

A Lecture by

Dr Alfred Bader

Thursday,
September 21, 2000
8:00 p.m.
Dupuis Hall Auditorium

Alfred Bader was born in Vienna in 1924. In 1939, as a Jewish Austrian teenager attending school in Britain, he was interned as an "enemy national," and subsequently sent to a prison camp in Quebec. After much effort and incredible good luck, in 1941 he was permitted to leave the camp to study at Queen's University. He graduated with a B.Sc. in Engineering Chemistry in 1945, a B.A. in History in 1946, and an M.Sc. in 1947. He received his Ph.D. from Harvard University in 1950.

Dr Bader has been a distinguished research chemist and entrepreneur, achieving considerable wealth through his own company, the Aldrich Chemical Co. (later Sigma-Aldrich). But he is equally respected as an art collector, restorer and critic. He has received numerous honours, including eight honorary doctorates. Among the more recent honours have been honorary citizenship from the University of Vienna in 1995, and the Gold Medal of the American Institute of Chemists in 1997; and in 1998 he received the American Chemical Society Award and was also made a Commander of the British Empire. He is a Fellow of the Royal Society of Arts, and has twice been guest curator at the Milwaukee Art Museum. His autobiography, *Adventures of a Chemist Collector*, is a fascinating story.

At Queen's, the generosity of Alfred Bader and his wife, Isabel, is legendary. Their gifts have enhanced enormously the art collection and the gallery space of the Agnes Etherington Art Centre. The acquiring of Herstmonceux Castle in Sussex, England, made possible the development there of the University's outstanding International Study Centre. As well, they have provided major funds for Chairs in Art and Chemistry, and have contributed towards numerous other creative ventures.

Following the lecture, a reception will be held in Theological Hall (Second Floor).

Die Mutter Gottes
Rembrandt Harmensz. van Rijn
1629

"CHEMISTRY IN ART"

As a collector of old master paintings I look every year at several hundred old paintings- in junk and antique stores and at auctions all over the world- and have to decide, usually within minutes, whether a painting is worth buying. The first criteria is, of course, the general artistic merit of the work- often hard to discern in paintings covered with centuries of dirt. Secondly, is the painting really what I think it is. I am offered a painting said to be by a Dutch 17th century artist- are the pigments those used by a 17th century artist? Are the wood or canvas and ground those used by 17th century Dutch artists? Once I have acquired an old painting, the surface dirt is usually easily removed with mild solvents, and the decision has to be made how much restoration to do. Is the painting an original, a workshop production, or a later copy? Is the painting in its original size? What is the condition of the support- be it canvas, wood, metal, or slate? How much old restoration is there and should it be removed? Almost every old painting has some overpaint- was this added to hide losses or subjects considered undesirable by previous owners? If the painting is signed, is the signature original? The last questions can generally be answered by a combination of physical and chemical means, chiefly examination with UV light and under a magnifying glass, and tests with various solvents. Many specific examples will be given to illustrate these questions and their answers.

Dr. Alfred Bader

The Artist's Father
Rembrandt Harmensz. van Rijn
1629

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Dr. Alfred Bader

Distinguished Scientists Lecture Series

1985-86

The Distinguished Scientists Lecture Series was established in 1983 by an endowment gift from Mr. and Mrs. Walter F. Brown of San Antonio. Mr. Brown, an independent oil producer, is a Trinity University trustee.

The lecture series is in addition to Trinity's Science Lecture Series which features outstanding members of the University faculty in evening presentations.

An earlier gift from the Browns supports Trinity's Distinguished Lecture Series which features well-known speakers from various disciplines, careers and countries.

The Distinguished Scientists Lecture Series, along with the other Trinity lecture series, is presented to the public as a community service free of charge (no tickets are necessary), beginning at 8 p.m. each time. The lectures are in Chapman Auditorium. Doors will open at 7 p.m

TRINITY UNIVERSITY
Division of Sciences,
Math & Engineering
715 Stadium Drive
San Antonio, Texas 78284

Distinguished Scientists Lecture Series

1985-86

- **DR. RONALD L. GRAHAM**
  October 1
- **DR. ALFRED BADER**
  February 5
- **DR. HARRY GRAY**
  March 24

TRINITY UNIVERSITY

TRINITY UNIVERSITY

1985-86 DISTINGUISHED SCIENTISTS LECTURE SERIES

DR. RONALD L. GRAHAM
Tuesday, October 1
"The Shortest Network Problem"

Dr. Ronald L. Graham joined the staff of the AT&T Bell Laboratories in 1962, upon his graduation with a Ph.D. from the University of California at Berkeley, and now serves as director of their Mathematical Sciences Research Center.

For the past 23 years he has confronted the formidable challenges that arise from the need to route hundreds of millions of telephone calls through the intricate communications web of cables, microwaves and satellites that embraces the earth

Using his rare ability to translate real-world problems into mathematics, and his knack of being able to bring high powered mathematics to bear on computer science, Graham will tell of Bell's goal to trim costs through shorter and more efficient communications networks.

He is a remarkably prolific mathematician, publishing more than a dozen papers a year. He sits on the editorial boards of some 20 mathematical journals, travels extensively and lectures frequently. He administers a large Bell Laboratories department, directing its research and solving mathematical problems

He has pioneered an area of mathematics known as "worst case analysis." His distinguished reputation has been earned in pure mathematics — mathematics with no immediately obvious application to telephone lines or spaceships (he had been an advisor to NASA on the Apollo moon program).

In 1972, he shared the prestigious Polya Prize, awarded by the Society for Industrial and Applied Mathematics, for his work in increasing the scope of the Ramsey Theory. His research in the Ramsey Theory was recognized by the *Guinness Book of Records,* which acknowledges that Graham holds the record for identifying the largest number ever used in a mathematical proof.

DR. ALFRED BADER
Wednesday, February 5
"Chemistry in Art"

Dr. Alfred Bader, recognized internationally as a scientist, businessman and art collector, is the founder of the Aldrich Chemical Company and currently is chairman of the Sigma-Aldrich Corporation.

He combines his experience as a renowned art collector and historian with his experience in the realm of chemistry. A collector of an important collection of paintings by 17th century Dutch masters, he lectures internationally on the chemistry involved in the restoration of works of art.

Bader has authored or co-authored 25 scientific publications covering a wide range of topics in the field of organic chemistry, with the emphasis being on practical rather than theoretical chemistry. He also holds 27 patents.

He earned a Ph.D. in chemistry from Harvard, and was employed first as a research chemist and then as organic chemistry group leader in the paint division of the Pittsburgh Plate Glass Company in Milwaukee.

Bader found it was wasteful of research chemists' time and talent to prepare the high-purity intermediate compounds necessary to accomplish the research.

He received permission from the company in 1951 to set up his own facility to make the chemical intermediates necessary in the research. In his spare time, and operating out of a garage, he acquired some basic equipment and manufactured the starting material for diazomethane, and several other compounds. He called his new company "Aldrich."

When Pittsburgh Plate Glass moved its research division to Springdale, Pa., in 1954, Bader resigned his position to stay in Milwaukee and operate Aldrich as a fulltime business.

Today, Sigma-Aldrich products are purchased by universities, research institutions, hospitals and industry in nearly every country of the world. There are more than 37,000 chemicals in the current inventory.

DR. HARRY GRAY
Monday, March 24
"Artificial Photosynthesis"

Dr. Harry Gray has been professor of chemistry at the California Institute of Technology since 1966. He is also a former chairman of the Department of Chemistry.

During his lecture at Trinity, Gray will explain how new chemical products and the testing of compounds made in the laboratory are used to produce the chemical reactions associated with photosynthesis. This development has the ultimate potential of duplicating the wonders of photosynthesis in a laboratory and extending our understanding of nature's processes.

Gray's work on the electron transfer reactions of metallo proteins, and his interest in photochemistry, led him in the mid 1970s to experiment with solar energy conversions.

In 1977, the first solar energy storage reaction involving hydrogen products in homogeneous solutions was discovered by Gray and his co-workers.

Further work by Gray and his associates in 1979 suggested several ways of improving the quantum efficiencies of solar energy storage reactions of this type.

Gray completed his Ph.D. at Northwestern University in 1960. The following year he was awarded a National Science Foundation postdoctoral fellowship at the University of Copenhagen, Denmark, where he collaborated on studies of the electronic structures of metal complexes.

After leaving Copenhagen, he joined the chemistry faculty of Columbia University in 1961. There, his continuing interest in transition metal compounds led him to investigate their electronic structures. He became the youngest full professor at Columbia in 1965.

For his work, Gray received two American Chemical Society awards, in Pure Chemistry in 1970 and Inorganic Chemistry in 1978. He was elected to the National Academy of Science in 1971.

All lectures will be presented at 8 p.m. in Trinity University's Chapman Auditorium.
They are free and open to the public. For further information, call 736-7413.

THE MERCK COMPANY FOUNDATION,

$\sigma\pi\delta$,

AND

THE DEPARTMENT OF CHEMISTRY

TRINITY UNIVERSITY

proudly announce

The 1993 Merck Foundation Lectures

by

DR. ALFRED BADER

Distinguished Chemist
Founder of Aldrich Chemical Company
Art Historian and Collector

Thursday, February 18th at 2:30 PM, Room 219 MEB
"Josef Loschmidt - The Father of Molecular Modeling"

This lecture, presented during Dr. Mills' Advanced Organic Chemistry class, will examine the foundation of molecular modeling - the visualization of molecules so essential in modern chemistry.

Friday, February 19th at 12:30 PM, Room 206 MEB
"The Development of the Aldrich Chemical Company"

This informal presentation, sponsored by the Student Affiliate Chapter of the American Chemical Society, σπδ, will hear about and discuss with Dr. Bader his history of involvement with the Aldrich Chemical Company. Attendance is limited to 15 students, so sign up with Amy Kazala, president of σπδ, as soon as possible.

Friday, February 19th at 4:00 PM, Science Lecture Hall
"The Adventures of a Chemist Collector"

How does a chemist look upon art? Dr. Bader, the Dutch Masters, and Aldrich have been unified since the first Aldrich catalogs were produced. But there is more to this story than collection of art or the supply of chemicals. In this presentation Dr. Bader presents a fascinating account of his ongoing efforts in the collection of significant art.

This series of lectures is made possible by a generous grant from the Merck Company Foundation to the Department of Chemistry at Trinity University.

Dr. Alfred Bader

Since founding Aldrich Chemical Company more than 40 years ago, Dr. Bader has been instrumental in building Aldrich into one of the world's foremost suppliers of high quality, fine organic and inorganic chemicals. A native of Austria, Dr. Bader went to England and eventually to Canada, where he received several degrees from Queen's University in Ontario. Later he also earned a Ph.D. degree from Harvard University in Cambridge, Massachusetts.

While working in Milwaukee, he received permission from his employer to start a small business on his own, which he did in 1951 in a rented garage. When, in 1954, his employer decided to move its Milwaukee operations to Pennsylvania, Dr. Bader opted to remain in the city he had grown to love and formed Aldrich Chemical Company. In 1975, he and Dan Broida, then the President of Sigma Chemical Company in St. Louis, led the effort which resulted in a merger of Sigma and Aldrich that year to become today's Sigma-Aldrich Corporation.

Throughout his career, Dr. Bader has traveled extensively meeting customers and suppliers, giving lectures and becoming well known among leading chemists throughout the world. He has been the driving force in accumulating a collection of 39,000 rare chemicals which Aldrich makes available to the research community. Over the years, he has also personally helped many deserving chemists at universities with grants to underwrite their research.

Dr. Bader also has won renown as an art historian and a student of the Bible. His collection of the works of seventeenth century Dutch Masters is considered one of the finest private art collections in the world. He was named a fellow of the Royal Society of Arts in London for his achievements as an art collector and historian and for his research in art restoration.

From: "Our Chemist-Collector Approaches Sixty"

At Pittsburgh Plate Glass, he was employed as a Research Chemist and later became Organic Group Leader in the paint division. Alfred found it wasteful of research chemists' time and talent to prepare high-purity intermediate compounds necessary to get on with the heart of the research itself. At that time, the only significant U.S. source for such products was a division of Eastman Kodak Company. He suggested to his superior to form a division to augment the list of high-quality intermediates available to research chemists. The proposal was rejected.

He then requested and received permission to try it on his own during his spare time. In 1951, he rented a $25.00-a-month garage, acquired some basic equipment and made MNNG, 1-methyl-3-nitro-1-nitrosoguanidine which was used as a starting material for diazomethane, and a few other compounds. Not wishing to personalize the company by using his own name he suggested to the attorney preparing the articles of incorporation that they toss a coin between "Daniels" and "Aldrich ", the names of his own and the attorney's fiancée. The coin came up "Aldrich".

In 1954, Pittsburgh Glass decided to move its research division to Springdale, Pennsylvania. Although sales from his personal venture were only $15,000 per year, Alfred decided to resign his position and stay in Milwaukee, a city he had come to like. The development of Aldrich now became his full-time occupation.

The Washington College Lecture Series presents

TWO SLIDE LECTURES

Art and Chemistry

A slide lecture on art restoration

ALFRED BADER, *Chairman Aldrich Chemical Company and art conservator*

4:00 p.m.

ALSO

The Bible Through Dutch Eyes

A slide lecture on 17th Century Dutch religious art

8:00 p.m.

Thursday, April 10, 1986
Norman James Theatre

WASHINGTON COLLEGE

Sigma-Aldrich Foundation Special Seminar Series Featuring

Dr. Alfred Bader

"The Rembrandt Project"

Washington University, Laboratory Sciences 300
Tuesday, May l, Lecture 7:15 p.m.
Reception 6:30 p.m. the Rettner Gallery of Lab Sciences

"Archibald Scott Couper and Josef Loschmidt: A Detective at Work"

Univ. of Missouri - St. Louis, Benton Hall Room B451,
Wednesday, May 2
Reception 1:30 pm, Lecture 2:00 - 3:00 pm

"The History of Aldrich and Sigma-Aldrich"

Sigma-Aldrich Life Science
Research Center, Room 1610
Wednesday, May 2, Lecture 7:15 p.m.
Reception 6:30 p.m. Book signing after seminar

As part of the St. Louis Section of the Amereican Chemical Society Centennial Celebration, Dr. Alfred Bader, founder of Aldrich Chemical Company is presenting three lectures. One held at Washington University, one at the University of Missouri-St. Louis, and one at Sigma-Aldrich Life Science Research Center.

