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## Memo

**To:** Professor Dudley Herschbach (Dept. Chemistry Harvard University)

**From:** Dr. Robert A. Rosenstein (Senior Member APS: Divisions of Chemical Physics, Astrophysics; International Forum on Physics, Forum on Statistical and Non-Linear Physics)

CC: Dean Christopher Comer College of Arts and Sciences University of Illinois at Chicago; Dr Alfred Bader Emeritus CEO Sigma Aldrich Milwaukee, WI; Dr. Hunt H. Unger, Evanston, IL

Date: June 22, 2005

Re: Historical and Personal Matters Related to Disciplines of Physics and Chemistry

In the last few years, I received some form letters from you related to my admittedly modest donations to the Center for History of Physics. I certain applaud efforts to maintain intact for later generations the legacy of this discipline of physics and those like yourself who give of their time to gain support among the community for this noble enterprise.

In past years I had some contact with Director Spencer Weart related to efforts to preserve some of that legacy in the area of statistical mechanics. As a chemistry graduate student at NU in the1960's, I had the good fortune to learn statistical mechanics under the tutelage of the later Professor Arnold Siegert, one of the PhD recipients under Professor Werner Heisenberg at Leipzig, and later a research associate under Professor H.A. Kramers at Leiden. Interesting, Siegert's name appears in the AIP online Heisenberg Exhibit at

http://www.aip.org/history/heisenberg/p10a.htm.as one of the PhD recipients from Heisenberg at the Leipzig Institute for Theoretical Physics. (The person who directed my own dissertation at NU in chemical physics, Ludwig Hofacker now emeritus from Technical University Muenchen Institute Theoretical Chemistry, later after World War II received his own PhD under Heisenberg's Leipzig colleague Friedrich Hund.)

After Siegert's death, I urged AIP Center Director Weart to arrange for storage of Siegert's papers at the Bohr Library and consider supporting publication of his biography. Efforts by both of us were made to locate Siegert's papers, but these efforts unfortunately failed. However, I did write a brief statement, at the Director's request, on my own encounters with Arnold Siegert in the classroom, seminar settings, and in later years about discussions on issues impacting scientific employment In American industry. This statement, and similar ones by Siegert's research associate at Dept. Physics NU, F.W. Wiegel, now at Twente University Netherlands, entered the Siegert file at the Bohr Library set up by Director Weart.

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Director Weart expressed deep regret that AIP could not finance publication of a biography. He argued that resources were limited and many other deserving physicists need also be considered for support. Instead he directed me to one of Siegert's then surviving colleagues, the late Max Dresden, and request Dresden to himself write the Siegert biography. Dresden died apparently before my letter reached him.

Before Dresden died, he had published in **Physics Today** Siegert's obituary. One entry in that obituary I especially noted was a claim that Siegert had published one of the most outstanding derivations of Boltzmann's Equation then available. This statement resonated with me last decade first because of the instruction both Siegert and Hofacker had provided in this area during my own studies. Second in 2001 in **Physics Today**, Professor Leonard Parker, Director UWM Center for Gravitational Physics and very active in APS, co-authored a paper in Physics Today that **resuscitated** fond memories of earlier instruction from Arnold Siegert. on Boltzmann's seminal studies on irreversibility and the H-Theorem

I had the pleasure of once meeting Professor Parker at a Chicago cosmology workshop subsequent to e-mail interchanges about the potential adaptation of Boltzmann's work on irreversibility to curved spacetime and specific issues in cosmology. The proposed goal here was to assist investigation into the nature of the enigma of quintessence, a major cosmological focus of Professor Parker, students, and colleagues. (A few years later, I had the privilege of attending a local colloquium given by Harvard Astrophysicist Professor Robert Kirshner, who emphasized the importance of obtaining insight into the exact nature of quintessence over the entirety of cosmic history to account for the current epoch of an acceleration in cosmic expansion and also for the antecedent understanding of cosmic inflation. Kirshner's excellent popular work, *The Extragavent Universe*, informed the public the about the importance of the quintessence issue.)

The entrepreneurial chemist Dr. Alfred Bader, to whom this communication is also addressed, co-authored that article in Physics Today on Joseph Loschmidt. They noted there the same objections (Umwiederkehreinwand) Loschmidt made to the Boltzmann H-Theorem I had first learned about in Arnold Siegert's NU course. http://www.physicstoday.org/pt/vol-54/iss-3/p45.html

Dresden in his biography of Kramers, made some deeply moving comments about Arnold Siegert.

(Internet citation of the Dresden book: "In addition to theoretical physics, Max was deeply interested in the history and sociology of modern science, particularly physics. He was aided in this pursuit by his wide range of friends and acquaintances in science, his ability to read, speak and write several European languages and by his love of travel. He was thus able in the 1940s and 1950s to get to know and to talk to many of the great physicists of the 1920s and 1930s. Indeed with his death, on of the last active links to the science world of the interwar years was lost. His 1987 book *H. A. Kramers: Between Tradition and Revolution* (Springer-Verlag) is representative of the depth of his knowledge and insight.")

Those comments by Max Dresden relate to the eulogy Siegert delivered at Kramer's funeral. There he made a statement, best termed in the Jewish tradition as a Midrash, on how 35 righteous persons uphold the world with their noble deeds. Siegert identified Kramers as one of those 35 righteous persons in the World. The Dresden biography

noted also how Professor Kramers hid Jewish scientists during the Nazi occupation of the Netherlands and provided them with food and scientific journals at risk to his own life. This action insured that the Arnold Siegert obituary was not mere hyperbole.

On matters related to physicochemical dynamics, the paper Kramers published in Physica, 1940 on the escape rate of a particle over a potential barrier has had profound impacts in physicochemical condensed phase dynamics. I first learned about this equation in Siegert's classroom setting, and years later learned that Wiegel, then at NU, had also in the journal Physica elaborated on the diffusion limit of the Kramers barrier passage rate that H.C. Brinkman had clarified earlier in 1956 again in Physica. Working under Arnold Siegert, Wiegel (who survived captivity in World War II by the Japanese in the Dutch East Indies) was the first person, to my knowledge, who adapted the functional integration methodology to physicochemical dynamics. He later published a book on this topical area of functional integration methodology in physics and polymer science. The Dresden obituary noted how earlier Siegert had himself pioneered in both the mathematics and initial physics applications of functional integration.

Under the tutelage of Ludwig Hofacker at NU and TU Muenchen, 1966-72, I had the experience of adapting the Kramers barrier passage rate models within the context of the linear response theory pioneered earlier by Yamamoto (JCP, 1960) and Kubo. My analysis then clarified somewhat the earlier unclear connection with transition state dynamics and diffusive barrier hopping. The thesis from NU in 1970 and the related publication in Ber. Bunsengesellschaft fuer Phykalische Chemie, 77,493(1973) were cited in the literature for over twenty years. Condensed phase proton transfer in hydrogen bonds was the central unimolecular reaction discussed in this work. Subsidiary consideration was given then to hydrogen atom diffusion in host metals and the kinetic isotope effect as a signature of the appropriate physicochemical mechanism determining barrier passage or tunneling. This type of study has resurfaced with a vengeance in terms of the nation's current (meager) efforts to develop renewable energy sources needed to retard global warming and free the Western World from dependence on fossil fuel. (One of the new generation of theoretical chemists, Professor Nancy Makri UIUC, made an outstanding contribution here in using the functional integral methodology, pioneered three decades earlier by Wiegel, to explain the observed value of the anomalous kinetic isotope tracer diffusivity ratio H/D of 0.8 in crystalline Si. K. M. Forsythe and N. Makri, "Path integral study of hydrogen diffusion in crystalline silicon", J. Chem. Phys. 108, 6819-6828 (1998). I found this study particularly gratifying because I had noticed three decades earlier similar anomalous tracer diffusivity isotopic ratio measurements of order unity in metals and had found no existing constructs, including my own, adequate to explain the anomalies.)

I left Muenchen in 1972, at the time of a raging unpopular war in Viet Nam, and returned to my birthplace in Chicago. In 1975, when relationships/connections with Ludwig Hofacker had completely broken down (for reasons best discussed with a panel on scientific integrity), I still had a strong desire to continue working in the scientific profession. Severance of that earlier working relationship meant that all efforts at securing scientific employment had to be done by me. That year I had some discussions with the person who then directed the Alumni Career Center at my Alma Mater University of IL In particular the Director showed me a listing from Dept. Chemistry University of Illinois at Chicago in the physical chemistry area. It was a postdoctoral listing from a then young faculty member, **Professor Robert Gordon, PhD Harvard 1970 under Professor Herschbach.** The Director strongly urged me to apply to gain re-entrance into the scientific profession. The position then paid \$10.000 per year and was for one or two years. I did phone Professor Gordon and then sent him the materials he requested. Sometime later, he indicated to me he did not view me as suitable for the position, and that appeared to be that.

I did not even think twice about the rejection from Gordon, having this experience repeatedly between 1972-5. However additional information came my way from persons close to the Gordon family that necessitated a re-appraisal. In Chicago, there was a group called Makom supported by the Jewish Federation of Chicago. The administrator there was a young rabbi from traditional Judaism named Baruch Fryman Kohl. He was a close friend of Robert Gordon and on his own had asked Gordon If he would meet with me to offer career advice. I had not discussed with Rabbi Kohl any effort made to earlier procure employment with Gordon. Rabbi Kohl then noted to me his amazement that Gordon had refused to enter into any such discussions. Rabbi Kohl hopefully has matured sufficiently so that such refusals today would not so bewilder him.

(Working between 1973-1998 as both a client and volunteer in a special program at Jewish Vocational Service Chicago, I offered assistance to scores of clients in diverse fields with the program director in Chicago Dr. Hunt Unger, now age 95 considered then the Dean of Executive Career Consultants in the Chicago area. Most interestingly, Dr. Unger had to flee Nazi Germany at about the same time Arnold Siegert left Leipzig to take up postdoctoral studies with Professor Kramers in Leiden. Unger **grew up** in **Halle near Heisenberg's Leipzig Institute** and received seventy years ago his doctorate in political economy from Halle-Wittenburg University. In 1946, he co-founded Roosevelt University in Chicago and in June, 2005 returns to Halle-Wittenburg University for a Festspiel commemorating the 70<sup>th</sup> anniversary of his doctorate. What Rabbi Kohl requested three decades ago of Dr. Gordon is standard practice in so many diverse fields of obtaining information and contacts. This is just what the Jewish Vocational Service Chicago in 1979 requested of their Milwaukee,WI colleagues .That request led to my meeting with Dr. Bader and the 1981 application to Dept. Chemistry UWM.)

At Makom, I was then friendly with a woman named **Debbie S**. She noted to me her **friendship with her neighbors in the Chicago Lakeview Community, the Robert Gordons**. In fact one day she asked me to accompany her to the Gordon's apartment when they were out t of town. She was looking after her neighbors' apartment during their absence.

Debbie and I were on good terms and I told her casually about the Gordon rejection. On her won, she stated, she had asked Robert Gordon why he did not hire me. According to Debbie, the response from Robert Gordon was that he did not want some theoretician coming into his lab and telling him what to do.

In subsequent years, I amazingly have had contact with Gordon's wife Eve in another setting. At one community function in recent years, she even "introduced" me to her husband. I have no inclination to discuss this sorrowful event with her, but I feel that such an **event is unfortunately part of scientific history and deserves to be set forth before a panel on scientific inquiry.** I am requesting in this memo any information you can provide on presenting this event to such a panel, not to embarrass Robert Gordon but instead to **insure this type of discriminatory employment experience not befall the next generation of scientists**.

Occasionally, I review the physics/chemistry/mathematics course selections of the universities I have attended to see how they have evolved over the years (University of IL Urbana, Western Reserve, NU, Technical University Muenchen). At UIC, I noticed Robert Gordon was teaching a graduate course in quantum mechanics and was using a book by Levine. Interesting, Nancy Makri that same year at Urbana was teaching elementary physical chemistry (Chemistry 342 which I took at the Navy Pier campus in 1958 under the tutelage of a close friend and McGill University classmate of Professor Rudolph Marcus, the late Samuel Schrage It was exposure to that magnificent instruction of Samuel Schrage in Chemistry 342 at Navy Pier campus of University of Illinois which motivated me to seek out in graduate studies an accomplished theoretical chemist like Ludwig Hofacker.) Amazingly, Nancy Makri, whom I hold in high esteem as a skilled representative of a new generation of

theoretical scientists, was using the same text for the quantum mechanics portion of the elementary course Chemistry 342 as Gordon was using in the graduate UIC class.

Looking now over Gordon's home page, and recalling that sorrowful "avoided crossing" dynamical event of 1975, I realize that Robert Gordon is not really a theoretical chemist. I knew that back in 1975 and remembered even from graduate school days just how uncomfortable some experimentalists are with persons expert in theoretical science. I suspected the eventual outcome even before I applied, but I did not want to risk loosing the support of the Director Alumni Career Center then by not applying. Gordon seems from his home page listing and my cursory knowledge of the topics he has researched to be quite accomplished and one who knows theoretical constructs well enough to design innovative experiments and come up with valuable contributions. (This dual expertise recalled my earlier contacts with Professor Edward Schlag at NU and TU Muenchen.) This type of expertise unfortunately was missing from most of the industrial scientists I later contacted. I am a person who can work well with experimentalists, design experiments to critically test theoretical constructs, or in industrial settings assist in design of marketable products, but I cannot successfully run experiments myself.

Perhaps one of the saddest experiences is my life was the exposure in the brief time I worked in American Industry 1977-79, to the absolute paranoia most industrial scientists I met had to the new theoretical constructs centered on statistical mechanics and quantum mechanics. I was caught in the middle of an ideological struggle in my view that has done heavy damage to our nation's scientific capabilities. One medicinal chemist then on the faculty of University of Illinois Medical School, with also experience in the pharmaceutical industry, provided support for this claim. He told me about in the early 1980's his own observations at a then recent University of Texas Symposium on Applications of Theoretical Chemistry in Industry. The industrial scientists all sat separately from the academic people and were constantly snickering at the presentations.

The Gordon "avoided crossing" event unfortunately typified so much of my adult life in trying unsuccessfully after 1979 to re-enter the scientific workplace on my own. Through the Jewish Vocational Service Milwaukee, by referral from the Chicago agency, I met Dr. Alfred Bader who kindly assisted me attempt to obtain a part time research position with Department of Chemistry UWM that paid about \$6,000/year. He was one of the few people, aside from Dr. Hunt H. Unger, in my adult life I have met who bothered to talk seriously about scientific employment yet alone provide assistance. I will always be grateful to him for those efforts, even though the position never materialized. Most interestingly, like my teacher Samuel Schrage at Navy Pier, he fled Austria in 1938 to avoid the consequences of the Anschluss for Jewish people.

Dr Bader did discuss with me the feedback he obtained from chemistry faculty at UWM. Bader stated that never in his professional career had he heard such defamatory comments as were made about me. He advised me that it was senseless for me under such circumstances to seek again scientific employment. When I met Dr. Bader in later years, I ran into criticism from him for not adhering to his advice. I had discovered that efforts to make career transitions into other fields were even more difficult than obtaining scientific employment. Without contacts in academe, I had absolutely no success in trying to set up scientific consulting services. The hiring practices in America discourage the PhD from obtaining entry level positions even in areas where skill sets transfer, which can be usually filled with candidates with less expertise and background hirable at lower salary levels. Such organizations also prefer to promote from within and do out want usually to hire outsiders at more advanced levels. (One former CEO Commonwealth Edison Company Chicago and also a former CEO NU Board of Trustees NU, Thomas Ayres, made a statement on this reality also to me and noted its application to his own firm).