Dr. Alfred Bader was born on April 28, 1924 in Vienna, Austria. Born into a family of Czech Jewish descent, he fled from Austria to England at age 14 to escape the Nazis. In 1940 he was deported to Canada and was interned at a camp in southern Quebec. He attended Queen's University, where he studied and received a Bachelor of Science in Engineering Chemistry in 1945 and a Masters of Science in Chemistry in 1947. He continued his education at Harvard University, earning a doctorate in chemistry in 1950. He founded the Aldrich Chemical Company in 1954. In 1975 Aldrich Chemical Company merged with Sigma Chemical Company to form the Sigma-Aldrich Corporation. In 1995, Dr. Bader published his autobiography, *Adventures of a Chemist Collector*, which details his experiences from Nazi-era refugee, to chemist magnate, to fine arts connoisseur. He has received many honors and honorary degrees over the years.

Sponsored by Sigma-Aldrich Foundation and St. Louis Section American Chemical Society celebrating 100 years.

The St. Louis Section gratefully acknowledges the financial support of Mallinckrodt Inc., Saint Louis University, Pfizer and Sigma-Aldrich for our programs.

REMBRANDT VAN RIJN, Dutch, 1606-1669
Portrait of a Young Jew, painted in 1663

Dr. Alfred Bader's interest in art goes back to his childhood, but he started collecting paintings seriously while working on his doctorate. Over the past four decades, he has amassed an impressive collection. One of his famous acquisitions is the purchase of a Rembrandt painting: "Portrait of Johannes Uyttenboraert" at Sotheby's in London in 1992. A few months later he sold the painting for $10 million to the Rijkmuseum in Amsterdam (which houses the world's largest collection of Rembrandts). Dr. Bader's research into Rembrandt is legendary.

Dr. Bader was born in Vienna to a Catholic Hungarian mother and a Jewish father of Czech origin. His father died two weeks after he was born and the father's sister, a wealthy widow, was allowed to adopt him. Because of the growing Nazi menace, he was sent to England to live with strangers under a British program allowing entry vistas for Jewish children. He obtained a B.S. degree in chemical engineering, a B.A. degree in history and an M.S. in chemistry from Queen's University in Canada followed by a Ph.D. degree from Harvard University. Dr. Bader is founder of the Aldrich Chemical Company (now Sigma-Aldrich after a recent merger) located in Milwaukee, Wisconsin.

Over the years, Dr. Bader's enthusiasm for chemistry and passion for art have made him a much-sought-after-lecturer for societies and universities around the world. Baylor University is sharing his time with the citizens of Central Texas. He is currently writing a book, an encyclopedic work of Biblical subjects treated by Dutch painters in the 17th century and has just completed writing an autobiography entitled Adventures of a Chemist Collector.

You are cordially invited to attend

a lecture and art examination

by

Dr. Alfred Bader

in the Cameron Gallery of The Art Center

Sunday, September 10, 1995

1:00 p.m.
"The Rembrandt Research Project and the Collector"

2:00 p.m.
Reception and Examination of Art

Bring works of art to be examined
(seating limited)

WACO CREATIVE ART CENTER, INC.
1300 College Drive • Waco, Texas 76708

TheArtCenter

address correction requested

Accredited by the American Association of Museums

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East Tennessee Section
American Chemical Society

AWARDS NIGHT

Speaker:

Dr. Alfred Bader

Founder, Aldrich Chemical Company

"Loschmidt - The Father of Molecular Modelling"

Thursday, April 14, 1994

The University of Tennessee Faculty Club

Chemistry Olympiad Certificates:
Presented by Greg Hurst (ORNL), Olympiad Committee Chair. Other members: Chuck Feigerle (UTK), Al Hazari (UTK), Chris Barshick (ORNL), and Stacy Barshick (ORNL).

Ben Cargile *(Karns HS)*
Nathan Cronan *(Roane County HS)*
Jared Mach *(Morristown-Hamblen HS, West)*
Samuel Neff *(Karns HS)*
Daniel Parker *(Morristown-Hamblen HS, West)*
Jeremy J. Ruddy *(Oak Ridge HS)*
James Wesolowski *(Roane County HS)*
Lisa Wong *(Oak Ridge HS)*

These eight students are our ETS-ACS representatives who will be among more than 1,100 nationwide to take a national qualifying exam April 22. Twenty finalists from that exam will undergo intensive training June 12-26 at the U.S. Air Force Academy in Colorado Springs. The top four will then be chosen to comprise the U.S. National Chemistry Olympiad team that will compete in the 26th International Chemistry Olympiad (IChO) in Oslo, Norway, July 3-11, 1994. The IChO involves a series of theoretical exams, laboratory exercises, and other activities aimed at identifying the best chemistry students from participating nations from around the world. This is the eleventh year of U.S. participation. Last year the U.S. team earned two gold and two silver medals, placing among the top three out of 37 participating nations.

Volunteers in Public Outreach (VIP):
Presented by Gordon Jones (ORNL)

Edward Alperin, Shannon Auge, Kevin Benner, Alan Bleier, Abram Bradley, Duane Bruns, Terry Bunde, Kurt Clawson, Jennings Cline, Stephen Cristy, Julian Culvern, Dent Davis, Jr., James Dillard, David Dohery, Diane Doll, Charles Dorton, Carol Erikson, Arthur Fowler, Arlene Garrison, Roswitha Haas, Peggy Vanderhoff-Hanaver, Todd Hardt, David Harkins, William Hayden, Al Hazari, Earl Hinton, Jr., Carl Honaker, Camden Hubbard, Deborah Huntley, Gail Hutchens, Elijah Johnson, Gordon Jones, Lawrence Kennard, Adolf King, Harvey Kite, Margaret Kwoka, Jeanne Lauhoff, Milt Lietzke, Charles Longford, Clay McClarnon, Harold McDuffie, Jr., Dan Marsh, R. Maxwell, Sherman Meade, Ken Monty, John Nemeth, William Parkinson, Jr., Delmas Pennington, Harold Phillips, Rudolph Pletz, Laurie Prell, Worth Quillen, III, Marjorie Richardson, James Sand, Charles Schmitt, George Schweitzer, Percy Staats, Ronald Sternfels, Terryann Ternes, Elizabeth Terry, Edward Tyczkowski, Diane Vance, Amy Walker, James White.

One of the largest and most influential scientific organizations in the world, the American Chemical Society is dedicated to the advancement of the chemical sciences and professionals in the field. From this fundamental commitment, Public Outreach evolved.

The mission of the American Chemical Society Public Outreach Program is the message of the ACS membership:

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50 Year Members:

Julian B. Culvern, R.E. Maxwell, Harold F. McDuffie, Jr., Henry W. Morgan, Edward B. Olszewski, and Frank M. Scheitlin

Past Section Chair's Pin:

Jack Young

WATTec Scholarships:

WATTec Committee: Al Hazari (UTK), David Cuneo (ORNL, retired), Mike Sepaniak (UTK), and Jack Young (ORNL).

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Paul Davis *(UT Chemistry)*
Brian R. Morris *(UT Chemical Engineering)*

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Lori Schirmer *(Maryville College)*

Graduate Student Award:
(To be announced at the April 29 UT Chemistry Honor's Day.)

Outstanding High School Chemistry Teacher:

Terry Uselton (*Carter High School, Strawberry Plains)*

Special Recognition of Service:

Barbara Monopoli *(IT Corp.)*, Newsletter Publisher, 1983-1994.

D.A. Shirley Award "for outstanding contribution to chemistry by a member of the East Tennessee Section in the form of teaching, research, and service to the profession."
Presented by Gleb Mamantov (UTK Chemistry)

Dr. W.D. ("Dub") Shults *(ORNL)*

ABOUT THE SPEAKER

Dr. Alfred Bader was born in Vienna, Austria. He received h bachelor's degrees in Chemical Engineering and History from Queer University in Ontario, a Master's degree in Chemistry from Queer University, and a Ph.D. in Chemistry from Harvard. He began h career with the research laboratories in the Paint Division Pittsburgh Plate Glass Company in Milwaukee in 1950. In 1951, H and an attorney founded Aldrich Chemical Company with $50 During its first year, Dr. Bader made one chemical, using a garage a laboratory. The company had total sales that first year of $1705. Dr. Bader left PPG in 1954 to become president of Aldrich. Th company grew steadily, and in 1975 merged with Sigma. Dr. Bad remained with Sigma-Aldrich until 1991.

Dr. Bader has been awarded numerous honorary degrees and has wo many awards, including the Engineer of the Year in Milwaukee ar the Winthrop-Sears Medal. He is a Fellow of the Royal Society of th Arts and a Guest Curator at the Milwaukee Art Center. His curre activities include completion of his autobiography, involvement in many ACS activities such as project SEED, and continuing his life-long interest in art.

ABOUT THE LECTURE

One of the greatest scientific achievements of the century is the recognition that all matter is constructed of molecules, and that molecular modeling accurately depicts molecules in space. At the beginning of this century some scientists still doubted the very existence of molecules. Since then many physical methods such as NMR and X-ray crystallography have helped scientists to prove that molecules really look as the models show. The proof has been developed in the last two hundred years by many brilliant minds and today we deal with molecular modeling as a matter of course. Yet Josef Loschmidt, the first scientist who drew many molecules "geographically", i.e., in space, has been virtually forgotten.

Loschmidt was the first accurately to depict unsaturation through double and triple bonds, to predict the existence of cyclopropane, to show ozone as O_3 and benzene as a molecule with six carbon atoms in a circle. His small book, *Chemische Studien I* was published in Vienna in 1861. It contains 368 graphic formulae, 121 of are aromatic.

The famous German chemistry, August Kekule, has generally been credited with being the first to describe benzene as a circular structure, in 1865. Later, he told how that idea came to him while on a bus in London or before a fire in Gehent - a snake biting its tail. But Kekule had certainly seen Loschmidt's book four years earlier, though he may not have understood it.

Loschmidt was a wonderful human being, total unmaterialistic, shy, self-effacing, loved by his colleagues in Vienna. He never pushed the priority of his work, but whoever reads it carefully today will realize that molecular modeling would have been developed a century earlier, if Kekule and his contemporaries had understood and encouraged Loschmidt.

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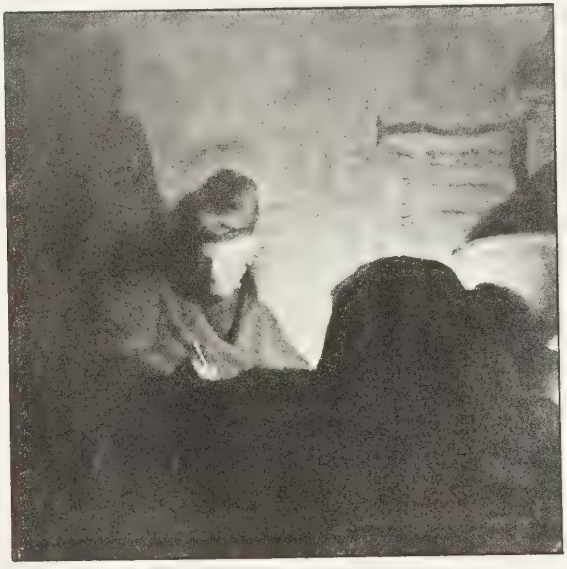
THE DAYTON BULLETIN

Bulletin of the Dayton Section of the American Chemical Society • Jan. 1972



DR. ALFRED BADER Speaks on "Chemistry and Art" — P. 4-5

POLYMER DISCUSSION GROUP MEETING

Dayton Section American Chemical Society

MEETING ANNOUNCEMENT

Subject:	Mechanistic Aspects of Cellulose Flammability
Speaker:	DR. ROBERT H. BARKER Clemson University
Date:	January 20, 1972
Time:	4:30 – 6:00 p.m.
Place:	Oelman Hall Wright State University

Abstract:
A number of divergent and frequently incompatible models have been proposed to explain the chemical action of flame retardants on cellulosic substrates. In an attempt to rectify this situation, a systematic mechanistic investigation is being conducted and a coherent model for the flame retardation process is being developed.

A model for cellulose flammability has been developed in which the reagent acts by phosphorylation, dehydration, and crosslinking to interfere with the thermal unzipping of the cellulose to form the levoglucosan which serves as the primary fuel supply for the flame. This model not only explains the action of simple phosphorus compounds, but also accounts for the frequently observed synergistic effect of nitrogenous bases in combination with organophosphorus systems.

Biography:
Dr. Barker received his B.S. in Textile Chemistry from Clemson in 1959 and his Ph.D. in Organic Chemistry from the University of North Carolina in 1963. He taught in the Chemistry Department at Tulane for five years before joining the staff at Clemson where he has been since 1967. His research interests include the study of flame retardation in polymers, cellulose chemistry, and the application of physical methods in structural elucidation. These studies have lead to the publication of over 25 research articles to date.

THE DAYTON BULLETIN

Published monthly October thru May by the American Chemical Society, Dayton Section

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J. THEODORE BROWN ..... Assistant Editor

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JANUARY SECTION MEETING

"PAST CHAIRMAN'S NIGHT"

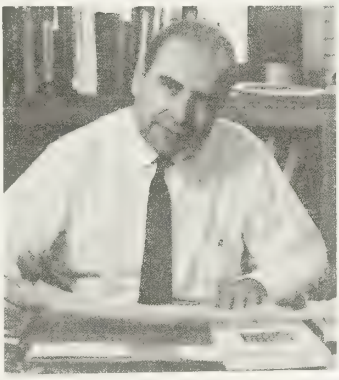
Speaker:	DR. ALFRED R. BADER President, Aldrich Chemical Company Milwaukee, Wisconsin
Topic:	"CHEMISTRY AND ART"
Date:	Tuesday, January 18, 1972
Place:	Kennedy Union, University of Dayton
Time:	Cocktail Hour — 6:00 p.m. Dinner — 7:00 p.m. Speaker — 8:00 p.m.
Menu:	Fruit Cocktail Roast Sirloin of Beef Baked Potato Broccoli Chef's Combination Salad German Chocolate Cake
Cost:	$5.00

Call Ted Brown — 449-2431 with your reservations by 4:00 p.m. Friday, January 14th.

This will be a most interesting meeting! Plan to attend with your wife, husband or friend.