I sadly conclude these adverse hiring practices will impact adversely the new generation. I did deeply appreciate the Parker/Bader **Physics Today** article of 2001 and in this context realize that hope for meaningful collaboration between the experimental and theoretical approach to understanding nature is not lost forever in America.

Alfred Bader and I did collaborate on one specific project related to a mutual friend cited glowingly in <u>Adventures of a Chemist Collector</u>, the late NU organic chemist, industrial consultant, and member Chicago Chemists' Club from 1924 up to his death at age 101:Charles Hurd. We both worked through the Center for History of Chemistry (now Chemical Heritage Foundation) from 1986-90 to insure that an Oral History of Professor Hurd be completed.

Actually, from inception of the idea until completion took about four years. Only the thoughtful, direct intervention of Dr. Bader with Dr. Arnold Thackery, who then directed the Center, insured completion of the project. At the interview, Dr. Bader was present to assist with the discussions with Professor Hurd. Interestingly, and appropriately, Dr Bader later became the subject of a Center oral history. Earlier, 1986-7 while serving as the President Chicago Chemists' Club, I had persuaded Dr. Thackery to complete an oral history of the Club's 1919 founder Dr. Ernst Volwiler, the late Abbott Lab North Chicago CEO and first graduate student of the late icon in organic chemistry, Professor Roger Adams at UIUC. Charles Hurd and Roger Adams were colleagues at UIUC Dept. Chemistry in the years 1921-4 when Hurd taught there before he moved on to NU where he spent most of his working days.

It is hard to imagine that a person finer than Charles Hurd ever lived. I understand why Bader wrote so glowingly of his personage and science achievements. During the late 1980's, I had many interactions with Hurd and collaborated with him on one specific presentation on the science/religion interface in 1986 before the Chemists' Club. Hurd, like Bader, kindly offered advice on career pathways, and wanted to write a letter to his former NU colleague Ludwig Hofacker discussing my personal situation. However, I did persuade him then not to write the letter, as I believed it could only succeed in opening Pandora's Box.

Alfred Bader wrote about his experience in the late 1980's as the Charles Hurd Lecturer in Industrial Chemistry at NU. I attended one of the weeklong series of presentations (Art and Science) actually as the designated representative of the Board of Chicago Chemists' Club. Hurd, seated in the audience, was quite pleased that the Club had sent a representative to one of Bader's lectures. I remember to this day a pleasant discussion after the lecture with both Bader and Hurd.

One decidedly unpleasant experience after Bader's Hurd Lecturer took place. The person hosting the lecture, then Chair NU Dept. Chemistry, had served in 1966-70 on my PhD dissertation committee. I noted that he walked away as I spoke to Bader and returned only after our conversation had ended. I took this rudeness as a signature that the poison which Bader had heard in 1981 from his colleagues at Dept. Chem. UWM had also impacted views of the NU Chemistry Dept.

This depressing situation amazingly repeated itself years later at the celebration this decade at Urbana of the 100<sup>th</sup> Anniversary Noyes Lab of Chemistry. After the final formal presentation on a Saturday morning, I stepped out of the lecture room into the corridors of Noyes Lab (where years before as a undergraduate student I had often encountered Roger Adams in the corridors) to view one final time some of the exhibits which featured Roger Adams. Who should come into the corridor-before the Adams exhibit-but this NU Organic Chemistry Professor-who had acted so rudely at the Hurd NU Lecture Series. For about five minutes, we stood about a foot apart and uttered not one word to each other. He was accompanied by his two young daughters apparently themselves undergraduate students at



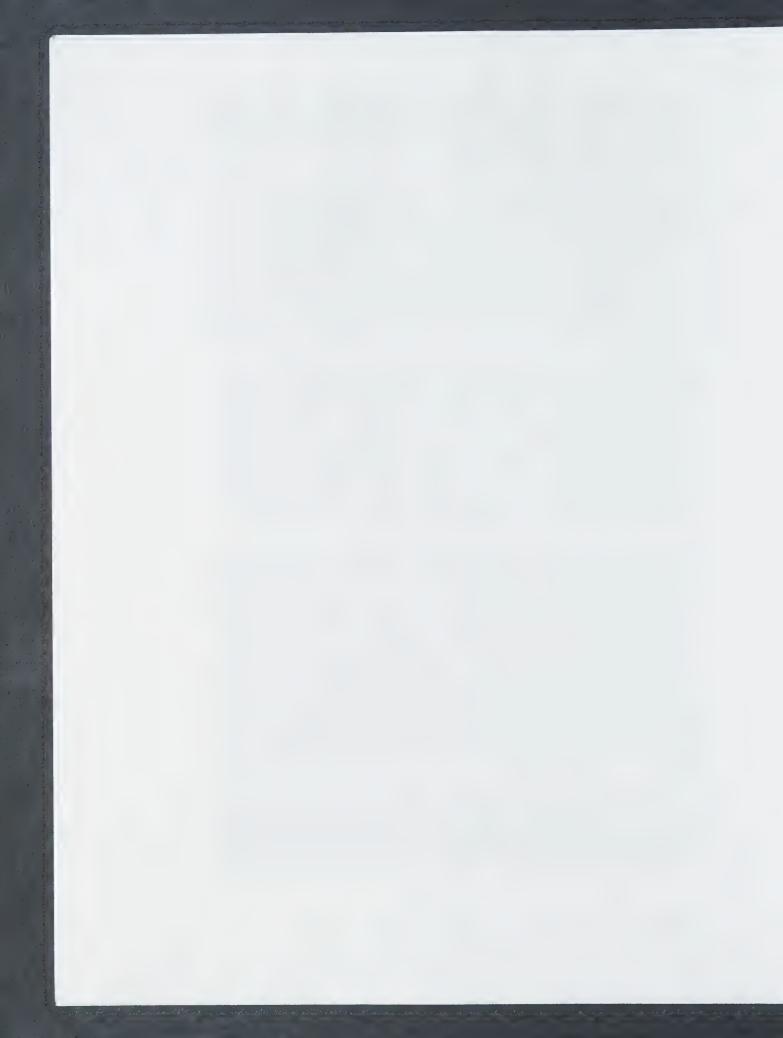
UIUC. I could only imagine what Roger Adams, or his 1920-24 colleague at Urbana Charles Hurd, would have said about such behavior by one who followed in their footsteps in this discipline. I believe such testimony need be brought before a committee on scientific integrity, not to embarrass the cited person but to insure that a new generation not be afflicted similarly. I am quite willing to provide this testimony.

After the meeting, I was given some bricks taken from the original Noyes Lab building and later gave one of them to Leonard Parker to pass onto his friend Alfred Bader whose footsteps undoubtedly had impacted the Noyes Lab corridors. I know as a fact about Alfred Bader's deep friendship with the late **UIUC physical chemist Professor Herbert Gutowsky**, his Harvard classmate, who over decades impacted physical chemistry research and instruction at UIUC. I never met Gutowsky during my UIUC days, but later at NU I heard him deliver a colloquium on in NMR studies and adapted some of the ideas there on motional narrowing in my own dissertation. Some years later, my old teacher at Navy Pier-Harvard on the Rocks of Chicago-Samuel Schrage, referred me to Gutowsky and the latter did provide kindly some suggestions on job seeking. Bader wrote movingly of Gutowsky in his autobiography and also wrote to me about his sorrow that Gutowsky had never received the Nobel Prize.

Retrospectively, I take far more pride in having my name inscribed on a wall at Noyes Lab as one of the undergraduate chemistry degree recipients than in my NU PhD degree. My years at Navy Pier and Urbana 1956-61 were far more joyous compared to the bitterness marring the NU 1966-70 years. Perhaps the divisiveness of the Viet Nam War afflicted both faculty and students at NU more than anyone then-or now-could admit. For faculty of a accomplished institution like NU to turn derisively on their own graduates without even benefit of a hearing or investigation of allegations undoubtedly made, in my view, recalls vigilante justice handed out in the American West depicted in <a href="Ox Bow Incident">Ox Bow Incident</a>, the One Book Selection for 2005 in Chicago, and precipitous action of lynch mobs in the South. And even more ominously it calls to mind such historical events as the Dreyfus Trial, a model of character defamation. Scientific Integrity panels have a responsibility to investigate and publicize such findings to insure due process for the next generation.

The courage Alfred Bader displayed when he discussed his wrongful dismissal from the advisory position at the firm he founded motivates further this long discussion. I remember a conversation on this issue, at a Chicago National ACS meeting last decade, with the late Noble Laureate in Chemistry Professor Herbert Brown Purdue. Brown noted that the dismissal had little impact on Alfred Bader because of his personal fortune. I responded that Alfred Bader was entitled to due process like anyone else, and suggested to Prof. Brown that such undeserved treatment afflicted the discipline and practice of chemical science. Failure by the community, I felt, to contest the lack of due process would set a terrible example for the next generation of potential chemists. I noted to Professor Brown my deep satisfaction that members of the profession contested and disputed the treatment Bader received at the hands of the person he "anointed" as his successor at Sigma-Aldrich. The opposition in the community to the lack of due process and the eventual restoration of Bader's good name at Sigma Aldrich renewed my faith in human nature and societal institutions and restored hope for the next generation. This important historical event impacting chemical science, its current and future practioners, motivates my discussion here of the Robert Gordon discrimination issue discussed here and other issues I need to relate to a scientific integrity panel.

(I had heard some years earlier Alfred Bader introduce Professor Brown at a Milwaukee Section ACS Meeting held at Johnson's Wax in Racine, WI. Professor Brown at the presentation covered intramolecular rearrangement of classical and non-classical entities in organic synthesis. Brown's Purdue colleague Professor Fong discussed this interconversion in his book on relaxation methods in chemical science from the perspective of linear



response theory. Memories of this Bader/Brown presentation, and the linkage to my earlier studies, with linear response theory adapted to intramolecular rearrangements in all phases of matter, resurfaced at the incidents described here linked to the NU organic chemistry professor who had served on my dissertation committee. One of the fond memories I retain of that dissertation examination in 1970 was an exploratory discussion on the potential application of the linear response methodology and the accessory quantum mechanics to form potential guidelines for use in the organic chemistry area. This anticipated the subsequent encounter with Professor Herbert Brown noted above.)

A most sorrowful event involving the ACS Theoretical Chemistry Subgroup of Division of Physical Chemistry clouded the early 1980's. I had written to officers of that subdivision about whether the Subdivision could offer some career guidance to mid-career professionals. The frequent listings of postdoctoral positions by the Subdivision motivated this inquiry. It was a realization of techniques commonly used at JVS Chicago on assisting diverse professionals access decision makers in their pertinent fields. The response I received was the equivalent of Marie Antoinette's supposed statement: "Let them eat cake."

I reported this feedback to the person then Head of ACS Employment Aides, Ms. Audra Raftner, who pursued this issue herself with other discipline oriented ACS Divisions. She later wrote back about having identical feedback from the discipline oriented ACS Divisions. With the co-Founder ACS Division of Professional Relations and a member Chicago Chemists' Club and former Chairman Chicago Section ACS, Mr. Stanley F. Drigot, I raised also this issue and its initiation by Dr. Hunt Unger at JVS Chicago. Mr. Drigot expressed deep interest in this technique and eventually meeting himself with Dr. Unger to explore further its adaptation to chemical professionals. Mr. Drigot agreed with me the issue impacts all disciplines of chemistry and requested my consent for him and Ms. Raftner to make the proposal at an ACS Council Meeting. Needless to say Mr. Drigot later reported that the discipline oriented divisions soundly rejected the proposal.

Mr. Drigot later kindly reviewed my entire employment history and then convinced me to allow him to submit the documentation to ACS Division of Professional Relations for investigation of discrimination based on such factors as age and religion. I reluctantly agreed despite my gut feeling of this being a futile effort. To his sorrow, Mr. Drigot later informed me that his ACS Division refused to investigate the alleged discrimination in hiring. (Some years later, 1989, Dr. Unger referred me to Bureau of Jewish Employment Problems in Chicago for a similar investigation. The attorney appointed by the organization to investigate my case noted in his official report to the Bureau "definitive religious and age discrimination and other violations of the Law.")

My own disillusion with ACS over this negligence led a few years after these collaborations with Stanley Drigot to letting my membership in the organization just lapse.

In the Chicago area, this networking scheme now is routinely used also at synagogues to assist unemployed and underemployed members make contacts with decision makers in their particular professions. CTC (Center for Career Transitions), sponsored by Catholic Archdiocese of Chicago and other faith based organizations, lauds this technique and makes it a key component of their program.

Two specific situations related to employment inquiries, involving accomplished chemists who held the ACS Presidency in the 1980's, fortified my decision to disengage from the organization. In 1983-84, Amoco Laboratories Naperville advertised in Physics Today and C&EN for two research openings in theoretical chemistry. The first position advertised was for a recent PhD graduate to fill a temporary assignment. I sent a copy to Dr. Ellis Fields, a accomplished industrial chemist, active in ACS, who happened to be a member Chicago Chemists' Club. My letter inquired whether a more senior level position in this research area



might develop. Dr. Fields wrote back that he passed around my vitae, and received "favorable comments from supervisors" but no such permanent openings were anticipated.

Some time later Dr. Fields became ACS President and then an ad appeared jointly in C&EN and Physics Today for a senior level position in theoretical chemistry at Amoco Naperville. I wrote again to Dr. Fields and enclosed copies of the latest ad from both publications. No response ever came, so I phoned Dr. Edward Mason, then the Amoco Lab Director of Research. Dr. Mason feigned ignorance of the ads, a fact I found sorrowful but not surprising. He insisted I contact human resources to determine whether any suitable research openings existed. I realized then further inquiry was futile, but I was determined to document the perceived discrimination in hiring. HR requested the usual resume be forwarded to keep on file. I responded that I was applying for the specific senior level position advertised in the two cited publications. Dr. Mason refused to accept my call made two weeks after I had sent HR the requested material. Eventually, HR wrote back stating that no suitable openings could be found for the skill levels I had. I learned from Dept. Chemistry NU Alumni Newsletter later that Amoco hired a then recent PhD student of NU theoretical chemist professor Mark Ratner (my classmate at NU also under Hofacker) for a position in theoretical chemistry. I never determined which of the two position this particular person obtained.

I sent copies of all pertinent documentation to Dr. Ellis Fields to inform him I was reporting this perceived employment discrimination to then US Senator from Illinois Alan Dixon, whom Dr. Fields then served as science advisor. I wrote to Senator Dixon I was not attempting to focus attention on Dr. Fields but needed to have this perceived discrimination thoroughly investigated by the US Congress. Senator Dixon then forwarded the documentation to US House Committee on Science and Technology, then chaired by Rep. Don Fuqua, D-FL. Some time later, Representative Fuqua wrote back an indifferent letter that did not address any issue put forward to Senator Dixon. I noted later that Rep. Fuqua became a Washington lobbyist for industry, so his indifferent response was not surprising.

A comparable situation arose in the 1980's at the Suburban Chicago firm of UOP (Universal Oil Products) then a component of the firm Allied-Signal. At that time, Dr. Mary Good who later became ACS President was the Director of Research. One insurance salesman known to me had a client at this firm and sent my credentials to him. Some weeks later, I phoned him and attempted to set up a meeting to explore issues of adaptation theoretical chemistry in the industrial environment. This person refused to meet with me, but indicated he would circulate the resume at his facility. Down the road, this contact did generate an interview for a new position created at the firm to utilize theoretical constructs. Dr. Good supposedly was out town on the day of the interview spread out over a full day with staff scientists, engineers, and HR administrators.