PAST CHAIRMAN'S NIGHT PROGRAM

Abstract: As a collector of old master paintings I look every year at several hundred old paintings—in junk and antique stores and at auctions all over the world—and have to decide, usually within minutes, whether a painting is worth buying. The first criteria is, of course, the general artistic merit of the work—often hard to discern in paintings covered with centuries of dirt. Secondly, is the painting really what I think it is. I am offered a painting said to be by a Dutch 17th century artist—are the pigments those used by 17th century artists? Are the wood or canvas and the ground those used by 17th century Dutch artists? Once I have acquired an old painting, the surface dirt is usually easily removed with mild solvents, and the decision has to be made how much restoration to do. Is the painting an original, a workshop production or a later copy? Is the painting in its original size? What is the condition of the support—be it canvas, wood, metal or slate? How much old restoration is there and should it be removed? Almost every old painting has some overpaint—was this added to hide losses or subjects considered undesirable by previous owners? If the painting is signed, is the signature original? The last questions can generally be answered by a combination of physical and chemical means, chiefly examination with uv light and under a magnifying glass, and tests with various solvents. Many specific examples will be given to illustrate these questions and their answers.



About the Speaker: Alfred R. Bader was born in Vienna, Austria on April 28, 1924. He began his higher education at Queen's University, Ontario, Canada, where he was awarded the following degrees: B.Sc., 1945; B.A., 1946; M.Sc., 1947. He then moved on to Harvard University where he obtained his M.A. degree in 1949 and his Ph.D. degree in chemistry, 1950.

Dr. Bader joined the Pittsburgh Plate Glass Company in 1950 as a research chemist, and was promoted to group leader of organic research in 1953. He joined the Aldrich Chemical Company (Milwaukee) in 1954 as chief chemist. Since 1955, Dr. Bader has been President of Aldrich.

Dr. Bader is a member of the Chemical Society (London) and the British Chemical Society. His research interests include fatty acids, quinones, reaction mechanisms, alkenylphenols, indoles. In addition, Dr. Bader is a collector of old master paintings and is quite knowledgeable of the chemistry of art.

Editor's Page

The following are reprints of the current series of Professional Relations columns sponsored by the Council Committee on Professional Relations. The column looks into areas which affect the careers of chemists and chemical engineers. The current area of interest is layoffs.

The Committee is interested in your reaction to these columns. Please direct any comments or questions to:

American Chemical Society
Office of Professional Relations
Washington, D.C. 20036
David A. H. Roethel, Manager

* *

MAJOR LAYOFFS. Probably no single activity of the Council Committee on Professional Relations has evoked more recent member interest than the investigation of major layoffs involving chemists and chemical engineers. Understandably so, since large scale terminations are a new phenomenon for a profession which has been used to a steady demand for its services since the end of World War II.

The Committee's initial purpose—and still a very valid one, as far as that goes—was to assure that ACS members caught up in layoff situations were treated fairly and in a fashion consistent with their professional standing. Pink slips at quitting time on a Friday afternoon is a poor and unacceptable way of letting chemists go. And, by and large, industrial management has demonstrated that it understands this premise, though the Committee did encounter a case in which only four hours notice was given more than 40 terminated chemists. Severance pay was given in lieu of notice, however.

How does the Committee learn about layoffs, how does it evaluate them, and what can it or the Society do about them, are three questions consistently posed by members. Let's look at the first of these for the balance of this column and save the other two for next month.

To begin with, a volunteer group such as the Committee does not have a vast surveillance network keeping track of employment practices and terminations at each of several thousand installations where chemists and chemical engineers are employed. Even our professional staff is limited in its ability to detect all layoffs, though to date it has performed admirably in ferreting out major cases and some minor ones as well. Beyond this, there is considerable reliance on information furnished by local sections and individual members. In fact, one of the more useful professional relations activities a local section can engage in is to serve as a set of eyes and ears for the national committee on layoffs so that official verification and uniform elicitation of details can be accomplished through the national office. Other sources of information are reports in C&EN, trade journals, and in the general press.

In any event, the emphasis is on documentable reports, not hearsay information which tends to abound in times like these. The soundness of this approach already has been amply demonstrated by several inquiries which led to the finding that no layoff of chemists had occurred despite other information to the contrary. In one case, for example, some 6000 persons were let go by a West Coast aircraft firm, but inquiry showed that only one or two chemical engineers at most were in this group. To further remove any witch hunting stigma from its study of layoff situations, the Committee is careful not to publish the names of any employers with which it is in contact until after verification of a layoff has been made.

(continued on p. 11)

Want To Interact With Legislators On A Professional Level?

At our last Board of Directors meeting it was proposed by one of our members that the Dayton Section should communicate professional opinions to and interact with our local, state, and national officials and legislators on issues which are technologically oriented and which may directly affect the scientific community.

The Board of Directors has appointed an ad hoc committee to investigate this possibility. Our activity would chiefly consist of furnishing information in our fields of professional competence.

All members who would like to help to man a permanent committee to thus interact with governmental officials are urged to contact Brian H. Chollar (449-2581), Claude Hudgens (866-7444) or Bill Scribner (268-3411).

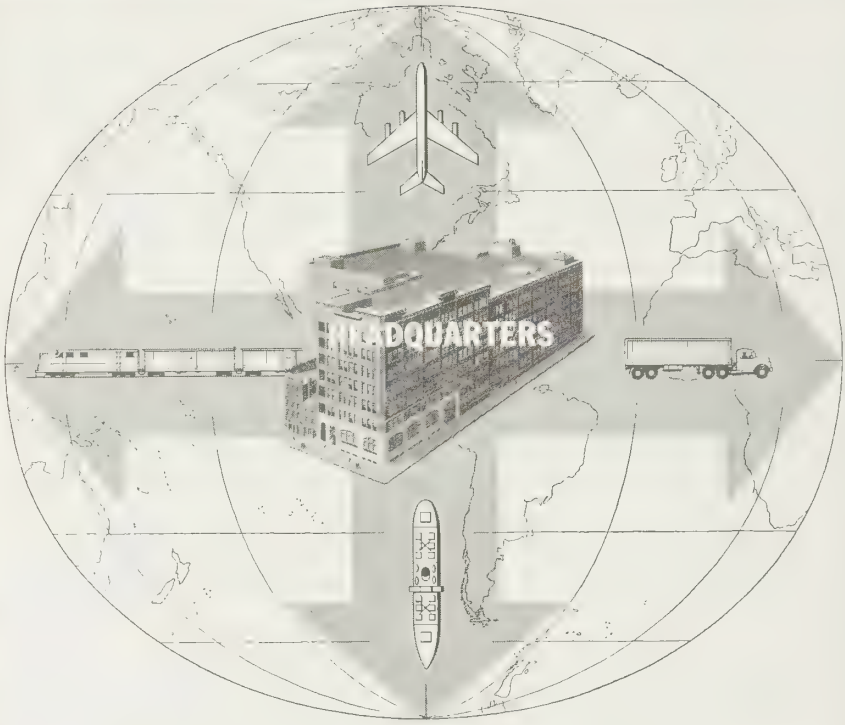
A draft of a proposed inquiry to a legislator is shown on the following page.

Dear _____

It is evident that many of the legislative decisions of these times involve issues which are technologically oriented and often directly affect the scientific community. The problem of collecting and appraising technical information related to these decisions must be of some concern to the legislator. As you know, the Dayton area has a large number of scientists with competence in a variety of disciplines. The Board of Directors of the Dayton Section of American Chemical Society feels that the local scientific community could provide a valuable source of information for legislative issues related to technical areas.

Many of our members have expressed a concern about legislation in technical issues and a desire to become more directly involved by contributing in those areas in which they have the interest and knowledge which could be of use to their legislators. Therefore we are proposing that we prepare a scientific information retrieval system which could be available to you. This would consist of a directory of professional scientists in our community and their main areas of interest and capability. These people could be consulted to prepare background information or to offer their opinion in matters of community concern.

We would like to have your reaction to this proposal and also to learn how you at the present time obtain technical information required in your deliberations.



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That this "professional" way of making inquiries has paid off can be attested to by the cooperative spirit of employers in responding to ACS requests for information on their layoffs. Many, in fact, are willing to go beyond the specific interests of the Committee in eliciting facts. Some, too, turn to the Committee before announcing a layoff in order to solicit its guidance on appropriate procedures. In the Committee's opinion, this kind of a relationship is far more apt to pay dividends in the long run and thereby to place ACS in a much better position to espouse principles and actions designed to enhance the chemist's status professionally and perhaps economically as well.

HOW TO JUDGE A LAYOFF. Judgment of the manner in which a company lays off numbers of chemists and chemical engineers at one time is not easily made, despite the existence of such well recognized principles as those espoused by the ACS's "Guidelines for Employers." Few cases are alike in all respects. Some firms offer generous severance pay. Others give several months notice. Some companies have extensive out placement counselling programs. Others don't have the resources for this kind of effort. And so on.

Primarily responsible for evaluating all such factors is the Subcommittee on Professional Standards of the Council Committee on Professional Relations. The Subcommittee has several tests it applies to each reported layoff in order to arrive at a balanced view. These, it feels, better enable it to see how given situations fit the Committee's guidelines. It stresses, too, that the guidelines are just that, not fixed rules of procedure, deviations from which, no matter how slight, are to be condemned.

Questions asked of layoff employers include:

1. Did a layoff actually occur? If so, how many chemists and chemical engineers were terminated?
2. How much notice and/or severance pay was given? How did this compare with the "Guidelines for Employers"?
3. Was re-employment assistance provided? If so, what did it consist of?
4. Did the employer help terminated employees with personal problems arising from their separation?
5. Were major employee protection benefits, e.g., life and health insurance, continued for some interval following termination?

Probably because they can account for up to several thousands of dollars of income, the notice and severance pay provisions regularly draw the most member attention. Also, many members hope that their notice and separation can be handled in a dignified manner befitting their professional status. Hence, termination with only a few hours warning is viewed with grave concern by the Committee on Professional Relations, other severance pay arrangements notwithstanding.

Fortunately, such situations are in the very small minority. Instead, most employers now seem to favor one to three months advance notice, with severance pay related to length of service used to adjust for any longer notice that custom or the "Guidelines" may indicate is desirable. A prevalent feeling, too, is that once an employee has been terminated, virtually all of his efforts should be directed to finding new employment, hopefully, with considerable employer assistance and prodding. Hence, long notice, some employers argue, only puts off the inevitable.

Whatever the approach, there is evidence of ample consideration by most employers in handling these unpleasant situations. In part, this may stem from a greater regard for the individual chemist and his professional standing. But it could just as well reflect a hope by such employers that they may have an easier time recruiting at some future time, if they are remembered for effecting terminations fairly.

Next month, a look at continuation of benefits for terminees and a list of employers judged to have handled terminations equitably to date.

David A. H. Roethel, Manager
Office of Professional Relations

ADVANCE NOTICE

ACS FILM COURSE

The A.C.S. Film Course "INTERPRETATION OF INFRARED SPECTRA" will be shown at several sites in Dayton during the period of the 14th to the 25th of February. The lecturer, Norman B. Colthup, is a pioneer in the field of infrared spectroscopy and is the author of the widely used Colthup IR group frequency correlation chart.

The duration of the course will be four hours, divided into two 2-hour sessions. The necessary reference books will be available at the time of showing.

Details of locations and times will be announced in the February BULLETIN.

SECTION DUES PAYABLE

The $2.00 local section dues are payable any time between now and February, 1972.

Members are urged to send their dues to our Treasurer, Dr. B. Lawrence Fox, Chemistry Department, University of Dayton, Dayton, Ohio 45409.

WASHINGTON COLLEGE
CALENDAR OF EVENTS

April

1 TUESDAY
BASEBALL vs. St. Mary's, *3:00 p.m.*
MEN'S LACROSSE EXHIBITION at Edgewood, *7:00 p.m.*
MEN'S B LACROSSE at Anne Arundel, *4:00 p.m.*
SOFTBALL vs. Essex, *4:00 p.m*

2 WEDNESDAY
BASEBALL at UMES, *1:00 p.m.*
MEN'S TENNIS at Ursinus, *3:00 p.m.*
WOMEN'S LACROSSE at Essex, *3:00 p.m*
WOMEN'S TENNIS at Marymount, *3:00 p.m.*

Art Show
COLLAGES by Tex Andrews
O'Neill Literary House

Opening reception 5:00 - 7:00 p.m.
Exhibit on display 9:00 a.m. - 5:00 p.m., weekdays through April 16th

Lecture Series and U.S. Association of Former Members of Congress
THE GOOD NEWS OF DAMNATION: A REVISIONIST VIEW OF HIROSHIMA
Gale McGee, Congressional Fellow
Sophie Kerr Room, 8:00 p.m.

Freshman Class and SGA
STUDENT & FACULTY AUCTION
Student Center, 9:00 p.m.

3 THURSDAY
MEN'S B LACROSSE vs. Cobelskill, *4:00 p.m.*

Sophie Kerr Committee
AN INTRODUCTION TO POST COLONIAL LITERATURE
Albert Wertheim, Dean, Indiana University
Sophie Kerr Room, 8:00 p.m.

4 FRIDAY
MEN'S TENNIS vs. St. Mary's, *3:00 p.m.*
SOFTBALL at Shenandoah, *3:00 p.m.*
WOMEN'S TENNIS at Catholic, *3:00 p.m.*

Drama Department Lecture
THE AESTHETICS OF AVANT GARDE DRAMA
Leon Katz, Yale School of Drama
Sophie Kerr Room, 7:30 p.m.

5 SATURDAY
BASEBALL vs. Farleigh Dickinson, *1:00 p.m.*
MEN'S LACROSSE at Hobart College, *2:00 p.m.*
CREW at Occaquan

Alumni Association
TALLULAH, A MEMORY
Eugenia Rawls as Tallulah Bankhead
Tawes Theatre, 8:00 p.m.

6 SUNDAY
MEN'S B LACROSSE vs. Buffalo State, *2:00 p.m.*

7 MONDAY
MEN'S TENNIS at UMBC, *3:00 p.m.*
WOMEN'S LACROSSE at Western Maryland, *4:00 p.m.*

International Relations Club and Lecture Series
INTERVENTION IN THE THIRD WORLD
Robert Duemling, Washington College Fellow, Director Humanitarian Aid to Nicaraguan Contras
Hynson Lounge, 7:30 p.m.

Film Series
THE GODS MUST BE CRAZY
Norman James Theatre, 7:30 p.m

8 TUESDAY
MEN'S B LACROSSE at Catonsville, *4:00 p.m.*
WOMEN'S TENNIS vs. Goucher College, *3:00 p.m.*

Sophie Kerr Committee
LAWRENCE FERLINGHETTI reading from his poetry
Norman James Theatre, 8:00 p.m

Campus Christian Fellowship
A CHRISTIAN ROCK CONCERT featuring Mylon Lefevre and Broken Heart
Cain Athletic Center, 7:00 p.m.

9 WEDNESDAY
BASEBALL vs. Swarthmore, *1:00 p.m*
MEN'S TENNIS vs. Swarthmore, *3:00 p.m.*
MEN'S LACROSSE at Franklin & Marshall, *3:00 p.m*

Concert Series
WILLIAM WOLFRAM, pianist
Tawes Theatre, 8:00 p.m

Business Club
OPPORTUNITIES AND CHALLENGES IN COMMERCIAL BANKING
George Elder, Vice President, Maryland National Bank
Sophie Kerr Room, 6:00 p.m

10 THURSDAY
WOMEN'S LACROSSE vs. Salisbury, *3:30 p.m*

Lecture Series
Alfred Bader, Chairman Aldrich Chemical Co and art conservator
ART IN CHEMISTRY
Norman James Theatre, 4:00 p.m. and
THE BIBLE THROUGH DUTCH EYES
Norman James Theatre, 8:00 p.m

11 FRIDAY
MEN'S TENNIS vs. Delaware State, *3:00 p.m*
WOMEN'S TENNIS at Mount Vernon College, *3:00 p.m*

DEAN'S LIST RECEPTION
Hynson-Ringgold House, 4:00 - 6:00 p.m

SGA Band
JR. CLINE & THE RECLINERS
Student Center, 9:30 p.m

12 SATURDAY
BASEBALL at Johns Hopkins, *1:00 p.m.*
MEN'S TENNIS at Johns Hopkins, *2:00 p.m*
MEN'S LACROSSE vs. Roanoke College, *1:30 p.m.*
WOMEN'S LACROSSE at Gettysburg, *1:00 p.m*
SOFTBALL at Gettysburg, *1:00 p.m*
CREW at Villanova

PACE
PUBLIC SPEAKING WORKSHOP
Merelyn Reeve, Professor of Speech, Dartmouth College
9:00 a.m

13 SUNDAY
Music Department
EARLY MUSIC CONSORT
Norman James Theatre, 4:00 p.m

14 MONDAY
MEN'S B LACROSSE at Salisbury, *4:00 p.m*
WOMEN'S TENNIS at Wesley College, *3:00 p.m*

Psychology Department Lecture
NEW DIRECTIONS IN MEDICAL PSYCHOLOGY
Kevin Riley, Temple University
Sophie Kerr Room, 7:00 p.m

Film Series
REVOLT OF JOB
Norman James Theatre, 7:30 p.m

15 TUESDAY
MEN'S TENNIS at Catholic University, *3:00 p.m*

Woodrow Wilson Fellow Lecture
MY LIFE, THEIR TIMES: MAKING IT IN JOURNALISM AS A WOMAN
Nan Robertson, New York Times
Norman James Theatre, 8:00 p.m

16 WEDNESDAY
BASEBALL at Ursinus, *1:00 p.m*
MEN'S LACROSSE at Western Maryland, *4:00 p.m*
WOMEN'S LACROSSE vs. Franklin & Marshall, *3:30 p.m*

Lecture Series and the Daniel Z. Gibson Jr. and A. Wagner Vessels Fund
SEX HORMONES AND EXECUTIVE ABILITY
Estelle Ramey, Georgetown University Medical School
Sophie Kerr Room, 8:00 p.m

17 TUESDAY
MEN'S TENNIS vs. Western Maryland, *3:00 p.m*
WOMEN'S TENNIS at Hopkins, *3:00 p.m*

AID, TRADE, AND THIRD WORLD DEBT
Marjorie Sheen, World Bank
Sophie Kerr Room, 8:00 p.m

Performance Preview Talk
Erika Salloch on The Threepenny Opera
O'Neill Literary House, 6:30 p.m

Departments of Music and Drama and Actors Community Theatre
THE THREEPENNY OPERA by Kurt Weill and Bertolt Brecht
Tawes Theatre, 8:00 p.m.

PACE with American University
ISLAM AND THE MUSLIM WORLD
Ambassador Luke Battle, keynote speaker
Professor Davy McCall, discussion leader
9:00 a.m

18 FRIDAY

BASEBALL vs. Western Maryland, *3:00 p.m.*
MEN'S TENNIS at Tiger Tournament, *12 noon*

THE THREEPENNY OPERA
Tawes Theatre, 8:00 p.m

19 SATURDAY

BASEBALL at Gallaudet, *1:00 p.m.*
MEN'S TENNIS at Towson, *9:00 a.m.*
MEN'S LACROSSE vs. Salisbury, *1:30 p.m.*
MEN'S B LACROSSE vs. Army Prep, *10:00 a.m.*
WOMEN'S LACROSSE at Muhlenberg, *1:00 p.m.*
WOMEN'S TENNIS at Notre Dame, *1:00 p.m.*
CREW at Lafayette

Alumni Association
INFORMAL SPRING GATHERING

THE THREEPENNY OPERA
Tawes Theatre, 8:00 p.m.

SGA Band
BOBBY AND THE BELIEVERS
at the OX party

20 SUNDAY

THE THREEPENNY OPERA
Tawes Threatre, 2:00 p.m

Sophie Kerr Committee and the Maryland Humanities Council
SUSAN MINOT READING AND DISCUSSING HER WORK WITH AMY WHITE, FICTION WRITER
O'Neill Literary House, 8:00 p.m.

21 MONDAY

MEN'S TENNIS vs. Salisbury, *3:00 p.m*

Dance Program, Art Department, Drama Department
AN ARTIST'S VIEW OF STAGE DESIGN
Paul Fonseca
Dunning Hall Lecture Room, 6:30 p.m.

Lecture Series
THE GDR ROLE IN THE UNITED NATIONS
Frank Schultz, Speaker
Sophie Kerr Room, 8:00 p.m.

Film Series
PRIZZI'S HONOR
Norman James Theatre, 7:30 p.m

22 TUESDAY

Senior Reading
SENIOR READING
O'Neill Literary House, 8:00 p.m

BASEBALL at Salisbury, *3:00 p.m*
WOMEN'S TENNIS vs. Trinity College, *3:00 p.m*

Music Department
STUDENT RECITAL
Norman James Theatre, 4:00 p.m.

23 WEDNESDAY

MEN'S LACROSSE at Gettysburg, *3:00 p.m*
WOMEN'S LACROSSE at Goucher, *3:30 p.m.*

Business Club
CAREER OPPORTUNITIES IN FINANCIAL PLANNING AND INSURANCE
Robert Frederick, President, Frederick Companies
Sophie Kerr Room, 6:00 p.m

24 THURSDAY

BASEBALL vs. Delaware Valley, *1:00 p.m*
MEN'S TENNIS at St. Mary's, *3:00 p.m*
WOMEN'S TENNIS at Western Maryland, *3:00 p.m*

Center for Career Development
AN INTERVIEWING WORKSHOP
John Flato '69, Bendix Corporation
Sophie Kerr Room, 7:30 p.m

25 FRIDAY

MEN'S B LACROSSE vs. Salisbury, *4:00 p.m.*

Art Exhibits Committee
STUDENT ART SHOW
Tawes Gallery
Opening reception, 5:00 - 7:00 p.m.

26 SATURDAY

MEN'S BASEBALL at Drew, *1:00 p.m.*
MEN'S LACROSSE at Washington & Lee, *2:00 p.m.*
WOMEN'S LACROSSE at Maryland Tournament
WOMEN'S TENNIS at CWAC
CREW vs. John Hopkins, *12 noon*

Parents Day & Spring Luau
STEEL BAND at the Lelia Hynson Pavilion,
4:00 - 8:00 p.m

French Club
L'ANGLAIS TEL QU'ON LE PARLE
a one act comedy in French and English
Norman James Theatre, 8:00 p.m

27 SUNDAY

Freshman Class Fashion Show
FASHION SHOW
Miller Library Terrace, 1:00 p.m

MEN'S TENNIS at Villanova, *1:00 p.m.*

28 MONDAY

MEN'S TENNIS at MAC
WOMEN'S TENNIS at Essex, *4:00 p.m*

Music Department
A PROGRAM OF PIANO TRIOS
Tawes Theatre, 8:00 p.m.

Film Series
THE GO MASTERS
Norman James Theatre, 7:30 p.m

29 TUESDAY

MEN'S TENNIS at Gallaudet, *3:00 p.m.*

30 WEDNESDAY

MEN'S LACROSSE at St. Mary's, *3:00 p.m.*
WOMEN'S LACROSSE vs. Haverford, *3:30 p.m.*

TOMMY CONWELL'S YOUNG RUMBLERS
Student Center, 9:30 p.m

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The Capital CHEMIST

Vol. 56 - No. 6 A publication of the Chemical Society of Washington—Section of the American Chemical Society September 2006

Save the Date: October 5th!

CSW, ACS and the Royal Netherlands Embassy will host Dr. Alfred Bader for a Special Presentation

Dr. Alfred Bader

Commemorating the 400th anniversary of Rembrandt's birth, Dr. Alfred Bader will speak on "The Rembrandt Research Project and the Collector" at 7:15 PM on Thursday, October 5 at the Royal Netherlands Embassy, 4200 Linnean Avenue, N.W., Washington, D.C. An ACS-sponsored reception honoring Dr. Bader will be held at the Embassy starting at 6:30 PM.

In 1951 Dr. Bader founded Aldrich Chemicals, later Sigma Aldrich, the world's largest supplier of research chemicals. He was able to combine his passion for fine arts with his distinguished career as a chemist when Aldrich began using Old Master paintings from his private collection, often alchemical in theme, on the covers of its catalogs and journal, the *Aldrichchimica Acta*. Articles on art history and alchemical paintings from "Our Chemist Collector" soon appeared in the Aldrich catalog as well, penned anonymously by Dr. Bader. This appreciation for fine art included years of devotion to the study of art history with preeminent experts, art dealers, collectors and historians of Old Master paintings. Dr. Bader has curated special exhibits, become a renowned lecturer, and was named a fellow of the Royal Society of Arts in London.

There will be no charge for this special event. However, because of security requirements and space limitations it is necessary to register attendees in advance. **Don't delay! Be sure to register yourself and guests immediately** by calling the CSW office at (202) 659-2650 or by e-mail at CSW@acs.org. *Directions to the Royal Netherlands Embassy: Traveling north on Connecticut Avenue, cross Tilden and turn right onto Upton St. Follow around to 4200 Linnean Ave., on the left side. Parking is limited in the Embassy grounds, but there is street parking outside. By METRO: The Embassy is 0.5 miles from the Van Ness – UDC Metro stop. From the station walk a half-block south on Connecticut Ave, go east on Upton, which joins onto Linnean.*

CSW *"Forensic Chemistry in Action"* Workshop Shows Societal Benefits of Chemistry

A one-day workshop, "Forensic Chemistry in Action," is planned for Saturday, October 21, 2006, at The George Washington University (GWU). Drawing on real cases, six experts in forensic chemistry will narrate and discuss their case studies and discuss them with an audience of undergraduate students, high school teachers and students, members of the media and interested public. The cases will show how fundamental and applied chemistry actually serve the needs of society in law enforcement and in the application of justice.

Expert presenters from GWU's Forensic Science Department are two professors: Walter Rowe on "crime scene chemistry" and Nicholas Lappas on the "influence of drugs on driving: effects and measurements". Madeline Montgomery, Ronald Kelly, and Dr. Jason Schaff, three scientists from the FBI Laboratory in Quantico, VA., will discuss, respectively, drug-facilitated sexual assaults; combustion, fire and explosion chemistry in investigating bombing incidents; and career opportunities in forensic chemistry. Dr. Kenneth Busch, President of the Washington Professional Chapter of AXE, will discuss the application of mass spectroscopy to drug testing for Olympic competition. Participants will gain a better understanding of how fundamental and applied chemistry actually serve society in protecting the rights of all its citizens. For more details on the program and a registration form

(Continued on page 3)

The Capital Chemist™

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Message from the President

Ted Becker

We have not had any dinner meetings or issues of the *Capital Chemist* for several months, but many people in CSW have been busy, and there are several important items to report.

We learned in July that CSW is one of three finalists for an ACS award: Outstanding Performance by a Local Section, Very Large Size Category. The award will be presented at the ChemLuminary Award ceremony during the ACS meeting in San Francisco, Tuesday, September 12. Whether or not CSW wins out over the other finalists – New York and North Jersey – the selection as a finalist represents a signal achievement for Jim Zwolenik's leadership in 2005 and the enthusiastic contributions of innumerable CSW members. The comments by reviewers on the CSW Annual Report for 2005 were extremely complimentary about accomplishments in a wide range of our activities carried out by a broad membership base.

Two upcoming special events, highlighted on the front page, deserve your attention, participation, and encouragement: (*i*) *Forensic Chemistry in Action* is a full day workshop designed for students, teachers and the scientific public. I hope that many CSW members and their families will attend, and I ask that you help publicize this event. (*ii*) The talk by Alfred Bader is a unique opportunity to hear this distinguished chemist-collector and to honor him at the reception for his remarkable support of ACS programs.

I would direct your attention to the article in this issue on the recent Conference on Standards of Learning – another novel foray for CSW into an important problem, where we cooperated with three ACS Sections in Virginia.

Finally, our editor and the CSW Publications Committee have been discussing ways by which the *Capital Chemist* can be made more valuable to our members. During the next few months you may see some modest changes in format and broadened coverage of news about chemistry and chemists in the Washington area. These are experimental changes, and we need your feedback to decide how best to configure the *Capital Chemist* and how to coordinate it with our web site. Please give your comments, criticisms and ideas to the editor and/or the Publications Committee at the addresses shown in the masthead at the left.

Attention New Members

If you joined the ACS or moved into the CSW Section during the past year, you are welcome to receive a $10 discount for your first monthly dinner meeting. Be sure to mention this discount when you make your reservations.

Visit CSW on the web: www.csw-acs.org

THE CHEMICAL SOCIETY OF WASHINGTON PRESENTS: *"FORENSIC CHEMISTRY IN ACTION"* WORKSHOP

SATURDAY, OCTOBER 21, 2006
8:30 AM TO 5:00 PM

The George Washington University
Hartman Auditorium, Room 213
The 1957 E Building, Foggy Bottom Campus
1957 E Street, NW, Washington, DC

This case-based, one-day workshop facilitated by two faculty members from The George Washington University's Department of Forensic Science, three forensic chemists from the FBI Laboratories in Quantico, VA., and an expert mass spectroscopist will explore the role of the chemical sciences and technology in modern crime-solving methods.