My follow-up call a few weeks later produced typical feedback: the principal interviewer refused to accept my call and routed me to HR. Interestingly, the HR administrator also refused to accept my call. Her secretary indicated a written response could be forthcoming. The written response did come and id not even state a rejection, but listed the typical dogma of retaining on file the resume in case positions open up later.

(Earlier, in 1975 I had interviewed at UOP and did receive a response from the person then Research Director who indicated my interview had created a favorable impression. But the Research Director, the late Dr. Herman Bloch, also a member Chicago Chemists' Club, noted then that consensus at UOP was against hiring a theoretician.)

Some time later, I noted that Allied-Signal/UOP listed the very position I had interviewed for with State of Illinois Dept. Labor under the classification of Alien Certification. This term



was defined to mean that Allied Signal /UOP could locate no suitable USA citizen to fill the position and therefore the firm was searching abroad for suitable candidates.

My only reason for not engaging an attorney and filing a lawsuit against Allied-Signal/ UOP was a sense of obligation to the staff member who had circulated there my resume. I believed that legal action initiated by me could have compromised his standing there. I had felt earlier a comparable sense of obligation in the 1975 Robert Gordon discrimination situation to Debbie S. and Rabbi Kohl and for only that reason did not file then a discrimination charge against Professor Gordon.

Harry Truman once stated "the buck stops here" and in this case I ascribe responsibility to Dr. Mary Good. I never talked personally with her, but once did attend a chemistry colloquium she presented at Illinois Institute of Technology. I left impressed with her expertise and knew of her accomplishments with chemical applications of the First Moessbauer Effect (My modest achievement in this area was seeing a proposal on Moessbauer studies of hydrogen bonded ferroelectrics, submitted as part of a PhD candidacy examination, published by another person years later in Physical Review.) I often saw her at local meetings of the Chicago Section ACS. To me, her public statements about the difficulty of recruiting young people to enter careers in science and engineering was compromised sordidly by the layoffs at Allied/Signal UOP that occurred under her leadership. Such layoffs were often discussed at board meetings Chicago Chemists' Club and written up in the NW Chicago suburban press, Daily Herald, headquartered in the Mt. Prospect area near the firm.

I sorrowfully juxtaposed Dr. Good's hypocrisy with my limited personal exposure in graduate school to Nobel Laureate in Physics Dr. Rudolph Moessbauer. There I learned from his NU host that Dr. Moessbauer had initiated a **Second Moessbauer Effect**. Viz. as a precondition for returning to his native land Germany, Dr. Moessbauer had insisted to the authorities there that educational opportunities be given to young Germans from families hitherto excluded from higher education. To this day I feel strongly that these discriminatory practices of Professor Gordon at UIC, Dr. Mason at Amoco and Dr. Good at Allied Signal/UOP **subverted** the notion of democracy. The best remedy I can advocate now is to bring forth this testimony before a panel on scientific integrity out of respect to the new generation of scientists to assist them avoid such treatment. Without people willing to speak out, no countermeasures to eradicate this virus can be developed and the new generation of American scientists will undergo comparable maltreatment and suffering.

Networking schemes operative here, or proposed for ACS utilization, are no panacea based on my personal experiences discussed above.. Referrals in the 1970's and 1980's from Dr. Unger to a then JVS Board Member, retired head of the Argonne Physics Division Dr. Murray Peskin (who worked under Feynman at the Manhattan Project, was a past colleague of Arnold Siegert <a href="http://prola.aps.org/abstract/PR/v87/i5/p735">http://prola.aps.org/abstract/PR/v87/i5/p735</a> 1) and co-authored a recent text (1995) on quantum field theory), illustrated such frustrations. I explicitly asked Peskin about countless rejections from physics and chemistry divisions at Argonne and other national laboratories. Peskin asked me why I had even bothered to apply without antecedent personal recommendations from well established scientists. I responded I preferred to base applications on my personal qualifications, accomplishments, and enthusiasm in physics, chemistry, applied mathematics, and communication skills. Peskin added I was living in a dream world and lack of these recommendations would insure failure for all subsequent applications in academe or a national laboratories.

One final application I made in 1997-8 at Chemical Technology Division Argonne National Laboratory confirmed further Peskin's sober assessment. Just before Dr. Unger retired (at age 89) from his JVS position, he showed me a job order from that Argonne Division and insisted I apply for it. The job order targeted a PhD scientist to perform theoretical studies



with eventual adaptation to new technologies, areas in which I had some expertise and accomplishments. I tried to convince Dr.Unger that applying to Division Chemical Technology was like whistling Dixie as I had projected back in 1975 to Univ. IL Alumni Career Center Director the probable futility on the "avoided crossing" application made to Professor Robert Gordon.

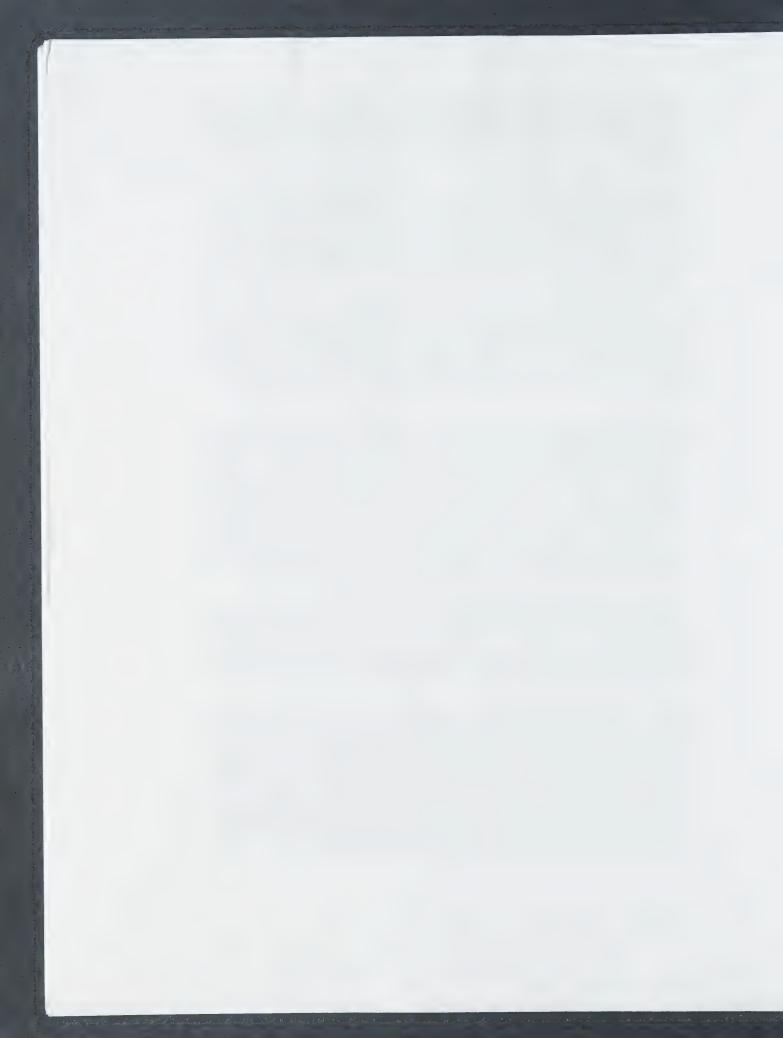
With the job description in front of me, I held a phone conversation with the person serving as Director Chemical Technology Division Argonne. The Director denied such an opening existed, but suggested I might want to send in a resume in case future openings materialized. After this futile conversation, I did send in an application along with the job description JVS had received from Argonne. I addressed all communications to the Division Head, for the advertised position. Eventually a letter came from a Human Resources staffer insisting the Division had no current openings but would keep the resume on file for possible future use in case positions materialized.

Dr. Unger's perspective was the organization had candidates waiting in the wings and went through the formality of advertising to feign compliance with non-discrimination legislation on government hiring. Chemical Technology Division, he argued further, could not imagine a social service agency could offer qualified candidates for a scientific position. My only mistake —besides applying-then was not to document this discrimination for my Congressman and US Senators. I however could not risk injuring my relationship with Dr. Unger by refusing to apply.

I experienced repeatedly this type of response from 1972-1998 with respect to applications targeted at academe, government, and industry. Only a few of the most egregious cases like the Gordon "avoided crossing" and the Argonne fiasco are noted here. After 1998, I deemed it futile and maladaptive to pursue actively any further scientific employment. Peskin's observation seem sorrowfully to represent a law of nature. As Dr. Peskin also astutely said, professional societies will consciously avoid any engagement in these malignancies impacting employment ("They will not touch it with a ten foot pole.") However, it is my hope that scientific integrity panels will examine these issues and the need to remove the poison that seeps into the scientific community by their continuation. Further impetus may well come from the need for science and its technological spin offs to assist in stabilizing our beleaguered constitutional democracy and globally our threatened ecosystem. A community replete internally with poison cannot respond successfully to any external challenges.

In his context, a former Harvard postdoc in biophysical chemistry Dr. Susan Gaud (PhD NU under Emeritus Professor Irving Klotz in the 1970's) made to me a comment about industrial employment similar to Dr. Peskin's observation about government. Susan noted in the1980's that employment circumstances would have been much different for me if I had obtained support comparable to what she has received from Irving Klotz. She was speaking then also from her position as Research Director Physical Chemistry at Kraft Foods in suburban Glenview.

Susan and I go back a long way. She was my student in a recitation section of (former NU Professor Edward Schlag's) undergraduate physical chemistry at NU during my own student days. She then was having trouble with the basic physical chemistry and I did give her some additional assistance. What a remarkable development from her days as a beginning graduate student with a deficiency in her major to have made such progress in both academe and later the industrial world. Irving Klotz, whom I deeply respect, has spoken glowingly to me of her industrial accomplishments, and Charles Hurd noted his admiration for her contributions to Chicago Chemists' Club. Things go full circle as Mr. Drigot was Irving Klotz's classmate at Univ. Chicago during the World War II era and Charles Hurd noted to me his own interactions with Irving Klotz as among his most cherished memories.



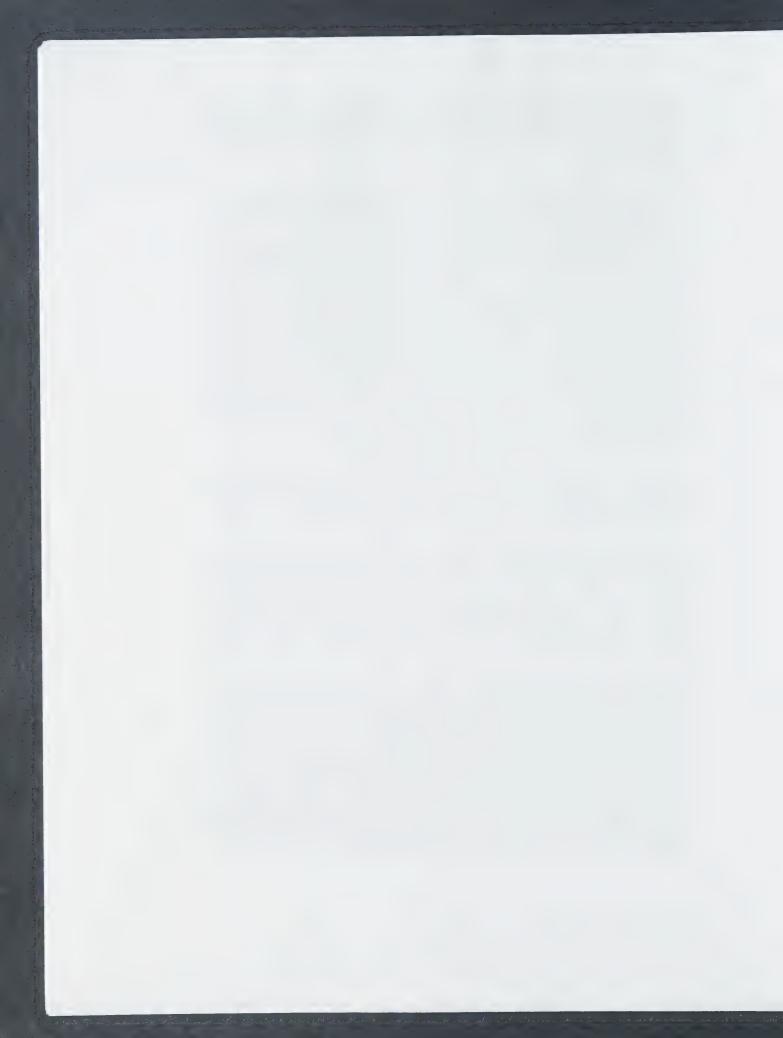
Today my residual scientific membership is with APS. I was granted senior membership. I have found career assistance here much more limited in scope than in ACS. One incident in 1982-3, worth reporting to a scientific integrity panel, convinced me to limit further involvement. Retention of membership maintains some residual association with the scientific community.

In 1982-3, I submitted a proposal to APS Division of Biological Physics (I was then a member) for a joint symposium with Division of Chemical Physics on the structure and dynamics of biophysical mechanisms. The idea evolved out of a colloquium I heard at UIC Dept. Physics in 1982 by now emeritus Professor Hans Frauenfelder UIUC Dept. Physics. The topical area was the dynamics and structural features of ligand binding to heme proteins in aqueous media(a subject area of interest to Irving Klotz and his students and colleagues). I focused in my proposal on the application Frauenfelder made of the classical Kramers 1940 Physica barrier crossing problem, and its semiclassical cryogenic temperature extension, to view the dynamics. The proposal suggested topics like this one, and structural and dynamic issues characteristic of liquid phase reactions of concern to both chemical physicists and biophysicists and a list of recommended speakers including Frauenfelder and his then colleague at UIUC Peter Wolynes. The supporting documentation covered my own views on the importance of juxtaposing both classical and semiclassical historic transition state and diffusions reactivity models with the emerging methodology from the Kramers paper and the newer linear response theory, along with biological structure. Frauenfelder's non-exponential ligand binding kinetic measurements done with his own students, and the physicochemical modeling in collaboration with Peter Wolynes, were noted in this proposal as diagnostic of a rich energy landscape in heme proteins and the need for multibarrier solution phase dynamic barrier crossing (penetration a t cryogenic temperatures) models.

The joint 1983 Symposium was entitled Dynamics of Biological and Chemical Reactions. Three of the four speakers selected including Peter Wolynes and Hans Frauenfelder, were from among my recommendations. However, the person then Chairman APS Division of Biological Physics, the accomplished biophysicist (and APS President-Elect) John Hopfield then at Cal Tech, took credit for the proposal. My name was never mentioned.

I hardly expected a metal but felt ethical conduct require citation of the proposal I wrote that initiated the idea for the symposium. I did forward the proposal documentation to the person then Vice-Chairman APS Division of Chemical Physics Emeritus Professor of UIUC Dept. Chemistry Jiri Jonas. His letter did thank me for the initiation and was complimentary, but between the lines I discerned an admonition for me to move out of the way and let those tenured and secure in the field work further without interference. This experience showed that keeping up with research accomplishments, and also motivating further research progress, had little impact on employability.

The 1982-3 APS experience resonated further with my involvement 1978-93 with IUPAC Commission on Solubility data. Working in a Chicago area industrial setting 1978,I responded to a survey from Commission on Solubility Data of IUPAC The response motivated the Founding Chairperson, the former MIT postdoc, late professor of inorganic and analytical chemistry Hebrew University Stephen Kertes to invite me to make a presentation at their annual meeting at Emory University. I delivered there the presentation on using theoretical constructs, emphasizing the fundamental linkage to molecular distribution functions, to systematize and correlate equilibrium solubility data .The following year, Kertes asked me to determine whether he could possibly spend his upcoming 1979 sabbatical year at that Chicago area firm. I was more than happy to assist him after I had determined he was serious about focusing in that sabbatical setting on industrial issues rather than purely academic matters. The documentation he provided me also convinced management to issue the invitation and that his research focus on both solubility and micelles could assist the firm



His sabbatical took place in the 1979-80 academic year. Just before he arrived, the firm fired me. Steve offered to intercede with management, but I convinced him such efforts were futile, and not to let my situation affect his experience in that industrial setting. I believe he made a real contribution to strengthening the industrial/academe interface. He told me later the experience assisted him in consulting arrangements with the Israel government. I regretted that financial circumstances later prevented me from traveling to Israel to attend the wedding of his daughter.

(The ACS Division of Professional Relations conducted a two year investigation,1979-81, of my employment there and explicitly requested me not to discuss the ongoing investigation with Professor Kertes. I had no difficulty complying with this request, even through in 1981 I had terrible disillusion with the final report that essentially whitewashed the actual reality of discrimination. Mr. Drigot felt the same way when in later years he read the documentation and then convinced me to let him initiate another investigation by ACS Division Professional Relations.)

Subsequently, I continued advising the Commission on topics related to the presentation I had delivered in 1978. Scientists expert in condense matter theoretical constructs began delivering plenary lectures at their yearly international symposia and the membership began to think seriously about how to incorporate as guidelines theoretical constructs in their publications, and recruit additional theoreticians. At the 1986 International Symposium held in Newark, NJ, I had the privilege of interacting with the late Kenneth Pitzer and introducing his plenary lecture on methodology adapted to concentrated electrolytic solutions. I found especially gratifying the contact Pitzer made on the methodology Arnold Siegert had presented years earlier on equilibrium molecular distribution functions.

Subsequently, the Commission asked me to recommend systems for concurrent evaluation of equilibrium (imaginary time) solubility measurements and real time diffusivity data. (This "isomorphism" had been a major focus of the poster presentation I made at the symposium where I applied ideas from the 1960's in graduate research seminars at NU organized by Edward Schlag and Ludwig Hofacker on Greens Function methodology and a related 1981 JCP paper by David Chandler and Peter Wolynes stressing the isomorphism.) The systems recommended were supercritical solvents and gas storage systems, specifically hydrogen and oxygen separated dissolved in liquid and solid solvent. The selection reflected my concerns about environmental issues like habitat preservation and adversity of global warming. Specifically, I long have advocated the attempt to extract shale oil without damaging the environment and potential use of hydrogen/oxygen fuel cells as a source of renewable energy potentially supplanting fossil fuel utilization. I remembered also Arnold Siegert at one time worked as a petroleum engineer and had been intrigued in graduate school on the kinetic isotope effect for proton transfer and atomic hydrogen tracer diffusivity in condensed "solvents". I was also intrigued by the distinctions between this "isomorphism" for hydrogen as operating in simple fluids, or liquid water (topic of a earlier plenary lecture by Saul Goldman, whom I recommended, at the Commission's 1st International Symposium), and the alternative condensed matter systems like metals, alloys, and intermetallic compounds. I underscored this distinction was underscored in the 1986 poster presentation.

(I was also aware of the frequent symposia held at the annual APS March Meetings on hydrogen in metals, and noted such a session in the 1990's at an ACS National Meeting in Chicago,).

Steven Kertes sorrowfully passed away in the late 1980's and then the Commission's enthusiasm for my participation waned exponentially. Commission sponsored international symposia in the early 1990's did feature plenary lectures on equilibrium features of supercritical solvents and atomic hydrogen solubility in condensed systems like metals and alloys. Those who followed Steve Kertes in leadership roles apparently felt more comfortable about relying on contributions more from scientists well positioned in their fields rather than



an unknown. After 1993, I dropped further interaction with the Commission. (I did experience recently some gratification on the real time analysis by Nancy Makri on the anomalous isotope effect of hydrogen in crystalline Si.)

To me, with the exception of my working relationship and friendship with the late Professor Stephen Kertes, (and other fine scientists like Professor of Analytical Chemistry Darryl Howery, co-author Factor Analysis in Chemistry whose PhD graduates had also a difficult time obtaining positions until they completed their MBA degree program), these experiences with the Commission mirror the futile efforts made in 1982-3 to establish meaningful contact with APS Divisions of Biological and Chemical Physics. Meaningful scientific activity seems reserved completely for those well positioned in their fields. This constriction issue seems worthwhile bringing before a panel on scientific integrity

To conclude this documentation, I want to mention first my brief meeting with you in Chicago (during the 1980's I believe). The occasion was a. forum targeted to young Chicago leaders, where you made a joint appearance and presentation with Professor Charles Rhodes Dept. Physics UIC, well known for his x-ray laser studies. I do not at this time recall the content of your remarks, nor those of Professor Rhodes. (I had made some earlier an application for a temporary advertised position in his research group. No response ever came to my application. In later years I became aware of his success in commercializing the x-ray laser methodology in medical applications.)

To this day, I still recall your **Physics Today** op-ed, written last decade, on the **multifaceted Sir Isaac Newton** as a physics pioneer, searcher for divinity in nature, one dedicated to alchemy, and a treasurer of the England Mint who had one hundred persons executed for minor infractions of the Law.

I made here the admittedly painful documentation of experiences which in my view subvert the democratic process. With such experiences unchecked in this time of retrogressive upheaval and massive cutbacks in federal support for basic research, career pathways for the next generation of scientists can be adversely impacted. The courage shown by Kramers and Bader in their particular situations motivate me to make the requested for assistance in having this documentation of personal experiences submitted to an appropriate panel on scientific integrity. (Possibly Dr. Alfred Bader who has taught Sunday School in a reform congregational setting-including Leonard Parker's children-might agree this documentation conforms with Rabbi Hillel's dictum: "If I am not for myself who will be, but if I am for myself only, what am I?")

Dr. Robert A. Rosenstein

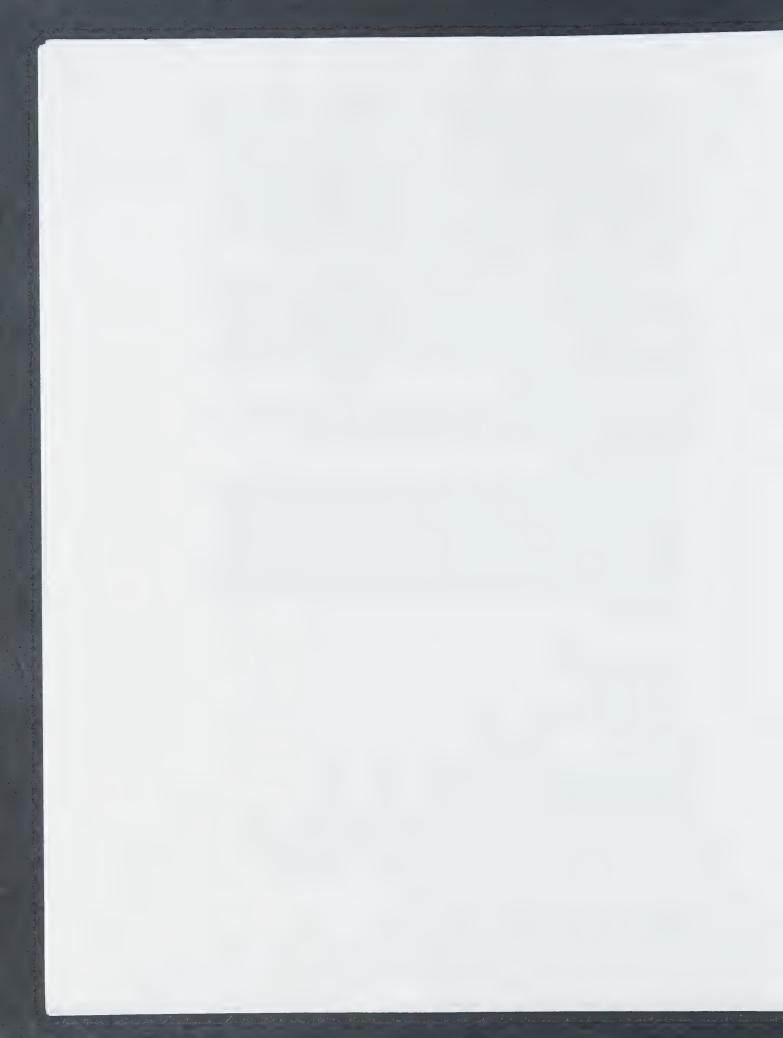
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Chicago, Illinois 60646-6058

lightcone@illinoisalumni.org







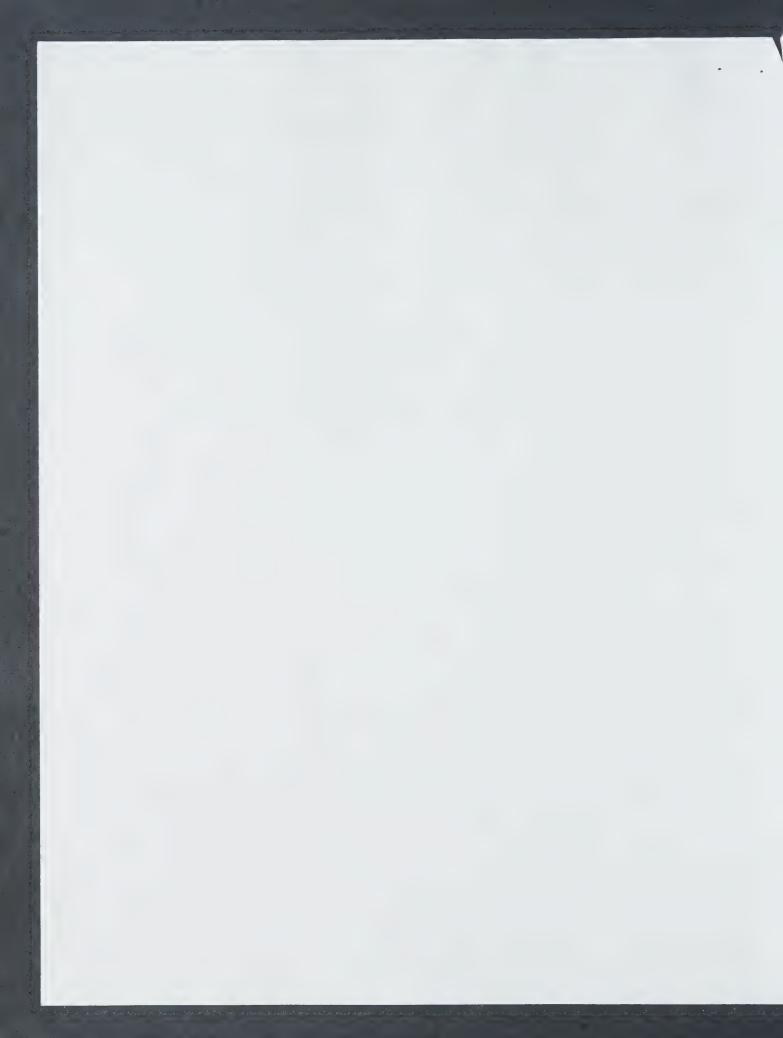
To: Dr. Alfred Bader

From: Dr. R. A. Rosenstein

**Date:** 6/27/2005

Re: Extended Memo To Professor Herschbach and Related Material

The reasons for forward this personal history to Professor Herschbach are noted in the memo addressed to him. The memo does make contact with our intermittent contacts, and <u>Adventures of a Chemist Collector</u>, through the dictum of Rabbi Hillel.



## History that matters campaign



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## Frank B. Baird, Jr. Research Professor of Science, **Harvard University**

Dudley Herschbach was born in San Jose, California (1932) and received his B.S. degree in Mathematics (1954) and M.S. in Chemistry (1955) at Stanford University, followed by an A.M. degree in Physics (1956) and Ph.D. in Chemical Physics (1958) at Harvard. After a term as Junior Fellow in the Society of Fellows at Harvard (1957-1959), he was a member of the Chemistry Faculty at the University of



California, Berkeley (1959-1963), before returning to Harvard as Professor of Chemistry (1963), where he was Baird Professor of Science (1976-2003) and is now a Research Professor (Emeritus). He has served as Chairman of the Chemical Physics program (1964-1977) and the Chemistry Department (1977-1980), as a member of the Faculty Council (1980-1983), and Co-Master with his wife Georgene of Currier House (1981-1986). His teaching roster includes graduate courses in quantum mechanics, chemical kinetics, molecular spectroscopy, and collision theory, as well as undergraduate courses in physical chemistry and general chemistry for freshmen, his most challenging assignment. Currently he gives a freshman seminar course on Molecular Motors and an informal graduate "minicourse" on topics in chemical physics. He is engaged in several efforts to improve K-16 science education and public understanding of science. He serves as Chair of the Board of Trustees of Science Service, which publishes Science News and conducts the Intel Science Talent Search and the Intel International Science and Engineering Fair.

He is a Fellow of the American Academy of Arts and Sciences, the National Academy of Sciences, the American Philosophical Society, the Association for Women in Science, and the Royal



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Chemical Society of Great Britain. His awards include the Pure Chemistry Prize of the American Chemical Society (1965), the Linus Pauling Medal (1978), the Michael Polanyi Medal (1981), the Irving Langmuir Prize of the American Physical Society (1983), the Nobel Prize in Chemistry (1986), jointly with Yuan T. Lee and John C. Polanyi, the National Medal of Science (1991), the Jaroslav Heyrovsky Medal (1992), the Sierra Nevada Distinguished Chemist Award (1993), the Kosolapoff Award of the ACS (1994), and the William Walker Prize (1994). He was named by *Chemical & Engineering News* among the 75 leading contributors to the chemical enterprise in the past 75 years (1998).

Herschbach's current research is devoted to methods of orienting molecules for studies of collision stereodynamics, means of slowing and trapping molecules in order to examine chemistry at long deBroglie wavelengths, a dimensional scaling approach to strongly correlated many-particle interactions, and theoretical analysis of molecular motors, particularly enzyme-DNA systems.





Heisenberg (right front) with his Leipzig seminar, 1930. Left front: Peierls. Rear (l to r): Placzek, Gentile, Wick, Bloch, Weisskopf, Sauter

# THE DIFFICULT YEARS

HEISENBERG'S DOCTORAL
STUDENTS AND ASSISTANTS
IN LEIPZIG

## **Doctoral Students and Assistants**

Erich Bagge (dr & asst) Guido Beck (asst.) Felix Bloch (dr & asst.) Gerhard Blass (asst) Heimo Dolch (dr) Hans Euler (dr & asst)

Edwin Gora (dr)

Hermann Arthur Jahn (dr)
Bernhard Kockel (dr)
Rudolf Peierls (dr)
Arnold Siegert (dr)
Edward Teller (dr & asst)
C.F. von Weizsäcker (dr & asst)
Wang Foh-san (dr)

Visitors to the Physics Institute (no degree or position with Heisenberg, Hund, or Debye)

Edoardo Amaldi
Wolfgang Buchheim
Ugo Fano
Eugene Feenberg
Marcus Fierz
Giovanni Gentile
Otto Halpern
Grete Hermann
William V. Huston
Seishi Kikuchi
Lev Landau
Ettore Majorana

Robert S. Mulliken
Arnold Nordsieck
George Placzek
Stefan Rozental
Fritz Sauter
John C. Slater
Laszlo Tisza
Sin-Itiro Tomonoga
J.H. Van Vleck
Satoshi Watanabe
Victor F. Weisskopf
Gian Carlo Wick
Karl Wirtz

Source: Christian Kleint, "Schüler und Gäste Werner Heisenbergs und Friedrich Hunds in Leipzig," in Christian Kleint and Gerald Wiemers, *Werner Heisenberg in Leipzig 1927-1942* (Sächsische Akademie der Wissenschaften, Math-naturw. Klasse, 58, Heft 2) (Berlin: Akademie Verlag, 1993), pp. 136-138.