Learn first hand how experts evaluate crime scenes, collect and process evidence, and contribute to the arrest and conviction of criminals. Teachers will find this workshop a source of new material for their classes; students at all levels, adults and media specialists will expand their horizons and enhance their appreciation for the role of chemistry in forensics. Easily accessible via METRO at the Foggy Bottom-GWU stop on the Orange/ Blue lines. The Hartman Auditorium is 7 short blocks from the METRO stop. A small registration fee covers lunch as well as refreshments and snacks during morning and afternoon breaks. Visit: www.csw-acs.org for the details on the program and speakers and for registration materials.

Space in the Hartman Auditorium is limited. Please register early to assure a seat. Registrations forms should be mailed and **must be RECEIVED by September 30th, 2006,** to

Forensic Chemistry in Action Workshop
c/o Chemical Society of Washington O-218
1155 Sixteenth Street NW
Washington, DC 20036

Forensic Chemistry Workshop

(Continued from page 1)

please visit: www.csw-acs.org . Registration will be open from September 1-31, 2006.

Since early June, Dan Bozutto, James Cassidy, Bhushan Mandava, Arvind Nandedkar, Kristine Patterson, Elena Pisciotta, Maria Rodriguez, Elaine Shafrin, Louis Stief, Paul Terry, and Jim Zwolenik, have planned the administrative details of this CSW one-day workshop. The committee now needs to meet the expanded efforts required in advertising, marketing, registration, and on-site coordination. **If you are willing to volunteer to assist in this exciting workshop, please contact:** Jim Zwolenik, james_j_zwolenik@msn.com or 202-296-3040; or Maria Rodriguez rodriguez.maria@epa.gov or 703-305-6710.

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Location TBA

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Board of Managers - Mon. Sep 25
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CSW Celebrating 122 Years of Service to Washington DC Area Chemists

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The Capital CHEMIST

Vol. 56 - No. 6 A publication of the Chemical Society of Washington—Section of the American Chemical Society September 2006

Save the Date: October 5th!

CSW, ACS and the Royal Netherlands Embassy will host Dr. Alfred Bader for a Special Presentation

Dr. Alfred Bader

Commemorating the 400th anniversary of Rembrandt's birth, Dr. Alfred Bader will speak on "The Rembrandt Research Project and the Collector" at 7:15 PM on Thursday, October 5 at the Royal Netherlands Embassy, 4200 Linnean Avenue, N.W., Washington, D.C. An ACS-sponsored reception honoring Dr. Bader will be held at the Embassy starting at 6:30 PM.

In 1951 Dr. Bader founded Aldrich Chemicals, later Sigma Aldrich, the world's largest supplier of research chemicals. He was able to combine his passion for fine arts with his distinguished career as a chemist when Aldrich began using Old Master paintings from his private collection, often alchemical in theme, on the covers of its catalogs and journal, the *Aldrichchimica Acta*. Articles on art history and alchemical paintings from "Our Chemist Collector" soon appeared in the Aldrich catalog as well, penned anonymously by Dr. Bader. This appreciation for fine art included years of devotion to the study of art history with preeminent experts, art dealers, collectors and historians of Old Master paintings. Dr. Bader has curated special exhibits, become a renowned lecturer, and was named a fellow of the Royal Society of Arts in London.

There will be no charge for this special event. However, because of security requirements and space limitations it is necessary to register attendees in advance. **Don't delay! Be sure to register yourself and guests immediately** by calling the CSW office at (202) 659-2650 or by e-mail at CSW@acs.org. *Directions to the Royal Netherlands Embassy: Traveling north on Connecticut Avenue, cross Tilden and turn right onto Upton St. Follow around to 4200 Linnean Ave., on the left side. Parking is limited in the Embassy grounds, but there is street parking outside. By METRO: The Embassy is 0.5 miles from the Van Ness – UDC Metro stop. From the station walk a half-block south on Connecticut Ave, go east on Upton, which joins onto Linnean.*

CSW *"Forensic Chemistry in Action"* Workshop Shows Societal Benefits of Chemistry

A one-day workshop, "Forensic Chemistry in Action," is planned for Saturday, October 21, 2006, at The George Washington University (GWU). Drawing on real cases, six experts in forensic chemistry will narrate and discuss their case studies and discuss them with an audience of undergraduate students, high school teachers and students, members of the media and interested public. The cases will show how fundamental and applied chemistry actually serve the needs of society in law enforcement and in the application of justice.

Expert presenters from GWU's Forensic Science Department are two professors: Walter Rowe on "crime scene chemistry" and Nicholas Lappas on the "influence of drugs on driving: effects and measurements". Madeline Montgomery, Ronald Kelly, and Dr. Jason Schaff, three scientists from the FBI Laboratory in Quantico, VA., will discuss, respectively, drug-facilitated sexual assaults; combustion, fire and explosion chemistry in investigating bombing incidents; and career opportunities in forensic chemistry. Dr. Kenneth Busch, President of the Washington Professional Chapter of AXE, will discuss the application of mass spectroscopy to drug testing for Olympic competition. Participants will gain a better understanding of how fundamental and applied chemistry actually serve society in protecting the rights of all its citizens. For more details on the program and a registration form

(Continued on page 3)

The Capital Chemist™

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Volume 56 Number 6 Sept 2006

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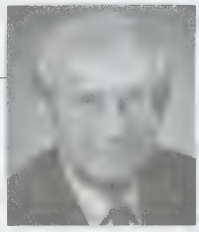
Message from the President



Ted Becker

We have not had any dinner meetings or issues of the *Capital Chemist* for several months, but many people in CSW have been busy, and there are several important items to report.

We learned in July that CSW is one of three finalists for an ACS award: Outstanding Performance by a Local Section, Very Large Size Category. The award will be presented at the ChemLuminary Award ceremony during the ACS meeting in San Francisco, Tuesday, September 12. Whether or not CSW wins out over the other finalists – New York and North Jersey – the selection as a finalist represents a signal achievement for Jim Zwolenik's leadership in 2005 and the enthusiastic contributions of innumerable CSW members. The comments by reviewers on the CSW Annual Report for 2005 were extremely complimentary about accomplishments in a wide range of our activities carried out by a broad membership base.

Two upcoming special events, highlighted on the front page, deserve your attention, participation, and encouragement: (*i*) *Forensic Chemistry in Action* is a full day workshop designed for students, teachers and the scientific public. I hope that many CSW members and their families will attend, and I ask that you help publicize this event. (*ii*) The talk by Alfred Bader is a unique opportunity to hear this distinguished chemist-collector and to honor him at the reception for his remarkable support of ACS programs.

I would direct your attention to the article in this issue on the recent Conference on Standards of Learning – another novel foray for CSW into an important problem, where we cooperated with three ACS Sections in Virginia.

Finally, our editor and the CSW Publications Committee have been discussing ways by which the *Capital Chemist* can be made more valuable to our members. During the next few months you may see some modest changes in format and broadened coverage of news about chemistry and chemists in the Washington area. These are experimental changes, and we need your feedback to decide how best to configure the *Capital Chemist* and how to coordinate it with our web site. Please give your comments, criticisms and ideas to the editor and/or the Publications Committee at the addresses shown in the masthead at the left.

Attention New Members

If you joined the ACS or moved into the CSW Section during the past year, you are welcome to receive a $10 discount for your first monthly dinner meeting. Be sure to mention this discount when you make your reservations.

Visit CSW on the web: www.csw-acs.org

THE CHEMICAL SOCIETY OF WASHINGTON PRESENTS: *"FORENSIC CHEMISTRY IN ACTION"* WORKSHOP

SATURDAY, OCTOBER 21, 2006
8:30 AM TO 5:00 PM

The George Washington University
Hartman Auditorium, Room 213
The 1957 E Building, Foggy Bottom Campus
1957 E Street, NW, Washington, DC

This case-based, one-day workshop facilitated by two faculty members from The George Washington University's Department of Forensic Science, three forensic chemists from the FBI Laboratories in Quantico, VA., and an expert mass spectroscopist will explore the role of the chemical sciences and technology in modern crime-solving methods.

Learn first hand how experts evaluate crime scenes, collect and process evidence, and contribute to the arrest and conviction of criminals. Teachers will find this workshop a source of new material for their classes; students at all levels, adults and media specialists will expand their horizons and enhance their appreciation for the role of chemistry in forensics. Easily accessible via METRO at the Foggy Bottom-GWU stop on the Orange Blue lines. The Hartman Auditorium is 7 short blocks from the METRO stop. A small registration fee covers lunch as well as refreshments and snacks during morning and afternoon breaks. Visit: www.csw-acs.org for the details on the program and speakers and for registration materials.

Space in the Hartman Auditorium is limited. Please register early to assure a seat. Registrations forms should be mailed and **must be RECEIVED by September 30th, 2006,** to

Forensic Chemistry in Action Workshop
c/o Chemical Society of Washington O-218
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Forensic Chemistry Workshop

(Continued from page 1)

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ALFRED BADER MENU OF TALKS

1. History of the Aldrich Chemical Co. (A) [overhead projector/screen]
2. Josef Loschmidt, The Father of Molecular Modelling (A) [overhead projector/screen]
3. Richard Anschütz, Archibald Scott Couper and Josef Loschmidt: A Detective at Work (A) [overhead projector/screen]
4. Chemophobia: Fear for the Future (A) [overhead projector/screen]
5. Advice to Young Chemist Entrepreneurs (A) [overhead projector/screen]
6. The Bible through Dutch Eyes (Rembrandt and the Jews) (B) [two slide projectors/screens]
7. The Adventures of a Chemist Collector (C) [two slide projectors/screens]
8. The Detective's Eye (B) [two slide projectors/screens]
9. The Rembrandt Research Project and the Collector (D) [slide projector/screen]
10. The Joy of Collecting: Hunting for Old Masters (D) [2 slide projectors/screens]
11. One Jewish View of the Messiah (E) [overhead projector/screen]

NOTE: For talks to groups of more than 10 to 15, please also provide a microphone

A. For chemist and business majors

B. For art historians, theologians, Bible students

C. Mainly on art, art conservation, some chemistry

D. For art historians

E. For theologians and Bible students

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ÖSTERREICHISCHE GESELLSCHAFT
FÜR WISSENSCHAFTSGESCHICHTE

GESELLSCHAFT ÖSTERREICHISCHER CHEMIKER

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Dr. Alfred Bader
Festvortrag:
Richard Anschütz, Archibald Scott Couper and Josef Loschmidt:
A Detective at Work

Freundliche Einladung
zum gemeinsamen Abendessen
im Anschluss an den Vortrag

Dr. Alfred BADER

A Chemist helping Chemists

Richard Anschütz, Archibald Scott Couper and Josef Loschmidt:

A Detective at Work

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Ústav fyzikální chemie J. Heyrovského
OS Chemická fyzika České společnosti chemické

Pozvánka na přednášku zahraničního hosta

Dr. Alfred BADER

(USA)

Richard Anschütz, Archibald Scott Couper and Josef Loschmidt: A Detective at Work

Přednáška se koná **ve středu dne 5. června 1996 ve 14:30 hodin**
v Brdičkově posluchárně Ústavu fyzikální chemie J. Heyrovského AV ČR,
Dolejškova 3, Praha 8.

Doc. Dr. Z. Herman, DrSc.
předseda OS

Doc. Dr. V. Mareček, DrSc.
ředitel ústavu

Přednáška Dr. A. Badera poskytuje jedinečnou příležitost seznámit se s touto mimořádnou osobností vědeckého a podnikatelského světa. Rodák z Vídně (1924), vychovaný mezi válkami většinou u příbuzných na Moravě, unikl zázrakem německé okupaci a studoval v Anglii a Kanadě. Po válce získal doktorát Harvardovy university v organické chemii. Z malé laboratoře v garáži v Milwaukee vybudoval v USA chemické impérium Aldrich Chemical Company, v němž byl dlouho ředitelem a členem správní rady. Proslul jako štědrý podporovatel výzkumu v organické chemii cestou malých soukromých grantů a jako člověk, který stále bedlivě naslouchá potřebám chemiků. Jeho druhou velkou láskou je umění, obrazy holandských mistrů. Je mecenášem vědy, škol i umění; u nás jeho nadace financuje Baderovu cenu České chemické společnosti. V poslední době se věnuje historii objevů v chemii; jeho přednášky a články o výzkumech Josefa Loschmidta ukazují tohoto významného fyzika, rodáka od Karlových Var, v netušeném světle - podobného druhu je i tato přednáška. Dr. Bader je nositelem prestižní Parsonsovy ceny Americké chemické společnosti a autorem pozoruhodné biografie "Adventures of a Chemist Collector" (1995).

Východočeské muzeum Pardubice

si dovoluje pozvat milovníky a znalce výtvarného umění
na přednášku

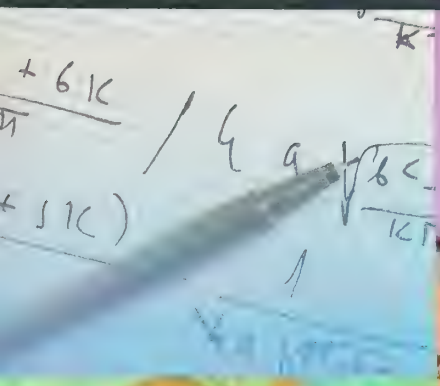
Dr. Alfreda Badera
(USA)
na téma
"REMBRANDT"

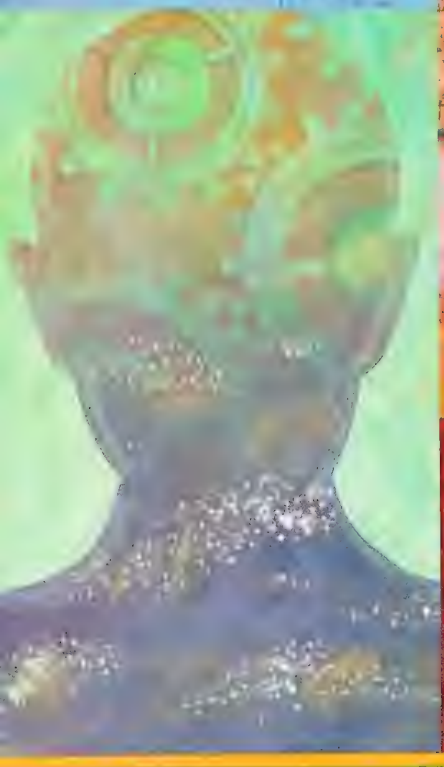
Přednáška se koná v ***pondělí 10. 6. 1996 v 18 hod.***
v malém gotickém sále pardubického zámku.
Bude vedena v angličtině s českým překladem
a doprovázena diapozitivy.