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Reminiscences of A. J. F. Siec

by Wiegel, Frederik W., 1938-

Call Number: MB 1999-23

Description: 1 pp.

Owning Repository: American Institute of Physics. Center for History of

Physics. Niels Bohr Library. One Physics Ellipse,

College Park, MD 20740, USA

More by this author

• Wiegel, Frederik W.,

Country of Repository: USA

Scope of Material: A brief summary of Wiegel's memories of Arnold J. F.

Siegert during the period that he worked with him as a visiting scientist from 1968 through 1970 in the Physics

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Department at Northwestern University.

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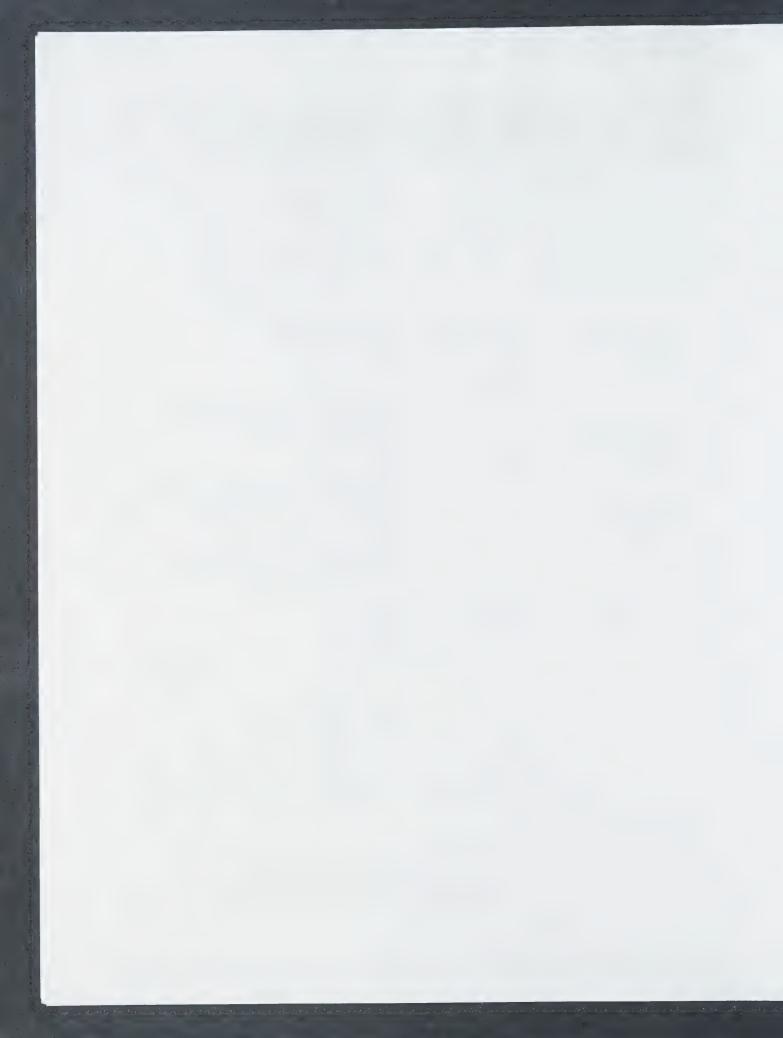
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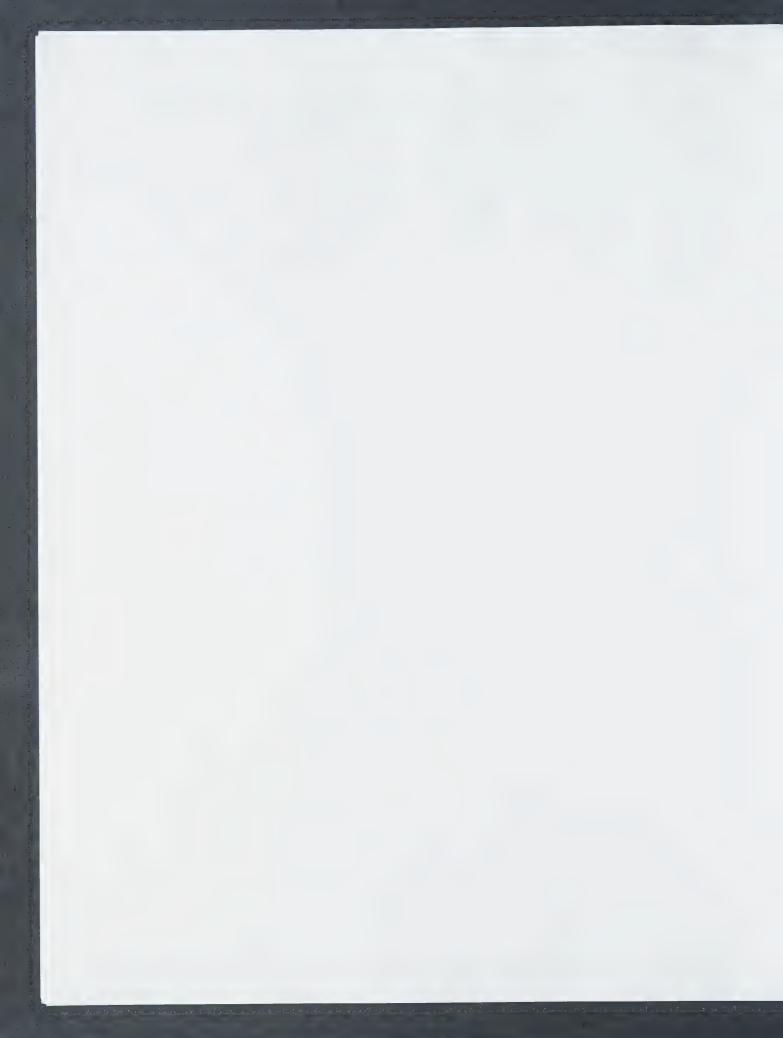
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Rosenstein, Robert	Country of Repository: USA						
A.  Browse Catalog  by author:  Rosenstein, Robert	Scope of Material:	Letters and statements concerning Rosenstein's memories of Arnold J. F. Siegert as his teacher in 1960s in the Physics Department at Northwestern University written in response to seeing Siegert's obituary published in Physics Today.					
A.	Provenance:	Received from Robert A. Rosenstein,	from Robert A. Rosenstein, 1999.				
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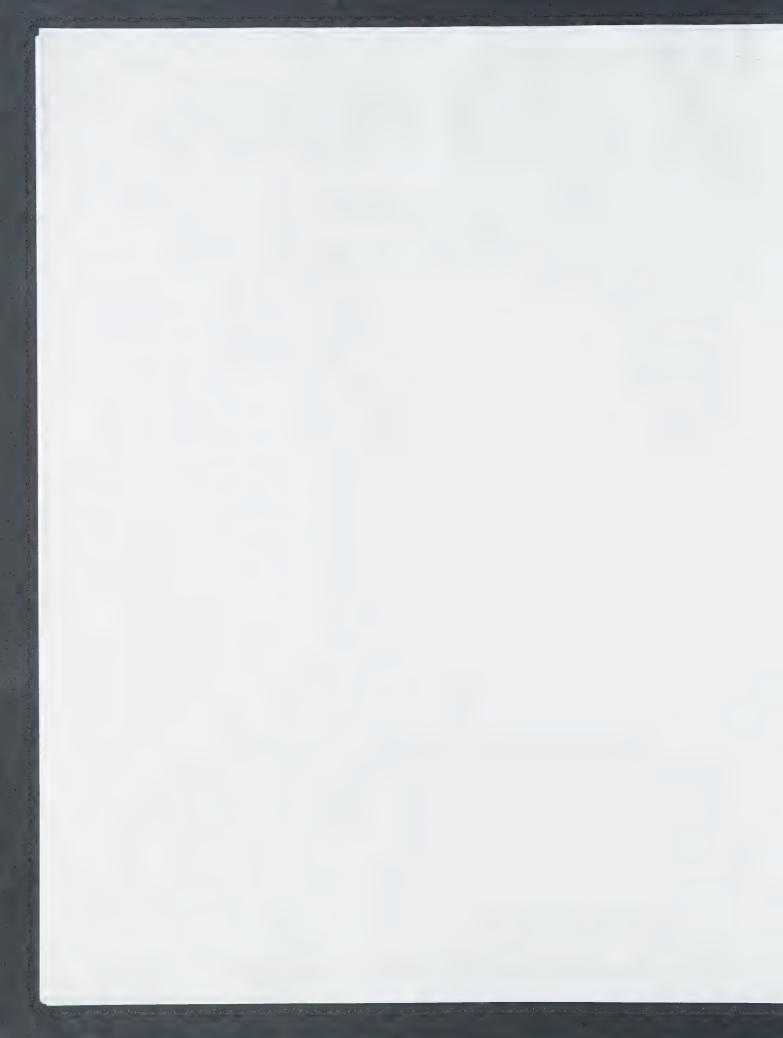
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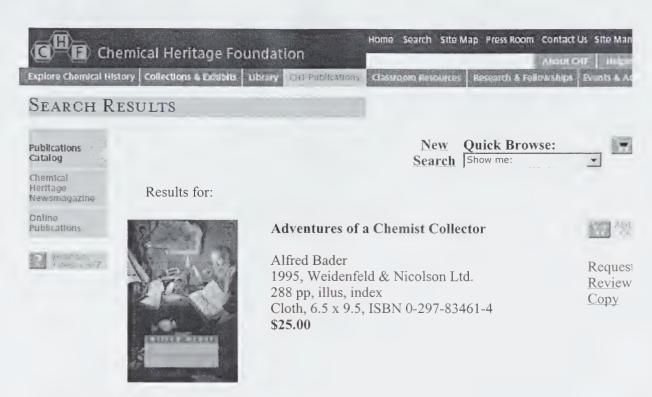


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#### DESCRIPTION:

When Nazis invaded his hometown of Vienna just months before World War II, the adventures of this chemist-collector began--he was 14 years old and fleeing to England with one small suitcase, one dollar, and his stamp collection. Then, two years later, he interned with other Jewish refugees and sent to a Canadian prisoner-of-war camp. Beh barbed wire he began his education in chemistry, which would later earn him a scholar at Queen's University and a fellowship from Harvard.

Bader describes his "adventures" with honesty and humor, continuing through the founding and growth of the Aldrich Chemical Company, now Sigma-Aldrich, and his ejection from the company he started. He also tells the heartening story of his second career as an art collector and gallery owner.

"It was said of Goethe that his life was his greatest masterpiece. That applies as well to Alfred Bader".--Dudley R. Herschbach, Nobel laureate





## Dr. Alfred Bader

924 East Juneau, Suite 622 Milwaukee, Wisconsin 53202 Phone: 414/277-0730 Fax: 414/277-0709

E-mail: alfred@alfredbader.com

A Chemist Helping Chemists

May 10, 2004

Dr. Robert A. Rosenstein 5801-E North Pulaski Rd., Apt. 112 Chicago, IL 60646-6058

Dear Dr. Rosenstein,

Thank you for your two interesting essays which I read Saturday afternoon. Thank you particularly for writing so kindly about my good friend, Professor Leonard Parker, and myself. But what gave you the idea that I selected the solvents to restore Rembrandt's *Nightwatch*? The Rijksmuseum might well have ordered solvents from Aldrich, but I had nothing whatever to do with the selection.

With best wishes I remain

und Kade

Yours sincerely,

Alfred Bader

AB/az



NORTHWESTERS

Vol. 19, No. 1, Winter 2005



Buehler Affiliate, Nicole Brodsky, PhD, photographed with her grandfather, Buehler Member, Hunt Unger, Dr.iur/NCC, in front of his beloved Chagall prints. Dr. Brodsky is the creator of the documentary film, Sage, featured at the 2004 inaugural John and Gwen Smart Symposium. Read Dr. Unger's "Profile in Aging" on page 11.



# **Profiles in Aging**

In this issue, the Buehler Center on Aging newsletter features Hunt H. Unger, Dr.iur/NCC, in the second of a series of profiles in aging.



Buehler Center staff member Emily Hagenmaier had the chance to share great conversation and cookies with Dr. Hunt Unger and his granddaughter, Nicole Brodsky, PhD, at his home in Evanston.

Hunt H. Unger, an avid reader, collector, scholar, art lover, pioneer, and mentor, is bustling with activity at age 95. A self-described "compulsive perfectionist since the day I was born," Unger cannot get enough of what the world has to offer and what he has to offer the world. Born in 1910 in the Black Forest region of Germany, Unger received his education under the Weimar Republic. At the age of 18, Unger traveled to Vienna to visit his wealthy aunt, who gave him funds to enroll in ballroom dancing lessons. It was on the dance floor that Anni Lewinsky looked across the room and decided, as Unger cheerfully recalls, "[I want] that guy!"

The rise of Hitler brought considerable challenges to Anni and Hunt, who had since completed doctoral work in law, economics, social, and political science. Under Hitler's regime, he knew that his career aspirations were impossible. In 1936, Unger left for the U.S. not knowing if he would ever be able to see Anni again. Unger holds his education as the source for his survival and success. "There's one thing about education," he explains, "they can kill you, they can take away your life, but education is one thing they can never take away from you." Although Dr. Unger arrived in the U.S. on the tail end of the Great Depression, he managed to build a niche for himself as the personnel director of a factory and as an influential advisor in social security. In 1938, Anni and Hunt were reunited in Chicago. They married in 1939 and have two children.

After many years in the field of personnel and industrial relations, Unger became interested in the field of career counseling. At the age of fifty-nine, he received a degree in personnel and psychology from Northwestern University. Unger explains, "Before World War II, the average American male was a high school graduate and had no choices. Dad, Granddad, and therefore you worked for Western Electric. You stayed with the same company for twenty-five years, and at the end, you got a gold watch." World War II, the GI Bill, and social and cultural stirrings on the home front changed that. Suddenly there was a new industry of executive career counseling, and Unger was one of its pioneers. Some fifty years later, Unger is "busier today than I ever was." He frequently meets with his twenty-five clients.

It is very important for Unger to "stay with the times... even though I'm a half-idiot where the computer is concerned, I still make attempts." In addition to his commitment to staying on top of advancing technology, Unger maintains a strong connection to his past. The literature of Isaac Bashevis Singer connects him to the experiences of his ancestors, and he telephones his younger sister in Berlin every Thursday. Perhaps it is his reverence for the past and awareness of future generations that, upon Anni's death seven years ago, led Unger to donate his Judaic library to the Jewish Community of Halle, her German birthplace. He and his granddaughter Nicole Brodsky, together visited the Anni Lewinsky Unger Bibliothek in June 2004.

Unger advises us to "learn, learn, learn. The reason I'm smart, is because I'm learning from my clients!" Unger devotes a lot of his meetings to listening, "the most important tool in my profession," he pauses, "and not only listening, but also listening to the undertones of what the client doesn't say directly. You've got to feel what he's trying to say. It's very stimulating, listening to the undertones." Unger applies this practice to his philosophizing on the needs of older people: "compassionate understanding, not just superficial understanding. Putting a person in a retirement home is not a whole solution; that will not ensure happiness. It's a broader human issue." Unger continues, "In 1871, Bismark instituted social security for all those 65 and older. But back then in Germany, people didn't live to age 65!" Unger emphasizes that the policies must match the needs, and that the needs of older adults are not just economic: "People" need someone to listen and be caring."



# Career



# **Transitions News**

The Newsletter of the Career Transitions Center • February, 2003 • Volume 5, Number 1



Jim Fitzgerald with Dr. Hunt Unger, who directed the Career Center at Jewish Vocational Services until he retired recently at age 90

Thanks to all of you who have participated in the CTC ministry.

The Career Transitions Center of Chicago just completed its busiest year. Not only are more people using the services of CTC, but it is taking longer for most participants to find a job. Many of our members are spending more time at the Career Transitions Center, often as much as 6 to 7 months. The uses of the Center have changed dramatically since its opening over five years ago. Initially, CTC had one computer linked to the Internet using a modem telephone line. Currently, CTC has 19 computers on line and will have 23 PCs on line with a T1 line by the end of this fiscal year. The Internet revolution as a job search tool is not so much about interviewing in cyberspace as it is about using the web as a research tool, to find available jobs and to get information about organizations and industries prior to interviews. The Internet is also a great networking tool.

In its early days, CTC had two volunteer coaches. Now, we have 22 coaches who are an integral part of the program to assist our members in their job searches. These coaches help them through a structured process: deciding

what they want to do, putting together written materials (resumes and letters), preparing presentations (interviews), networking and developing their negotiating skills. Our coaches possess numerous skills such as video taping mock interviews, and helping members learn how to handle multiple interviews and behavioral interviewing. Our coaches are available to assist in identifying issues that might hurt a candidate in the interviewing process and help him/her learn how to overcome the problem. Our coaches can serve as "cheerleaders", cajolers, confidants, evaluators or just sympathetic ears. They

have the ability to be concerned without

letting the member be stymied by self-pity.

The Center's educational programs have been strengthened by the addition of our Core Curriculum, a four-week program on the skills which are essential to obtain a job. These sessions are offered on a year-round basis by CTC coaches at locations throughout the city. CTC continues to offer the "Start Your Own Business" course for individuals who want to consider working for themselves. CTC is able to offer this ten-week course at a very nominal fee because of grant support. This program will be given again in March of 2003. The "Options 55" program will be offered again to members over 50, who want to explore the many life issues which older workers face on their "journey" toward the "age of integrity" (Gail Sheehy). This program will be offered on two Saturdays in April and May of 2003.

The Thursday morning educational and networking sessions at Old St. Pat's are now attracting as many as 55 people

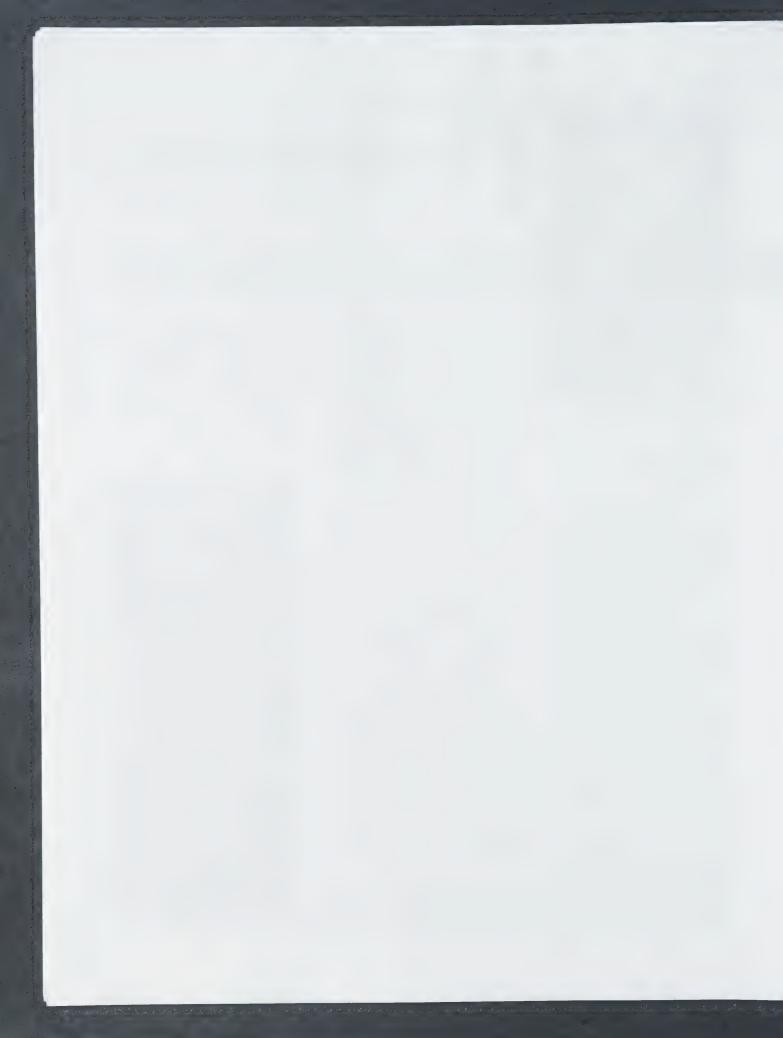
each week. The Monday evening sessions at St. Chrysostom's are drawing as many as 25 people each week. CTC will again offer a retreat for members, along the same lines as the weekend spiritual retreat conducted by persons in job transition from the founding faith community sponsors when the CTC first started.

James F. Fitzgerald

# NEW HOME FOR CTC

On December 7, 2002, the Career Transitions Center moved from its "temporary" office space in an unused Convent building at Old St. Patrick's Church to a new location at 703 W. Monroe Street in Chicago. Old St. Patrick's Church has extensively remodeled a building of about 10,000 square ft. at the corner of Monroe and Desplaines Streets for use by several social outreach programs previously housed at Old St. Pat's including: CARA, Horizons for Youth, Global Alliance for Africa and the Career Transitions Center. Our former office space has been torn down, along with the Warner Building and the old gymnasium to make room for a new school building on the Old St. Pat's campus.

The new CTC facilities consist of approximately 1,700 square feet of space, all on one floor, with handicapped accessibility and individual cubicle work stations for 16 participants at one time. In addition, the new offices accommodate up to five job coaches at one time. The space also includes a library and dining space so that CTC participants can visit with one another during lunch breaks.



# Alternative Careers: Counseling Students and Alumni — Always Remember the 4 P's

by Art Bousel

When I told Hunt Unger, Dean of Chicago's Career Counseling Community, that I would be writing an article on alternative career searches, he emphasized one word — personality. "Focus on the candidate's personality in assessing whether she or he is suited for the rigors of an alternative career search."

Hunt, who is 94 years old and has seen it all, proceeded to tell the story of a former client, a very successful middle-aged man, who decided to enter the printing business without knowing anything about it and without any experience in the field — and at a time when the printing industry as a whole was suffering from a downturn.

The bottom line is that the candidate successfully made the transition because of his marketing skill, self-confidence, and ability to build personal relationships. The characteristics of his personality, including sheer will and determination, compensated for lack of substantive knowledge in the field.

Career counselors should remember Hunt's advice in evaluating how to counsel the parade of students and alumni looking for "a change," "something different," or what we often call "alternative careers."

# Two Types of Alternative Careers

The words "alternative careers" mean different things to different people. Here, they refer to a career which does not require admission to the bar in any state.

From the perspective of the job seeker, there are two categories of alternative careers: those where

the benefit of legal skills is obvious and those where the benefit is not.

## Benefit of legal skills is obvious

Lawyers are frequently hired into these positions. The employer is buying a candidate's legal skills and recognizes their transferability. Business affairs, investment banking, and management consulting consistently attract legal talent. Lawyers are in demand by vendors to the legal industry where their background is a recognized sales tool.

Your clients obtain these positions by selling the same skills they would sell to a legal employer.

# Benefit of legal skills is NOT obvious

For many other positions being a lawyer is not a prerequisite, not even a benefit, and may actually hurt. Positions run the gamut from product development manager to marketing director, restaurant chef, corporate executive, sales executive, or just about any career opportunity.

Finding a position in this category requires a more aggressive strategy and, generally, a longer time-frame.

# Success Stories: <u>Personality</u>, <u>Proof</u>, <u>Patience</u>, <u>Pride</u>

In evaluating whether a candidate has the character and resourcefulness to successfully obtain an alternative career, **consider the 4 P's.** 

1

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7 Liame Terrace milkeitin Midlothian ocotional EH22 3JP 27+h July 2000

Dear Dr Bader,

I am studying chemistry at Glosipiu University and am writing to thank you for the kind and generous bursary which I have been given. I am really enjoying studying it glasepu and hope to graduate with an honours degree in chemistry with medicinal chemistry. The beisury will be of much help to me financially during my three years left at University It will also encourage me to keep working hard and to achieve the best results possible

At present, I am visiting relatives in Hales Corners, Wisconsin not too far from where god live This is my seventh visit to Wisconsin and once again, I have had a great time; beeing family and enjoying the sun. I fly home on Thursday but hope to return again soon.

Thanking you again for your kind generosity

yours faithfully

Jane Robertson

(c) Hallmark Cards, Inc



# $R \cdot I \cdot T$

Rochester Institute of Technology

Office of the President George Eastman Building 2 Lomb Memorial Drive Rochester, New York 14623-5604 716-475-2394 Fax 716-475-5700

December 14, 2000

Dr. Alfred Bader Alfred Bader Fine Arts 924 East Juneau Avenue Milwaukee, WI 53202

Dear Dr. Bader:

I am delighted to write to thank you for your recent gift of \$3,600 directed to the scholarship fund in the Chemistry Department. On behalf of RIT, I write to tell you that we are honored by this expression of confidence in the work we do. Of course, it is also my pleasure to tell you how much RIT appreciates the work that Dan does on the RIT board, where his contributions – especially on the University Relations Core Committee – are especially valued.

Because your reputation and interest in the fine arts precedes you, I am taking the liberty of sending you some information about the Cary Collection at RIT. You may know that RIT has for many years had the country's premier School of Printing. More than 30 years ago, the university received the collection of printer's manuals and type specimens assembled by Melbert B. Cary, Jr. In the past decades, this collection has grown to include holds on bookbinding, papermaking, type design, calligraphy, and book illustration as well as a growing number of manuscripts. Together with the work done at RIT in the interpretation of ancient documents through special imaging processes (the reading of an ancient palimpsest of Archimedes, for example), the Cary Collection gives RIT an unusual niche in the history and preservation of graphic design. If you are ever on campus, I would be delighted to show you this less-known side of RIT.

With very warm regards for the coming holidays; and with sincere good wishes,

Albert J. Simone

President

Enclosures



Subject: Response to letter

To: "Alfred Bader" <baderfa@execpc.com>

#### Alfred:

I just received your letter asking for a copy of my paper. Actually this is just a trial workshop to see how people like the idea. A "full" workshop will be given at the 16BCCE conference in Ann Arbor, MI in August and possibly at the DC ACS meeting.

I may have an extra copy of the handout workbook after the meeting which I could send you. However, the idea is to get the workshop participants to actively pursue "recreations" of some of the proposals. Given the limited amount of time, I may not get to any of the Loschmidt exercises.

You can get some idea of what I have in mind from looking over the manuscript I sent you last summer of the talk I gave in Slovakia. I did not get your reactions.

#### Bert

p.s. I am also giving a talk about my chemical calculator.

As a "Chemist Helping Chemists", do you have any interest in learning more about my entreprenurial venture? I have some 4 patents - and believe I have invented a tool that would be of value to the practicing chemist and chemistry students in particular. You can get some idea of what I am up to at www.chemicalc.com.

Bert/Ramsay, President Chemical Concepts Corporation 32 N. Washington St., Suite 9-B Ypsilanti, MI 48197-2662

Phone: 734-483-4022 Fax: 734-483-4768

URL: http://www.chemicalc.com e-mail: Bert@chemicalc.com (Emeritus Professor of Chemistry, Eastern Michigan University)



## Dear Dr. Ramsay,

Dr. Bader is currently on a lecture tour in Florida. He does not plan to attend the ACS meeting in San Francisco in March. I am certain he would send his very best wishes for a successful workshop to you, however.

Sincerely, (Mrs.) Ann Zuehlke, Secretary

### bert wrote:

#### Alfred:

Just a note to say that I will be trying out a trial/mini- version of my historical reenactment workshop on the development of structural organic chemistry late Sunday afternoon, March 26, in the HIST section, at the ACS meeting in San Francisco. Should be fun! May not get around to Loschmidt.

Hope to see you at the meeting.

Bert

Bert Ramsay, President Chemical Concepts Corporation 32 N. Washington St., Suite 9-B Ypsilanti, MI 48197-2662 Phone: 734-483-4022

e-mail: Bert@chemicalc.com URL: www.chemicalc.com [Emeritus Professor of Chemistry,



Subject: On to Slovakia

Date: Tue, 31 Aug 1999 12:51:40 -0400 From: "bert" <bert@chemicalc.com>

To: "Alfred Bader" <baderfa@execpc.com>

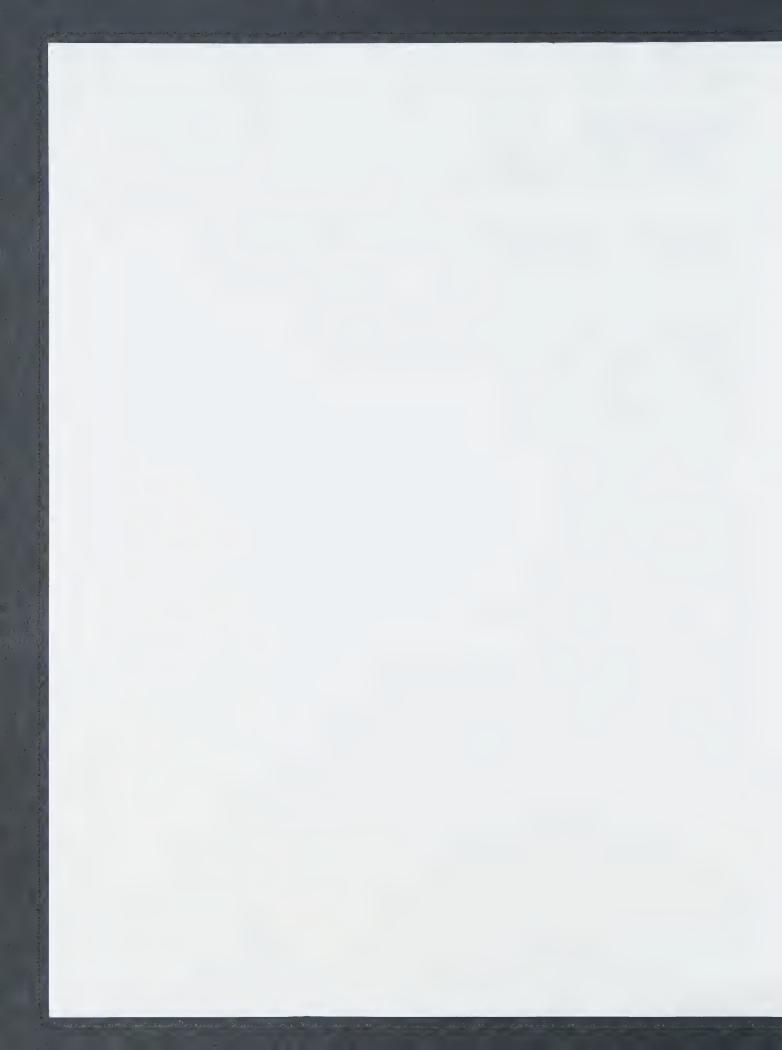
Alfred:

Off to Slovakia tommorrow - so may not see your response if this gets to you. Historical "interactive" talk is in much better shape than copy I sent to you. I'll let you know how it works.