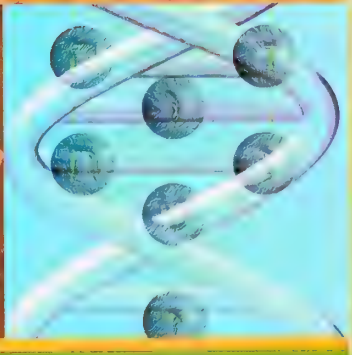
Srdečně zve

Dr. František ŠEBEK
ředitel Vč. muzea

Dr. Alfred Bader, významný organický chemik a velký podnikatel, který vybudoval jednu ze světových chemických společností ALDRICH, je rovněž velký milovník, znalec a sběratel starého umění. Je také štědrým podporovatelem českého umění a vědy. Českou republiku navštěvuje řadu let a má k ní vřelý vztah již od dětství neboť se narodil v Rakousku a jeho matka pocházela z Moravy. Jeho návštěva v Pardubicích je mimořádnou příležitostí tohoto pozoruhodného člověka poznat.







TORAH

COURSE CATALOG OF

THE INSTITUTE FOR JEWISH LITERACY

"Your center for adult Jewish learning"

SPRING/SUMMER

APRIL - AUGUST '07

WWW.CHABADWI.ORG

DEDICATION

THE REBBE,
RABBI MENACHEM M. SCHNEERSON
of blessed memory

The Institute for Jewish Literacy is dedicated to the Rebbe's vision of *Klal Yisrael,* raising Jewish consciousness and promoting Torah knowledge.

IN THIS ISSUE

Are you looking for answers in life?

Are you seeking intellectual stimulation?

Do you want to discover the depth of your heritage?

There are many reasons why people choose to study at the Institute for Jewish Literacy. Throughout the year, we offer classes in every area of Judaic studies imaginable. And if you don't see it in our catalog, just call, e-mail, or write us and tell us what you'd like to learn. Whatever it is you're looking for, we have it.

This semester, in addition to our regular on-going classes, we bring you a number of special courses. In the Department of Kabbalah and Mysticism, we'll explore **The Secret Powers of the Mind**, a three part lecture series on how your thoughts can affect reality.

In our Department of Biblical Studies, we'll be exploring **Torah Math**, a look at the numerical codes of the Bible.

This semester's **JLI course**, offered through the Department of General Judaic Studies, will be **Flashbacks in Jewish History**, a six-week retrospective on Jewish survival through the ages.

We are also proud to present a lecture by our dear friend, **Dr. Alfred Bader**, on **The Haftorah Through the Eyes of the Dutch Masters**.

All this, plus NEW on-going classes in all of our departments.

Whether you're a returning student or a newcomer, we're looking forward to seeing YOU this semester.

Sincerely,

Rabbi Mendel Shmotkin
Director
Inst. For Jewish Literacy

Rabbi Shais Taub
Associate Director
Inst. For Jewish Literacy

LUBAVITCH OF WISCONSIN LOCATIONS

MILWAUKEE

LUBAVITCH HOUSE
Bais Menachem
3109 N. Lake Dr.
Milwaukee, WI 53211
(414) 961-6100

THE SHUL EAST
3030 Kenwood Blvd.
Milwaukee, WI 53211
(414) 332-7485

CHABAD OF DOWNTOWN
633 W. Wisconsin Ave. #770
Milwaukee, WI 53203
(414) 841-6464

SHOREWOOD

JEWISH REACH
3510 N. Oakland Ave.
Milwaukee, WI 53211
(414) 758-0331

WHITEFISH BAY

CHILDREN'S LUBAVITCH LIVING AND LEARNING CENTER
6401 N. Sta. Monica Blvd.
Milwaukee, WI 53217
(414) 962-2444

BAYSIDE

THE SHUL
383 W. Brown Deer Rd.
Milwaukee, WI 53217
(414) 228-8000

MEQUON

PELTZ CENTER FOR JEWISH LIFE – *Mequon*
AGUDAS ACHIM CHABAD
2233 Mequon Rd.
Mequon, WI 53092
(262) 242-2235

WISCONSIN DELLS

CHABAD OF THE DELLS
OHR YEHUDAH – CHABAD
409 Broadway St.
Wisconsin Dells, WI 53965
(608) 231-3450

MADISON

CHABAD OF MADISON
1722 Regent St.
Madison, WI 53726
(608) 231-3450

CHABAD AT THE UNIVERSITY OF WISCONSIN-MADISON
450 W. Gilman St. #2
Madison, WI 53726
(608) 257-1757

ABOUT THIS CATALOG

On-Going Classes and Featured Courses

On-Going Classes meet regularly for a full semester or more. "Rolling enrollment" allows students to join these classes at any point in the semester. Featured Courses are special offerings offered for only a limited time.

All classes are one hour unless otherwise indicated.

Registration and Enrollment

We always welcome new students to "drop by" and check out our classes. But because there are sometimes changes in class locations or times, or classes may already be full, we ask that you please pre-register for every class you attend. In this way you will be assured a place in the class and we may inform you of any changes.

Just fill out the easy-to-use Registration Form at the center insert of the catalog, or simply call or e-mail our office.

In the event that you should need to drop a class for which you have already enrolled, please let us know and a full refund will be sent to you.

Payment & Financial Aide

Cost for tuition for on-going classes is a nominal fee of $18 per semester however larger contributions, if possible, are most welcome. Fees for special or limited engagement courses vary.

Payment may be made by check, Visa, MasterCard, Discover or American Express. Limited financial aide is available for those who cannot afford full tuition.

Choosing a Class

Our staff is available to help you find the class that's best suited for your interests and schedule. If you don't find what you're looking for, we'd also be glad to discuss creating an independent program of study, either one-on-one or in a group.

W *Classes especially for women*

C *"Chabad on Campus" classes*

THE INDEPENDENT STUDY OPTION

Can't find the class you're looking for? Interested in exploring a topic of personal interest? Looking for individualized attention? Explore the Independent Study Option.

Outside of the framework of a formal class, you can study a topic of your choosing one-on-one with a member of our staff. You'll enjoy the flexibility of scheduling your own classes and creating your own program of study. You can even arrange for classes in your home or office.

Call our Associate Director, Rabbi Shais Taub, at (414) 961-6100 ext. 309 to discuss your interests and needs in creating your own, personal program of study.

DEPARTMENTS

The Institute for Jewish Literacy offers an array of classes in all areas of Jewish studies. In order to help you find the class you want, we have organized our classes into several departments.

KABBALAH AND MYSTICISM

Classes on Jewish mysticism, spirituality and meditation are offered by our Department of Kabbalah and Mysticism.

LAW AND ETHICS

[illegible]

BIBLICAL STUDIES

Biblical Studies classes examine the canon of Jewish Scripture (Tanach). Everything from studies on the weekly Torah portion to the writings of the Prophets.

GENERAL JUDAIC STUDIES

This department provides classes on a wide range of topics such as Jewish history, contemporary social issues and basic Jewish observance and traditions.

LANGUAGES

In this department you will find offerings which teach or explore the significance of Jewish languages from classical Hebrew liturgical reading to conversational Yiddish.

TORAH

Lubavitch of Wisconsin
Adult Education

SPRING/SUMMER 2006

OUR STAFF

THE MEN AND WOMEN OF LUBAVITCH OF WISCONSIN'S INSTITUTE FOR JEWISH LITERACY ARE HERE FOR YOU IN ALL OF YOUR ADULT JEWISH STUDY NEEDS.


Rabbi Yisroel Shmotkin


Rabbi Yoseph Samuels


Rabbi Yonah Matusof


Rabbi Dovid Rapoport


Rabbi Mordechai Spalter


Rebbetzin B. Devorah Shmotkin


Rebbetzin Chashie Samuels


Rebbetzin Faygie Matusof


Rebbetzin Faygie Rapoport


Rebbetzin Rivkie Spalter


Rabbi Shmaya Shmotkin


Rabbi Moshe Rapoport


Rabbi Mendel Shmotkin


Rabbi Menachem Rapoport


Rabbi Shais Taub


Rebbetzin Devorah Leah Shmotkin


Rebbetzin Dini Rapoport


Rebbetzin Devorkie Shmotkin


Rebbetzin Hudi Rapoport


Rebbetzin Brocha Taub


Rabbi Mendel Matusof


Rabbi Yossi Touger

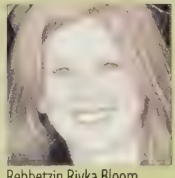

Rabbi Elazar Bloom


Rabbi Avremi Schapiro


Rabbi Yaakov Elman


Rebbetzin Henya Matusof


Rebbetzin Sara Touger


Rebbetzin Rivka Bloom


Rebbetzin Sheindy Schapiro


Rebbetzin Chedva Federman

FEATURED COURSE

JEWISH LEARNING INSTITUTE

Flashbacks in Jewish History:
HOW OUR PAST INFORMS OUR FUTURE

In "Flashbacks In Jewish History" you will learn how Jews in far-flung lands survived cultural onslaught and maintained their identity despite all odds.

You will also develop new perspectives to help you face the modern challenges of moral relativism, Western hedonism, and religious warfare.

We live in an increasingly global society where cultures are forced to interact more than ever. By probing the miracle of Jewish survival, you will find new ways to live meaningfully as a Jew in the 21st century.

COURSE SYLLABUS

UNIT 1 ANCIENT STRUGGLES WITH MODERN MESSAGES: ENCOUNTERS OF THE CLASSICAL PERIOD

Lesson 1
Cultures in Collision: Israel vs. Greece and Rome

UNIT 2 RISING STARS, WANING CRESCENTS: ENCOUNTERS WITH MEDIEVAL ISLAM IN THE MIDDLE EAST AND SPAIN

Lesson 2 Far From the Place That We Call Home: Jewish Exile and Dispersal in the Middle East

Lesson 3 All That Glitters: The Golden Age in Moslem Spain

UNIT 3 PREVAILING DESPITE HATE AND OPPRESSION: ENCOUNTERS WITH MEDIEVAL CHRISTIAN EUROPE

Lesson 4 Rivers of Blood: Anti-Semitism in Medieval Christian Europe

Lesson 5 In the Shadow of the Inquisition: The Downfall of Spanish Jewry

Lesson 6 Rising from the Ashes: The Renewal of European Jewry

Mondays
April 30, May 7, 14, 21, 28, June 4

7:30 pm

Instructor: Rabbi Mendel Shmotkin
Location: The Shul
Fee: $100 / early bird discount April 15, $85
Contact: (414) 961-6100 ext. 309

To learn more about this course or to enroll on-line, visit www.myjli.com

JLI

FEATURED COURSE

The Haftorah Through the Eyes of the Dutch Masters

Renowned Rembrandt expert Dr. Alfred Bader, a Milwaukee art collector and dealer, will be our guest speaker.

Drawing on his broad knowledge of the Old Masters with a particular emphasis on Rembrandt and his students, coupled with an encyclopedic knowledge of the biblical sources, Dr. Bader will explore the unique often complex relationship of the Dutch Artist's views and relationships of their Biblical and Jewish subjects, using tens of detailed slides. The presentation will examine the nuances of this fascinating relationship.

"Alfred Bader Fine Arts" has earned an international reputation, selling to such esteemed museums as the Rijksmuseum in Amsterdam, the National Gallery of Scotland, and the Getty.

Tuesday, May 15

7:00 pm

Guest Speaker: Dr. Alfred Bader
Location: The Shul
Recommended Contributions: Adults $10.00
Students $5.00
Contact: (414) 961-6100 ext. 309

Men's Retreat
Shabbaton

Fly with us to New York where we will be received at Lubavitch World Headquarters in Crown Heights, visit the Rebbe's private study where he received thousands of Jews who sought his guidance, tour the Chabad historical museum and rare books archive, experience the brand new Jewish Children's Museum, and spend an unforgettable Shabbos at the Ohel, the international visitors' center near the Rebbe's resting place. All this plus classes, farbrengens, Five Star kosher dining and more. Don't miss out on this exciting trip that you will never forget!

Date: Friday, June 1 – Sunday, June 3
Fee *(includes room accommodations, gourmet meals and all programming)*:
$120 plus airfare
Contact: Rabbi Shais Taub
414-961-6100 ext. 309

The Ohel" is where the Lubavitcher Rebbe, Rabbi Menachem M. Schneerson, of righteous memory, was interred on the 3rd of Tammuz 5754 (June 12, 1994), next to his father-in-law, the sixth Lubavitcher Rebbe, Rabbi Yosef Y. Schneerson, of righteous memory.

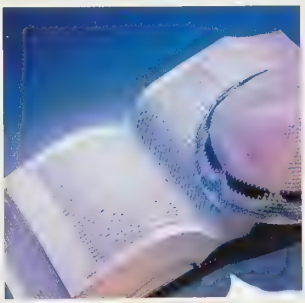
During the Rebbe's lifetime, he would frequent the resting place of his father-in-law, the previous Rebbe, bringing there requests for blessings and guidance from his many followers.

Even now Jews from around the world travel to the Rebbe's resting place seeking inspiration and guidance.

Senior Luncheon

The first Wednesday of every month, get together with other seniors for a gourmet lunch, entertaining program and an opportunity to socialize and meet with friends. Each month features a guest vocalist, speaker or musician.

Date: First Wednesday of the month
Location: Peltz Center for Jewish Life – Mequon
Fee: Seniors – No Charge, Guests $10
Contact: Rabbi Dovid Rapoport
(262) 242-2235



DAILY MINYAN

Start your day with Tefillin and morning prayer services. Join us daily, weekly, monthly, or to say Kaddish on Yahrzeit. Cake and fresh brewed coffee served.

The Shul
Sun 8:15 am
Mon 6:45 am

The Shul East
Mon – Fri 7:00 am
Sunday, 8:30 am

Agudas Achim Chabad
Mon – Fri 6:45 am,
Sunday, 8:00 am

Chabad of Madison
Mon – Fri 7:00 am,
Sunday, 9:00 am

SHABBOS SERVICES

The Shul

Friday night
Afternoon service at candle lighting time followed by "Welcoming the Shabbos" Evening Service

Saturday
9:00 am - Morning Services
10:00 am - Junior Congregation
11:30 am - Kiddush luncheon

The Shul East

Friday night
Afternoon service at candle lighting time followed by "Welcoming the Shabbos" Evening Service

Saturday
9:00 am- Morning Services
11:30 am- Kiddush luncheon

Afternoon Service: 15 min. before sunset

Agudas Achim Chabad

Friday night
Afternoon service at candle lighting time followed by "Welcoming the Shabbos" Evening Service

Saturday
9:30 am - Morning Services
10:30 am Jr. Congregation
12:00 pm - Kiddush

Jewish REACH

Friday night
At sunset

Chabad of Madison

Friday night
6:00pm - "Welcoming the Shabbos" Evening Service

Saturday
10:00 am – Morning Services
12:30 pm – Kiddush Luncheon
1:30 pm – Afternoon Service

The Ohr Menachem Living Legacy Program is a series of hands-on workshops focusing on the creation of ritual objects universally used in Jewish practice, such as a Shofar Factory, Matzah Bakery, or Olive Oil Workshop. Each workshop is designed to challenge, engage, and actively involve its participants, providing a vital link between Jewish learning and Jewish practice and living.