Hope you had a pleasant trip to Europe.

Bert

Bert Ramsay, President
Chemical Concepts Corporation
32 N. Washington St., Suite 9-B
Ypsilanti, MI 48197-2662
Phone: 734-483-4022
URL: http://www.chemicalc.com
e-mail: Bert@chemicalc.com
(Emeritus Professor of Chemistry,
Eastern Michigan University)



**FAX FROM:** 

Dr. Alfred Bader 924 East Juneau Avenue Astor Hotel -Suite 622 Milwaukee, WI 53202 Ph: (414) 277-0730 Fax: (414) 277-0709

e-mail: <u>baderfa@execpc.com</u>

A Chemist Helping Chemists June 2, 1999

TO: Sr. Mary Virginia Orna

Chemical Heritage Foundation

Page 1 of \_2\_\_

FAX #:

215/925-1954

Dear Mary Virginia,

Here is the abstract of Bert Ramsay's paper which was rejected.

I just don't know what the division is doing to reject what is bound to be a really interesting talk.

With all good wishes I remain

Yours sincerely,

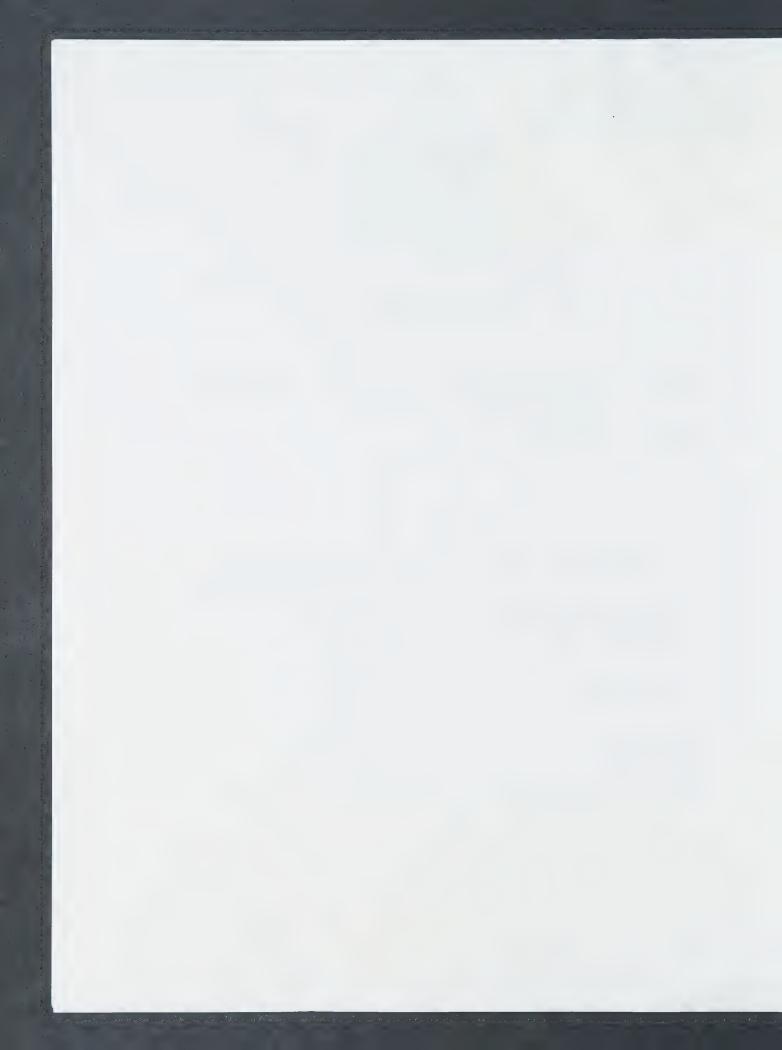
Alfred Bader AB/az Att.





### Bert Ramsay, Ph.D. President

32 N. Washington St., Suite 9-B Ypsilanti, MI 48197-2662
Tel: (734) 483-4022 (800) 243-6023 Fax: (734) 483-4768
e-mail: Bert@chemicalc.com web, www.chemicalc.com





32 N. Washington St., Suite 9-B Ypsilanti, MI 48197-2662 Phone: (734) 483-4022, 800-243-6023 Fax: (734) 483-4768 e-mail: Bert@chemicalc.com Web: http://www.chemicalc.com

Professor Edgar Heilbronner Grutstrasse 10 CH-8704 Herrliberg SWITZERLAND

Professor Jean Jacques College de France Laboratoire de Chimie des Interactions Moleculaires 11 place Marcelin Berthelot F-75005 Paris FRANCE

Dear Professors Heilbronner and Jacques:

Alfred Bader has been kind enough to send me a copy of your recent article, "Paul Havrez und seine Benzolformel" (*Chemie in unserer Zeit*, 32, 1998). I have been in contact with Dr. Bader since I have reactivated my historical research to prepare for a talk I will be presenting at the joint meeting of the Czech and Slovak Chemical Socities in Nitra, Slovakia, September 7-9, 1999. My book on the history of stereochemistry (Heyden Press, 1981, out of print) is being translated into Slovak.

Unfortunately, neither my book, nor the presentation I gave at the "Benzolfest" symposium organized by John Wotiz at the Boston ACS meeting in 1990, has received any citations in the literature. The latter paper was not included in John Wotiz's book, *The Kekule Riddle*, because of disagreements I had with him over editorial policies. My talk ("Dreams and Visions: The Role of Imagination in Scientific Research") was one of the few that took issue with Wotiz's views on the veracity and function of Kekule's "dream" account. I will be giving a significantly revised version of this paper in my talk in Slovakia, focusing on how the introduction of molecular models by Kekule and others contributed to the development of sterechemistry.

My impression is that Paul Havrez was one of the few chemists who attempted to "visualize" Kekule's early graphic ("bread roll") formulas by the construction of models. May I assume that this activity began well before the publication of his "Principes de la Chmie Unitaire" in 1865? (I am sorry if I have missed some of the answers to this question provided in your paper. My facility with with the German language is very rusty.) Have any of the Havrez models survived?



Perhaps we might have a chance to talk more during my visit in September? I will be arriving/departing from Paris (September 2/15). I should mention that during the past 10 years I have been involved in the development of a chemical calculator - now in a software version. (You can get some idea of what I have been doing at my web site at www.chemicalc.com. It will be extesively revised in another month.) A french-language version, under license agreement, of the software has been purchased by the French Ministry of Education. (See the ChemCad web site: www.chemcad.fr)

In the meantime, perhaps we could communicate by e-mail? My e-mail address is **Bert@chemicalc.com**. I look forward to hearing from you.

Sincerely yours,

Bert Ramsay

cc. Alfred Bader



Subject: Your paper

Date: Wed, 09 Jun 1999 13:20:18 -0500 From: Alfred Bader <a href="mailto:baderfa@execpc.com">baderfa@execpc.com</a>

**Organization:** Alfred Bader Fine Arts

To: Bert Ramsey <bert@chemicalc.com>

Dear Bert,
Thank you for the first draft of your paper which I will read on my trip to Europe, leaving tomorrow.
With all good wishes I am
Yours sincerely,
Alfred



Subject: Re: Thanks

Date: Tue, 1 Jun 1999 15:43:45 -0400

From: "Bert Ramsay" <bert@chemicalc.com>

To: <baderfa@execpc.com>

#### Alfred:

Although the abstract may seem a bit confrontational, I was careful not to mention Wotiz, or you for that matter. I will soon have finished the paper which I will be giving in Slovakia. As soon as it is done I will send you a copy. It is in a kind of "workshop" format to allow the audience step through the historical development of organic structural chemistry. I will be interested in your reactions.

Of course, there is much to be learned.

When do you leave for Europe?

I do not understand how the division, or the ACS, can permit the withdrawal of my paper since I was not involved in the suit. I think I was not included in the original suit because I was an ACS member — as Alan Rocke and Bill Jensen were not. Perhaps then the ACS would have done a better job of protecting the division members from things like this.

But then perhaps you can understand.

#### Bert

> From: Alfred Bader <baderfa@execpc.com> > To: Bert Ramsay <bert@chemicalc.com> > Subject: Re: Thanks > Date: Tuesday, June 01, 1999 11:51 AM > Dear Bert, Isabel and I spent a few days giving seven lectures arranged by the > in Philadelphia, one of these on Loschmidt. There Sr. Mary Virginia Orna told me the amazing news that the paper of > yours which was submitted for the next ACS meeting has been rejected by the > Division for the History of Chemistry. Mary Virginia explained that the > rejection was not because of the quality of your paper, but because the ACS > is scared of lawsuits a la Wotiz. Could you please send me a copy of your abstract? With best regards I remain > Yours sincerely, > Alfred Bader > Bert Ramsay wrote: I will be mailing you soon the copy of the book, transparancies (I"m > > preparing my own set), and Bulletin of History of Chem copy you lent I hope to have the talk completed before the end of May. Taking a bit > > longer because of getting the photographs I will use redone. And also > > rechecking references (if the talk is published). >> Plan is to step the audience through a set of exercises to see how > > structural organic chemistry developed in the period ~ 1850 - 1875.



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Encoding: base64

**Description:** ACSNO99.doc (Microsoft Word Document)



# TITLE: Dreams and Visions: Do We Need to Reexamine the Historical Origins of Stereochemistry - Again?

AUTHOR: **Bert Ramsay**, President, Chemical Concepts Corporation, 32 North Washington St., Suite 9-B, Ypsilanti, Michigan, 48197-2662. Bert@chemicalc.com, (734) 483-4022 (Emeritus Professor of Chemistry, Eastern Michigan University, Ypsilanti, Michigan, U.S.A.)

## ABSTRACT:

In the 25 years since we last celebrated the birth of stereochemistry, there have appeared several revisionist historical analyses that suggested, among other things, that stereochemical concepts were proposed that predated those of van't Hoff and LeBel. These interpretations of historical events seem at odds with the historical record that suggests that the birth of stereochemistry was the culmination of the development of structural organic chemistry initiated by August Kekule in 1858. While it is tempting to evaluate a contribution by looking at how close it comes to our current view, we should be careful in assigning a priority of discovery before fully examining the historical context of the proposal. To assist you in this historical reexamination of the development of structural organic chemistry in the period from about 1850-1875, I will offer a set of "hands-on" activities designed so the audience can participate in the steps involved in the development of molecular models in this period. (Bring paper and pencil, and if you like to compare models, a set of your own favorite molecular models.)



Subject: RE: I need your permission

From: "P. V. Ramachandran" < chandran@purdue.edu>

Date: Mon, 29 Sep 2003 09:31:48 -0500

**To:** "Alfred Bader Fine Arts" <baderfa@execpc.com>

Dear Alfred:

Thank you very much for agreeing to my proposal.

The good Lord has always been with me and He will make the celebration a grand success. So, you should not have any worry.

I shall keep you posted about the developments.

Happy Rosh HaShanah!!

Sincerely,

----Original Message----

From: Alfred Bader Fine Arts [mailto:baderfadex= po.com]

Sent: Friday, September 26, 2003 2:46 PM

To: P. V. Ramachandran

Subject: Re: I need your permission

Dear Chandran,

I am truly moved by your kind inquiry of September 23rd.

Of course I would consider it a great honor if the ACS held a symposium in Philadelphia in August 2004.

However, I see two problems. One is that the good Lord never tells us when he will take us. Isabel and I are in good health and I just gave the Ullyot Lecture at the Chemical Heritage Foundation in Philadelphia but what will we be like next August?

The second problem relates to ACS approval. Every symposium honoring a chemist has honored an academic chemist and that certainly does not include me.

As you might be interested in looking at the text of my Ullyot lecture, I am attaching a copy.

With all good wishes I remain

Yours sincerely, Alfred Bader

#### P. V. Ramachandran wrote:

Dear Alfred:

I hope that this letter finds you and Isabel in the best of your health and spirits.

Here, all of us, including HCB and Sarah, are doing fine. While discussing with HCB, we noticed that you will turn 80 in April 2004 and I felt that we should celebrate this occasion.

During the past five years, I have organized three Symposia during three separate ACS National meetings. The last one was in Boston for HCB's 90th, which you also attended. I had promised myself that I should not do

one for a long time. However, 80th birthday of someone whom I have highest



regards does not come very often. Accordingly, I would like to organize a 1-2 session sympsium in Modern Synthetic Organic Chemistry and a birthday party (banquet) during the 228th National Meeting in Philadelphia in August 2004 in your honor. I hope that you will give me the permission to organize

this event. If you give the permission, I sh all contact the ACS Organic

Division to approve a symposium. If you have any particular individual whom

I should invite to speak, please let me know that also. Thanks in advance for your permission.
All the best, always!
Sincerely,
Chandran

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# Subject:

**Date:** Wed, 18 Apr 2001 14:06:47 +0300

From: MordecaiRubin <chrubin@techunix.technion.ac.il>

To: Baderfa@execpc.com

Dear Alfred,

How nice to hear from you even if it is a correction relating to my ozone article. Actually, Hunt's speculation (1848) that ozone was 03 precedes Loschmidt by 13 years but you are, as usual, quite correct that Loschmidt deserves to be mentioned as well as Hunt and Odling. The problem with Loschmidt is that, genius though he was, he had very little impact on chemical thought. Every time I look through the formulas in his book (which you sent to me, by the way), I am astonished again at the man's genius. I understand that at the time he sent copies to about 100 scientists; obviously they were not ready for his ideas.

In any case, the Bulletin for the HIstory of chemistry did not print Schönbein's symbols for ozone and antozone correctly and will print a correction in the next issue. I will ask the editor to include a

reference to Loschmidt in that correction.

If I ever said that you are the most undiplomatic chemist I have ever known, I withdraw that statement. The correct word is fearless. There are chemists who are much more undiplomatic that you ever were, even in your younger days. I do remember the Fieser seminar you gave and the distress of the Fiesers at the thought that anyone could criticize them.

That was in 1949 or 1950, more than 50 years ago.

Life goes on well here in spite of the unhappy political situation. The chemistry department is populated by younger people who are doing research which I would never have dreamt of. As you can see, I am professor emeritus and enjoying the status very much. Part 2, 1869-99 of the history

of ozone is nearly finished.

Best regards, and from Riffie. We trust this finds you in good health and enjoying life.

Prof. M. Rubin Dept. of Chemistry Technion Haifa, Israel Office phone --972-4-8293717 Fax --972-4-8233735 home phone --972-4-8345990



Subject: Shana Tova

From: "RobertROSNER" < RobertRosner@everyday.com>

**Date:** Tue, 23 Sep 2003 22:43:11 +0200

To: "Alfred Bader" <Baderfa@execpc.com>

Beste Wuensche fuer das neue Jahr fuer Isabel und fuer Dich. Hoffen wir, dass wir alle gesund bleiben und ich freue mich Euch im Juni wieder zu sehen

Bobby

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Subject: Loschmidt Feier

From: "RobertROSNER" < RobertRosner@everyday.com>

**Date:** Wed, 24 Sep 2003 19:54:13 +0200 **To:** "Alfred Bader" <Baderfa@execpc.com>

#### Lieber Alfred,

Wie Du wahrscheinlich weißt, werden die tschechischen Universitäten am 4. Oktober in Ostrov eine Loschmidt Gedenktafel mit einer Feier einweihen. In der Einladung dazu heißt es:Josef Loschmidt was born into a Chech family. Das ist natuerlich ein Unsinn, der nur boeses Blut macht und ich habe Skursky einen Brief geschrieben, den ich Dir mit attachment schicke.