TO ORGANIZE A GROUP OR FOR OTHER INFO,
contact Rabbi Avremi at
(414) 228-8000

SPRING/SUMMER SEMESTER
(April – July 2007)

April
30 JLI - Flashbacks in Jewish History, 7:30pm

May
2 FC - Secret Powers of the Mind, 7:30pm
6 Lag B'Omer
7 JLI - Flashbacks in Jewish History, 7:30pm
9 FC - Secret Powers of the Mind, 7:30pm
14 JLI - Flashbacks in Jewish History, 7:30pm
16 FC - Secret Powers of the Mind, 7:30pm
21 JLI - Flashbacks in Jewish History, 7:30pm
22 All-Night Torah Study,11:00pm
23-24 Shavuos
28 JLI - Flashbacks in Jewish History, 7:30pm
29 FC- The Haftorah Through the Eyes of the Dutch Masters, 7:00pm
30 Friendship Circle Dinner

June
1-3 Men's New York Trip
17 Evening of Song and Spirit
28 JLI - Flashbacks in Jewish History, 7:30pm

July
5 FC- Torah Math, 7:30pm
12 FC- Torah Math, 7:30pm
19 FC- Torah Math, 7:30pm

KEY
FC = Featured Course
JLI = Jewish Learning Institute

HOLIDAYS AND SPECIAL EVENTS

May

Lag B'Omer
Sunday, May 6

All-Night Torah Study
Tuesday, May 22, 11:00 pm

THE SHUL-EAST
3109 N. Lake Drive - Milwaukee

THE SHUL
383 W. Brown Deer Rd. - Milwaukee

CHABAD OF MADISON
1722 Regent - Madisonl

AGUDAS ACHIM CHABAD
2233 West Mequon Rd - Mequon

Shavuos
May 23, 24

Friendship Circle Dinner
Wednesday, May 30
See page 12 for more information.

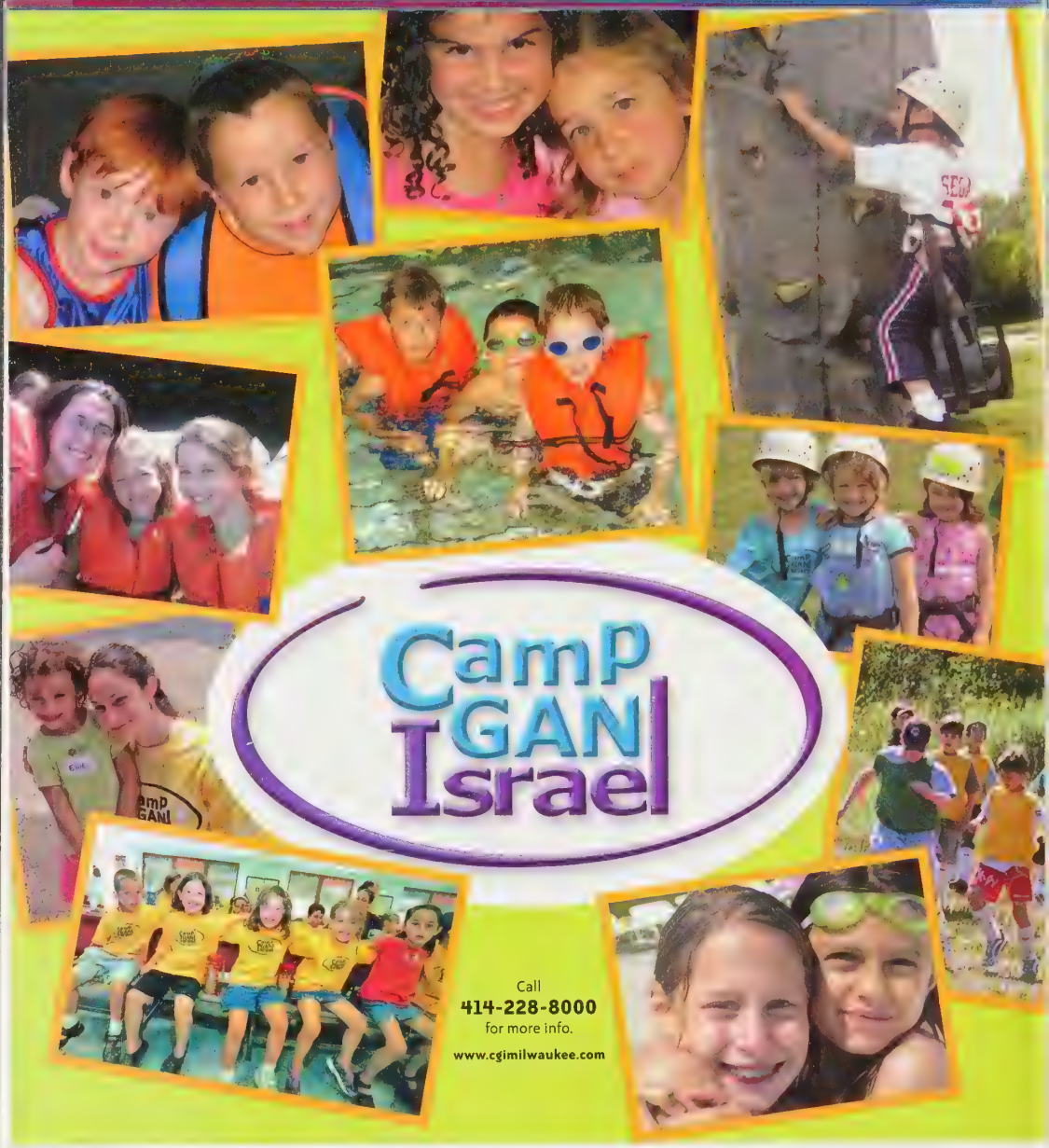
June

Men's New York Trip
June 1-3
See page 29 for more information.

An Evening of Song and Spirit
Sunday, June 17

A wonderful musical performance.
A distinguished guest speaker who was on the personal staff of Prime Minister Levi Eshkol; Israel's Consul in New York; Israeli Counselor at the Embassy in Washington; staff of Prime Minister Golda Meir; Advisor to Prime Minister Yitzhak Rabin and Shimon Peres; Advisor to Prime Minister Menachem Begin; and much, much more.

For more information, please call (414) 961-6100 or e-mail us at RIS@chabadwi.org



Call
414-228-8000
for more info.
www.cgimilwaukee.com

BEIS HAMIDRASH
Institute for Jewish Literacy

A Division of
Lubavitch of Wisconsin

LUBAVITCH OF WISCONSIN
INSTITUTE FOR JEWISH LITERACY
3109 N. Lake Drive
Milwaukee, WI 53211

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DR. AND MRS. ALFRED BADER
2961 N SHEPARD AVE
MILWAUKEE WI 53211-3435

In Search of a Girl

Alfred Bader

ABOUT THE COVER

Our collector chemist calls the painting of the intense little girl depicted on the cover his "Alfa-girl" because he bought it in a small Boston gallery after a day's discussion with our friends at Alfa. The gallery owner smiled at the suggestion that it looked like a sketch by John Singer Sargent, but the art-historian most knowledgeable about Sargent, Mr. David McKibbin at the Boston Athenaeum wrote: "Your head of a girl is stunning. . . . I have never been more sure of an unknown and I'd like to identify her." The canvas is on a Boston stretcher but, wrote Mr. McKibbin, "I know of no Boston subject and because the little girl is so attractive it seems unlikely had she lived here that it would not have been recorded or seen by any one who would have recorded it. Of course Sargent might have taken a prepared canvas with him to some place outside Boston such as Newport or Worcester, but I cannot think who this child might be. If you will tell me what you know of the canvas's provenance there may be a clue which I could interpret." Thereby hangs a tale of as yet uncompleted art-historical sleuthing: The gallery-owner told our chemist that he had bought the canvas from an antique store, "Recollections" in Brookline, Mass. The owner of that store well remembered the painting but the seller, a lady whose name he had forgotten, had moved to Florida; she had, he believed, once taken the sketch in payment of rent. The lady's sister still lived in Boston, and occasionally came to "Recollections"; next time she came in, he would ask her about her sister's name and address, and perhaps we shall discover our girl's identity yet.

The back of the canvas bears the name FRYE, perhaps the sitter's name, or that of a previous owner. We would appreciate hearing from any reader who knows the identity of this girl.

The above description of the cover of our "Organothallium" issue, Volume 3, Number 1 of the *Aldrichimica Acta* told what I knew of the "Alfa-girl" some years ago. Since then I have learned a great deal about the history of the painting; yet the identity of the girl remains elusive, and I am publishing this sequel in the hope that one of our readers might be able to help identify this beautiful and intense girl.

When I visited Alfa again, I took this sketch with me to show to Mr. McKibbin, who told me that over the years he had been shown a great many unknown so-called Sargents, and of only two had he been absolutely certain. This was one of the two. He urged me, of course, to try and determine who this haunting girl was — not that I really needed urging.

Luckily the owner of the antique store, "Recollections," was able to send me the name and address of the lady who had moved to Florida. I have since become convinced that she must be one of the most delightful people in the world.

She replied to my query:

Dear Dr. Bader,

I received your letter and kind of doubt if I can be of any great help to you in tracing the subject of the painting. I received a trunk in payment of friendliness to two maiden ladies, about thirty years ago. When we decided to move to Miami two years ago, it became necessary to part with my relics stored in the cellar. When I opened the trunk it contained some things that were interesting because of their age, such as books, and papers and nine paintings. The painter of most of the pictures was Alice Leach. I am neither an artist nor am I an authority on art, but the ones she painted certainly didn't make me zing. From various papers in the trunk the Man's name was FRYE. Alice F. Leach, may have been Mrs. Frye, and signed her paintings with her maiden name. Or Mr. Frye, may have been her Father. The only thing about Mr. Frye that I know is that he went to Harvard University, so maybe you can trace him from there. The two maiden ladies 30 years

ago were then 60 and maybe better, so unless they have located the fountain of youth, it sort of seems that they are by now in the happy hunting ground. Also I am not sure if Alice Leach was their sister, or their mother as I really can't recall their names. I did keep two of the paintings, one of which is a painting of a house on lower Beacon St. and is so typical of the early homes of the Beacon St. Aristocracy that I enjoy having it hang on the wall to remind me of Boston. Also that may very well be the house they lived in. From the various papers, I gathered that they were very cultured and that Mr. Frye did quite a bit of investing in the stock market, which incidently didn't always put wood in the fireplace. When I gave Mr. Tracy the paintings to sell it was with the understanding that when he sold them I would get 2/3 and he would keep 1/3 for commission. He told me that he sold the girl in the frame for $75.00 and sent me a check for $50. You can just imagine how I feel knowing that I had a painting by John Singer Sargent and got $50.00 for it. I blame no one but myself, don't think too badly of me, but it sure does hurt. Now we come to the other painting that I kept. As I said they were not all painted by Alice Leach. This one about 10 by 12, framed in a gold leaf frame, it is sort of a water color mostly pastels, the subject is huts on a mountain side, the place could be southern Italy or southern Spain. It was so nice that even I appreciated it. A friend of mine from Boston came to visit me last year and when she saw the painting she asked me where I got it, as she does quite a bit of painting, although 'A grandma Moses she is not' she does by now at least recognize art when she sees it, she immediately said, that looks like a 'Cezanne'. At that time, frankly I thought she was out in space, but now being as Alice Leach had a Sargent, she very well may have had a Cezanne, and maybe my friend wasn't out in space after all. I was going to take the painting to the Bass Museum here in Miami, but right now the Bass Museum has enough problems without worrying as to whether my painting is a Cezanne, and I will wait until I go to Boston next summer on a visit and take it to the Boston Museum and ascertain if I do or do not own a Cezanne. I hope that the little information that I did give you may be of some help. I wish you good health and good living.

Sincerely,
Mrs. Max Bloom

Unfortunately, Mrs. Bloom's water color turned out not to be a Cezanne:

Dear Dr. Rider,

I received your letter and thank you for your good wishes. I wish I did know Mr. Frye's first name, but I just don't remember it. If I recall correctly, the date on most of the letters was around the 1880's. I have just one slender clue, on the back of the watercolor painting that I have which was framed by Foster Brothers, 4 Park Sq. Boston, order #12351, on the upper left hand corner, written with a marking pencil, is a notation (JAF to KCF May, 1904). One set of those initials may belong to Mr. Frye. I very much doubt, if the little girl in the painting could have been a member of the Leach or Frye family as I remember the sisters, they were nondescript in both their coloring and features and the girl in the picture is anything but. I can't seem to figure out why the identity of Mr. Sargent's model is important, but if it is, I wish you success in locating this will of the wisp.

The mystery as to who painted the watercolor is now solved. I decided that perhaps I ought to use my eyeglasses for occasions other than bridge, so I took the painting off the wall and the signature is G Noyes. I looked it up in Mallets directory and part of his background was in Boston. While he has a very impressive background, I do not have any idea as to the value of his paintings. If its value is nominal, then it will hang on my living room wall and become my claim to fame. I am sorry for all concerned that I do not possess another Sargent, but, c'est la vie. . . . . .

Mrs. Max Bloom

The framers, Foster Brothers in Boston — whom I tried to find as they had also framed the Sargent — had closed their doors many years ago. However, Mrs. Bloom's information led me a step further: she had mentioned that Mr. Frye had been a Harvard man, and as my old friend Martin Ettlinger was just spending a year at Natick, I enlisted his help:

Dear Alfredo,

As I told you on the phone, it was only yesterday I had a moment to go by the Harvard Archives. Only two Fryes were at Harvard between 1880 and 1890, or even, I think, between 1850 and 1900. One, Alexis Everett Frye, did not attend the College (i.e., as an undergraduate): LL. B. 1890, A.M. '97. Since he did not belong to a College Class, the only information about him comes from newspaper clippings of around 1900. He owned an orange grove in California; was superintendent of schools for the whole of Cuba in 1900 (during the U.S. occupation after the Spanish-American War); married a Cuban girl (at least one child, a daughter, Pearl, born 1901); and settled in Cambridge about 1902. I guessed him to be the less likely candidate, but you can judge of the matter better than I. The other is James Albert Frye, A. B. 1886. Born Boston 1863, son of James Nichols and Sabina Bacheler Frye. An editor of the Crimson ("He was the wit of the Board, delighting particularly at festive meetings"); chairman of his Class Committee, '86-'06. Special student at the Law School, '86-'89; in business with his father, '90-'91. Married 1891 to Kate Colony, "daughter of Hon. Horatio Colony," at Keene, N. H., apparently her home. Presumably no children. An author, publishing 5 books, including a history of the Spanish-American War, and numerous articles. Socially prominent; a volunteer officer of coast artillery, spending much time and energy as a gentleman soldier. Rose to be Adjutant-General of Massachusetts, '06-'07; retired from militia in 1907 with rank of major-general. Thereafter seems to have lived mainly at Keene. Boston addresses in 1911 (25th Class Report): Hotel Westminster, St. Botolph Club, and 336 Boylston St. (business). Business in 1911: "Writing and management of estate." Died at Keene 1933. Possibly one or both of these Fryes are in standard sources like the Dictionary of National Biography or old Who's Whos, but I haven't checked. . . . . .

As ever,
Martin

Thus, Mr. Frye was clearly identified as James Albert Frye, The JAF of Mrs. Bloom's painting, who had given it to his wife, KCF, Kate Colony Frye. As Martin succinctly put it in a subsequent letter:

Dear Awlfred,

. . . . . Though J, A, K, and C are relatively common initials and I would have preferred coincidence on a few Q's, X's, and Z's (e.g., Quentin Xantus Zephaniah Frye), I agree that we have probably found your Sargent ex-proprietor whose successor you expropriated.

The hopeful hypothesis is that the painting is of a member of the Frye or Colony families, and if McKibbin is right that the painting was done out of Boston, being unrecorded, it is to Keene and the Colonys or Colonies we must turn. If his attributed date is approximately right, it's unlikely she (the sitter) was old enough to be married (barring scandals such as you undoubtedly are imagining) in '91. On the other hand, the painting could well be of a younger sister of Kate's. . . . . .

Yrs.,
Martin

Martin's work suggested a search in and around Keene, New Hampshire, the home of the late James Albert Frye and of many of Mrs. Frye's family. Their nephew, Mr. John J. Colony, provided the link between J.A. Frye and John Singer Sargent, and also pointed to the ladies who had owned the painting before Mrs. Bloom.

Dear Dr. Bader:

Sorry to have taken so long responding to your letter of March 27, 1970 concerning the Sargent painting, but I did want to get as much information as possible from my cousin Horatio Colony who had been off on a cruise until recently.

The portrait interested me immediately and I feel that I must have seen it long ago when it was in General Frye's possession. However my cousin and I agree that the subject is definitely not our aunt Kate Colony Frye nor any other member of our family.

Your detective work so far has been excellent and for any help it may be to you we offer the following bits of information:—

James Albert Frye graduated from Harvard 1886, knew my father there and married the latter's sister Kate Colony. He was a major general in the regular U.S. Army.

General and Mrs. Frye lived in Cambridge, Massachusetts winters after his retirement and spent their summers in the "Noah Cooke" house in Keene, N.H., an old colonial house belonging to my father. After Kate Frye's death about 1928 General Frye lived the year around in Keene and all his possessions were there when he died about eight years later.

Alice Frye Leach was General Frye's sister, a fair painter in her own right, and was the mother of the two unmarried sisters, Catherine and Elizabeth Leach. When General Frye died the Leaches took over his personal belongings and from there on you have traced the route of the painting via Mrs. Bloom to yourself.

Incidentally the Leach sisters were not as old as your correspondent supposed; they are both still living we understand and although Catherine is in an institution of some sort, Elizabeth F. Leach was listed in the Boston phone book (1968) at 28 Irving St., Boston, Massachusetts. This would be your most interesting lead to pick up.

Other information from my cousin:—General Frye knew John Singer Sargent fairly well personally, and was a very close friend of the artist's brother James, who was a fellow club member in Boston's old St. Botolph Club. . . . . .

Very truly yours,
John J. Colony, Jr.

While Martin was helping at Harvard, I had sent a copy of our *Acta* to every Frye in and around Boston, and Miss Marjorie J. Frye of North Quincy pointed to the same James Albert Frye that Martin had uncovered:

Dear Dr. Bader:

Regarding your letter of March 20, 1970, addressed to my father, Walter C. Frye, I have some information which might be of much help to your search for the identity of the girl painted by John Singer Sargent. I suggest that you contact

Miss Elizabeth Frye Leach
28 Irving Street
Boston, Massachusetts.

(Miss Leach is not our relative, but I happened to know of her and contacted her.) She has given me permission to send you her name and address. After describing briefly to her your search, I learned that Alice F. Leach was her mother, Mrs. Alice Frye Leach, an artist. The initials J.A.F. to K.C.F. would have been those of Miss Elizabeth Leach's uncle and aunt, James Albert Frye and Kate Colony Frye. . . . . .

Sincerely yours,
(Miss) Marjorie J. Frye

Naturally, I could hardly wait till my next trip to Boston, and from Logan airport telephoned Miss Elizabeth F. Leach to inquire whether she and her sister might join me for dinner the next evening. She graciously accepted, and I spent a delightful evening with the sisters, looking at some of their mother's colorful paintings in their Victorian apartment and discussing their mother and her brother, General Frye. They seemed curiously evasive about the Alfa girl. They remembered it to have belonged to their mother, who had called the girl Virginia, but they were not sure whether the sitter had just been a model or one of the three daughters of Lilla Cabot Perry (a painter and author) and Professor Thomas S. Perry of Harvard. When I asked the sisters how Mrs. Bloom had obtained the painting, they denied ever knowing Mrs. Bloom and just did not know how she might have gotten the painting. All in all, it was a delightful and yet frustrating evening -- I seemed so close and yet so far. Throughout the evening the sisters did not question my ownership of the painting, so I was surprised when some weeks later I was contacted by a Milwaukee attorney who had been requested by the Misses Leach's Boston attorney to attempt to regain possession of the painting. I talked to Miss Catherine Leach on my next trip to Boston, and she told me rather sheepishly that her sister had remembered later that she had stayed with Mrs. Bloom who had stolen her trunk, and that they wanted "Virginia" returned.

Mrs. Bloom's reply to my request for details was as clear as could be:

Dear Dr. Bader,

I just received your most interesting letter and hope that you are enjoying good health. Before I start this Megilla, let me assure you that the manner in which I received the trunk makes that painting your property and you won't ever have to give it up. I acquired the trunk just as I told you I did and my story can easily be checked at the town hall of Brookline that they never at any time lived in my house. I lived at 47 University Rd from 1938 to 1950. These two ladies lived on Winthrop Road in a large apartment house and the two back yards faced each other. I barely knew them, I would greet them when I went out to check on the children in the yard. They would sometimes sit on their back porch and watch the children at play in the yard. I assume I am not too good at guessing ages. if the two Leach sisters are the two ladies in question, and they were not sixtyish at the time then they surely were fiftyish, perhaps it was their mode of dress that made them look older, however, I don't do any better at the races. As I wrote you before the only way I have of judging how long ago it was that I got the trunk is by my daughter's age. One day one of the ladies came to see me and she had asked my little girl to take her into the house as she wanted to speak to her mommy, she was holding my little girl's hand and at the time I am sure my little girl was anywhere from 3 to 5 years old, maybe a couple of years older, but certainly not more than that and now she is 34 years old. The lady said and I quote 'Mrs. Bloom, I know you have a cellar and I would appreciate if my sister and I could leave a trunk with you. We have always lived together, but now we are going our separate ways and intend to live at the Cape. If we still want the trunk we will send for it within a year and if you do not hear from us in a year just discard the trunk in any way that you are able.' end of quote. We sold that house in 1950 and moved to a house that we had on Tappan St. in Brookline. I had told the mover not to bother moving the trunk but it seems that he forgot and moved the trunk to the cellar on Tappan St. In 1967 we decided to move to Miami, we sold the house on Tappan St.

and the buyer asked me to immediately clear the cellar as he was going to store some things there before he occupied the house. When we went down to see what to get rid of I noticed the trunk and that was the first time I had ever opened it. What I had expected to find was a fortune in Confederate money, and not what was there, some old books, a very ornate sword, a box of paints, a christening dress and the paintings, also a heap of correspondence to and from General Frye, which was very interesting, also that story, 'His Aunt's Idol.' Not being an art lover, I have to confess that I was going to throw away the paintings, all but the one I liked signed by G. Noyes, but I happened to be in Mr. Tracy's store that day and noticed he had so many paintings around, so I told him about the paintings in the trunk. He told me to bring them in as he sold quite a few to people that like to give a painting for a house gift and if the paintings are not by a well known painter they don't bring much but he can always get $25.00 or $35.00 for them and he will take them on consignment and give me 2/3 and keep 1/3 for commission. I thought it was a good deal. Mr. Tracy can corroborate my story. This was in 1967. Their story that I stole the trunk would be funny if it wasn't so stupid. Anybody that is intelligent enough to steal a trunk should certainly have enough intelligence to open it first and see if there is anything in it worth stealing. The trunk had no lock on it. If I stole it for art's sake, I wouldn't be apt to wait 25 or 30 years to sell the paintings and also I wouldn't be apt to give them to Mr. Tracy to sell for $25.00 or $35.00 a painting. They really will have to dream up a better story than that if they want you to give them your painting. I can back up every word in this letter and I will do anything I possibly can to help you establish your right to that painting. I have only to tell the truth. It really is very funny, but I resent having them say I stole a trunk. I never was a delicate girl, and have always enjoyed good health, but I would think twice before I would carry a trunk down two or three flights of stairs. Now that they think you have a valuable painting they will try by fair means or foul to get it back.....

Sincerely
Dianna Bloom

There followed increasingly belligerent notes from Miss Elizabeth Leach, who finally wrote:

Dear Dr. Bader:

From the tone of your recent letters it is clear that our request that you return our picture, "Virginia" to us was not strong enough. We hereby demand that you return it to us immediately. . . . . .

Sincerely yours,
Elizabeth F. Leach

To which I replied:

Dear Miss Leach:

Your singular letter of August 24, received on Woman's Liberation Day, would seem funny, if I did not realize that you must mean your demand quite seriously.

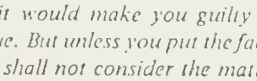
I bought this painting from a reputable Boston Art Gallery and have clear title to it. You have told me two completely contradictory stories — one that you and your sister had never known Mrs. Bloom; the other that your sister now remembers (though she did not remember during our dinner on April 27) that she did stay with Mrs. Bloom who allegedly stole the trunk. I understand your reluctance to put this in writing, as it would make you guilty of libel, if untrue. But unless you put the facts in writing, I shall not consider the matter further. . . . . .

Sincerely,
Alfred Bader

My altercation with Miss Leach did not, of course, diminish my desire to identify the intense girl. Mrs. Lilla Cabot Perry who had died in 1933, had three daughters, Mrs. Joseph Clark Grew, wife of the U.S. Ambassador to Japan, Mrs. Edward Valentine of Hancock, N.H. and Miss Margaret Perry who died in Hancock last summer. Miss Perry's adopted niece, Miss Patricia C. Holsaert, wrote to me that "the only thing I can feel definite about is that the charming young girl, about which you are seeking information is not one of the three daughters of Lilla Cabot and Thomas Sergeant Perry."

I still feel so close and yet so far. The chain of ownership from General Frye (who had been a close friend of Sargent's brother) through Mrs. Leach and her daughters to Mrs. Bloom is clear, but Mrs. Alice Frye Leach had called the girl "Virginia" without telling her daughters who Virginia was. I will be deeply indebted to any reader who could identify this beautiful girl.

Important Heterocyclic Intermediate



18,986-3
Methyl thioacetohydroxamate
100g $12.00

Lab Notes ... *cont'd from page 26*

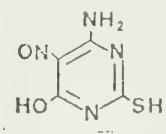
this does not impede operation of the breaker, the breaker can be used under full water pressure.

A very simple device for restricting the flow at the hose fitting is a plastic dropper. Polyethylene tubing may be heated and drawn into droppers. The diameter of the tubing should be selected to fit snugly into the back of the hose fitting adapter. The water flow is determined by the size of the opening at the tip of the plastic dropper. Cutting the dropper so the opening at the tip is the size of a pencil lead or toothpick allows a moderate flow. The plastic dropper is inserted into the hose fitting adapter and the fitting is replaced. The water valve can then be completely opened, yet only a slow flow is obtained through the condenser.

Harvey Hopps
Aldrich-Boranes, Inc.

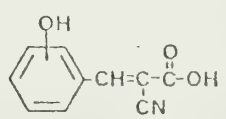
Any interesting shortcut or laboratory hint you'd like to share with ACTA readers? Send it to Aldrich (attn: Lab Notes) and if we publish it, you will receive a handsome red and white ceramic Aldrich coffee mug. All entries become the property of Aldrich Chemical Company, Inc., and cannot be returned.

Palladium Reagent



86,055-7
6-Amino-5-nitroso-2-thiouracil
Used for the colorimetric determination of palladium. *Chem. Abstr.*, 66, 34552j (1967).
5g $20.00

Inhibitors of Pyruvate Transport



α-Cyano-3-hydroxycinnamic acid and α-cyano-4-hydroxycinnamic acid are potent specific inhibitors of mitochondrial pyruvate transport. *Biochem. J.*, 138, 313 (1974); *ibid.*, 148, 85 (1975).

14,463-0
α-Cyano-3-hydroxycinnamic acid
25g $13.50 100g $36.00

14,550-5
α-Cyano-4-hydroxycinnamic acid
25g $7.00

Q: Who discovered the structure of Benzene?

A: August Kekulé

Do you believe he really had a dream?

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4:30 PM

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"History of Aldrich Chemical Co."

Monday, April 22, 2002

1:30 PM

Room 160 WTHR

Visit with

DR. ALFRED BADER

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Thursday, March 21, 1985

10:30 Dr. J. C. Martin, 245 Roger Adams Laboratory

11:00 Dr. William H. Pirkle, 161 Roger Adams Laboratory

11:30 Dr. Robert M. Coates, 377 Roger Adams Laboratory

12:00 Lunch in the Ballroom with Drs. Martin and Pirkle

1:30 Organic Chemistry Students, 464 Roger Adams Laboratory

2:15 Dr. John A. Katzenellenbogen, 461 Roger Adams Laboratory

Gutowsky 177 NL 3 7621

Scott Denmark Adams 264

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Vice-President for
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