Beste Gruesse

bobby

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Dear Bobby,

The Academy is playing games. I have no interest in supporting molecular medicine and it is important to me that the Award ceremony is separate and by itself. If the Academy insists on molecular medicine, they will have to find another donor.

I will try to call you on Sunday to discuss.

Best wishes, Alfred

RobertROSNER wrote:

---- Original Message ----- From: Arnold Schmidt
To: Robert Rosner

Sent: Wednesday, September 17, 2003 8:43 PM

Subject: WG: Lieben-Award

-----Ursprüngliche Nachricht-----

Von: Arnold Schmidt [mailto:arnold.schmidt@tuwien.ac.at]

Gesendet: Mittwoch, 17. September 2003 16:20

An: 'Robert Rosner (robert.rosner@everyday.com)'; 'Robert Rosner (robert.rosner@netway.at)'

Betreff: Lieben-Award

Lieber Bobby,

vor mir liegt eine weite Modifikation der Vereinbarung über den Liebenpreis. Es gibt folgende Änderungen:

- 1. Die Bezeichnung der Wissenschaftsgebiete lautet jetzt: molecular medicine, molecular biology, chemistry, physics. Sowohl Peter Schuster als auch ich sind damit einverstanden.
- 2. Das Minimum der im Ausland tätigen Mitglieder des Auswahlkomitees wurde von drei auf zwei reduziert. Froh bin ich darüber nicht, aber Schuster hat mir versichert, dass die ÖAW schon damit gewisse Schwierigkeiten hat. Ich denke man sollte mit leisen Knurren zu stimmen.
- 3. Die Verleihung des Preises wird heuer in einer eigenen Zeremonie stattfinden, in den Folgejahren aber Teil der jährlichen Preisverleihungen der ÖAW. Das Wort "Special" ist noch in Klammer gesetzt. Nach einigem Nachdenken bin ich aber jetzt dafür es zu streichen. Der Preis ist so außergewöhnlich, dass er ohnehin die Feier



dominieren wird. (Für heuer ist es natürlich wichtig, dass es eine spezielle Veranstaltung gibt – und so ist es jetzt auch festgelegt).

Ich denke Bader sollte jetzt abschließen.

Liebe Grüße,

Arnold

P.S.: Ich habe diesen letzten Entwurf nach einem Gespräch mit Schuster als Fax direkt von der ÖAW erhalten. Frau Moser hat ihn auch an Bader geschickt. Leider habe ich vergessen: hast du ein Fax? Wie kommst du sonst zu dem Papier?

This message scanned for viruses by Corecomm



Subject: Lieben Award

From: "RobertROSNER" < RobertRosner@everyday.com>

Date: Sun, 21 Sep 2003 00:15:17 +0200

To: "Alfred Bader" < Baderfa@execpc.com>

## Lieber Alfred,

Ich habe Deine Mail an mich an Arnold weitergeleitet und er hat an sie Schuster weitergesandt und nach einem längeren Telefonat hat Schuster in beiden offenen Punkten nachgegeben:" Molecular medicine" ist gestrichen und die "special ceremony" bleibt so wie ursprünglich geplant.

Ich habe Dich versucht telefonisch zu erreichen. Der Mann der am Telefon war konnte (oder wollte) mir nicht die Telefonnummer vom David geben.

Herzliche Grüße

Bobby

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# Dr. Alfred Bader

924 East Juneau, Suite 622 Milwaukee, Wisconsin 53202 Phone: 414/277-0730 Fax: 414/277-0709

A Chemist Helping Chemists

March 12, 1996

Dr. Lev Rayz 1300 E. Kane Place, #910 Milwaukee, WI 53202

Dear Dr. Rayz:

In response to your letter of February 28th, I wish I could help, but I am unfortunately quite unfamiliar with plastics engineering.

You are already in touch with the two organizations that came to mind, the W.H. Brady Company and the Department of Chemistry of UW-M.

I wish that I could be of more help.

With all good wishes, I remain,

Yours sincerely,

AB/cw



1300 East Kane Place Apt. # 910 Milwaukee, WI 53202 February 28, 1996 LEV RAYZ Independent Consultant, Engineer, PhD.

1300 E. Kane Pl. #910 Milwaukee, WI 53202

Telephone (414) 272-4804

Dr. Alfred Bader 2961 N. Shepard Ave. Milwaukee, WI 53211

Dear Dr. Bader:

My friend, Martin Slater, gave me your name and address. He is the brother-in-law of Mr. Benie Edelstein, now deceased, who was your friend and co-worker. If it is possible, I would like to ask you to help me find a job.

I am sending you my resume, which gives you information on my background and, also, some additional information on my knowledge and experience in extrusion and screw design.

I was one of the leading specialists in the field of the technology of extruded and coextruded multilayer films in Russia. As a Group leader of the extrusion department of the Central R & D Institute of Polymer processing in Moscow, Russia I was actively involved in development of the equipment and technology of extrusion and coextrusion along with formulating technical requirements for the equipment purchased by Russia from foreign countries.

I was responsible for technical support of designers creating screws and dies with optimal parameters providing high quality polymer melt. These projects were important for the production of various types of polymer films, tubes, and sheets. I participated in development of extrusion of mono- and multi-layer film, stretched and oriented films using cast- and blown extrusion technologies.

I took an active part in cooperation with many companies (in the fields of electrical, electronic, military, aircraft, space, medical and food production) introducing Plastic Corporation, developing technology and arranging film production.

I also participated in conjunction with Du Pont, Dow Chemical(USA); ICI (UK); EMS (France); Reifenhauser, Barmag, Kampf, Kloeckner (Germany); Bielloni (Italy); Kohjin (Japan) in studying the raw material problems, purchasing, and assimilating the equipment.

I hope my advanced education and experience in extrusion of polymer materials, their properties, and applications will be useful.



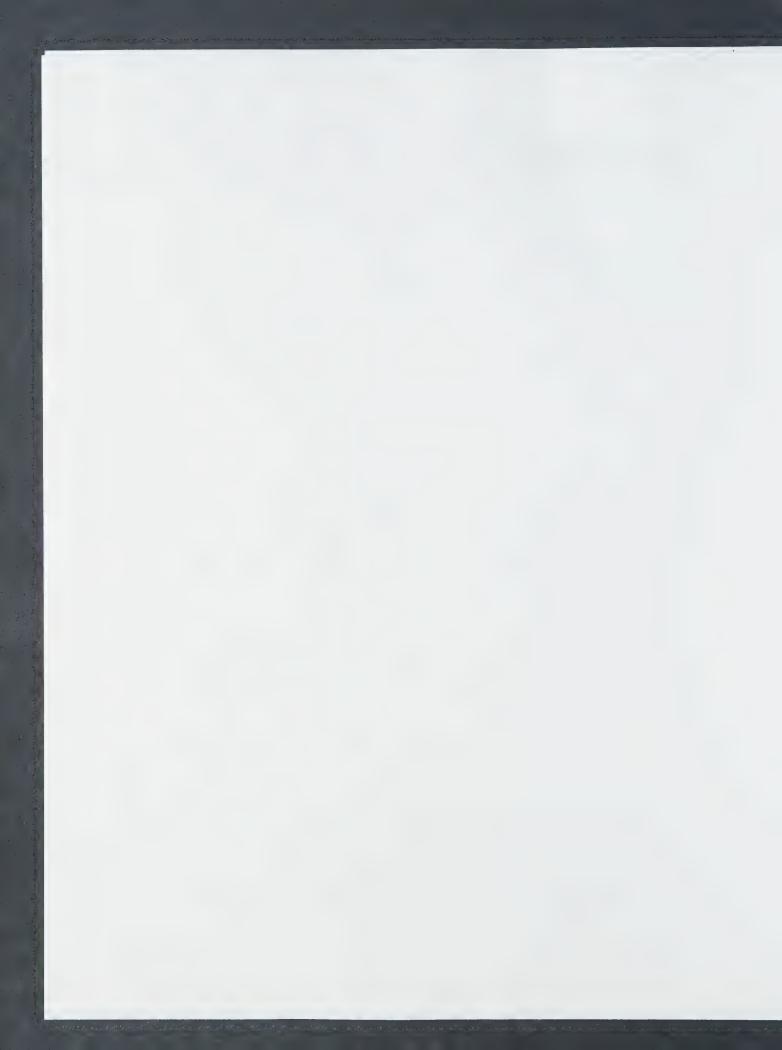
Thank you for your consideration. I look forward to hearing from you soon. I can be reached at (414) 272-4804.

With best regards,

Sincerely,

Lev Rayz

Encl.- Resume



## LEV RAYZ, Ph.D.

1300 E. Kane Pl., Apt. # 910 Milwaukee, WI 53202 Tel. (414) 272-4804 SSN: 398-11-0998

**OBJECTIVE:** 

Professional position in Polymer materials, extrusion and orientation of thermoplastic materials, and their applications.

**EXPERIENCE:** 

1995

Consultant for KDK Plastic, LTD.(Chicago, IL.) on the problems of PE film production.

Wrote a report on Recycling of Post Consumer Plastic for University of Wisconsin-Milwaukee

1968-1993

PLASTIC CORPORATION, CENTRAL R & D INSTITUTE, Moscow, Russia.

Senior Research Scientist (1986-1993);

Group leader (1983-1986);

Senior Development & Application Engineer (1978-1983);

Senior Processing Engineer (1974-1978);

Processing Engineer (1968-1974)

Responsible for development of a family of co-extruded (multilayer) and oriented polyamide films including start-up of the first Russian manufacturing plants with a capacity of 2.5 mil.lbs/yr. for each type of film.

- Developed raw materials requirements and formulations based on PE, PP, PA, PET, EVA, EVOH, and adhesives for a set of film layers, and transferred formulations to manufacturing.
- Developed co-extrusion technology and began production of family of films for food packaging, medical, aircraft and space applications.
- Developed and transferred to manufacturing the first in the country blown film process for PA-6, and PA-12 polyamides.
- Developed technology of extrusion and orientation for films, tubes, and sheets.
- Developed and implemented super-thin PET-films (the thickness 0.04 0.12 mil).
- Developed recycling technology of polyamide and co-extruded (multilayer) films.
- Developed and began fabrication of a novel laminate consisting of polyamide-12 and carbon fabric for endoprostatic devices.
- Provided customer service in the field of special films and laminates.

1966-1968 INSTITUTE OF ORGANIC CHEMISTRY OF THE ACADEMY OF SCIENCE OF RUSSIA, Moscow, Russia.

Mechanic Technician



• Maintained and operated various mechanical equipment and devices in R&D Lab.

#### **EDUCATION:**

Ph.D. in polymer materials and processing.

INSTITUTE OF CHEMICAL TECHNOLOGY, Moscow, Russia.

THESIS TITLE: Development of Novel Formulations Based on Polyamides and

Their Processing into High Quality Mono - and Multilayer Films.

M.S. in Polymer Engineering.

D. I. Mendeleev UNIVERSITY OF CHEMICAL TECHNOLOGY,

Moscow, Russia.

B.S. in Organic Chemistry.

POLYTECHNIC COLLEGE, Moscow, Russia.

PUBLICATIONS: - 9 Certificates of Invention from Russia.

- 15 articles (8 of which were published in Chemical Abstracts, USA).

- 14 Conferences report.

All publications, I can send to you upon request.

**HONORS &** 1995, Member of Society of Plastics Engineers (No DSM95083656).

AWARDS: 1989, USSR Technical Exhibition, Moscow. Silver Medal.

1979, USSR Technical Exhibition, Moscow. Gold Medal.

**PERSONAL:** Permanent Resident of the USA. Married with one child.

REFERENCES: Dr. Michael Friedman, R & D Director, Norton Performance Plastics Corporation.

150 Dey Road, Wayne, NJ 07470.

Tel. (201) 696-5564.

Dr. Benjamin A. Feinberg, Professor, Department of Chemistry,

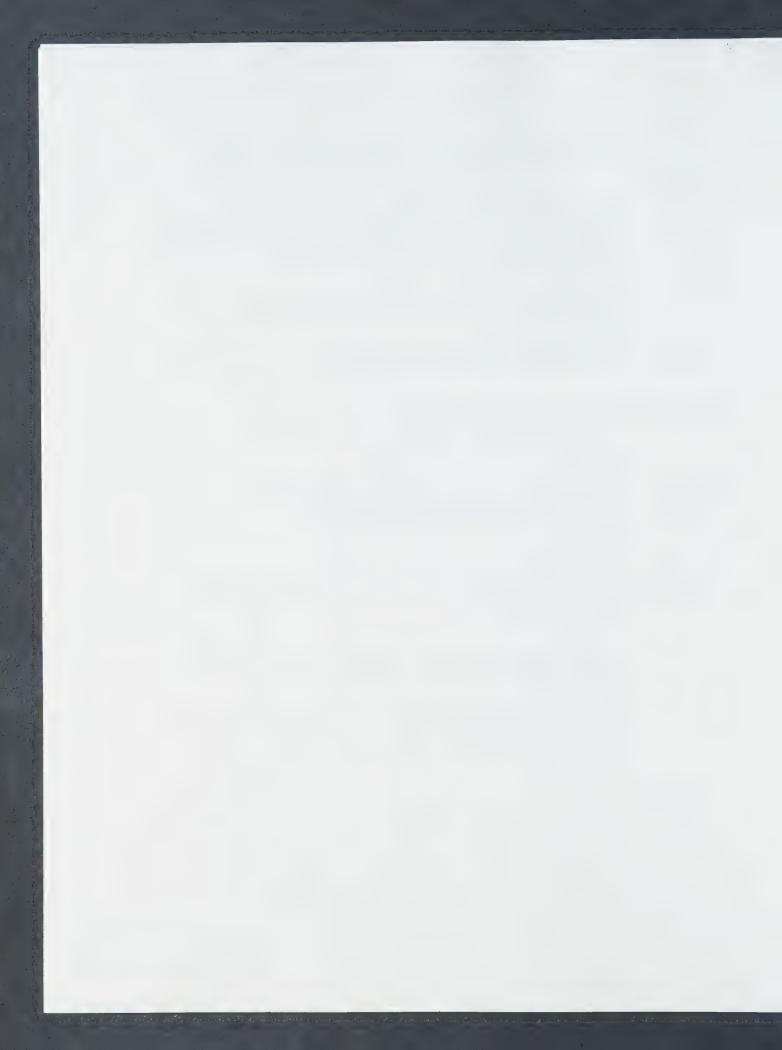
University of Wisconsin - Milwaukee. P.O.Box 413, Milwaukee, WI 532

Tel. (414) 229-4169.

Dr. Val Golub, Development Chemist, W. H. Brady Co., Coated Products

Division, 2230 W. Florist Ave. Milwaukee, WI.

Tel. (414) 332-8100 ext. 3786.



May 12, 1995

Professor Alan J. Rocke Dept. of History Case Western Reserve University 10900 Euclid Avenue Cleveland, OH 44106-7107

#### Dear Professor Rocke:

It has been a long time since we have corresponded, and unfortunately, I have not been to Cleveland with time to visit you nor you in Milwaukee.

Will you have a chance to visit the Loschmidt Symposium in Vienna in June? I enclose the copies of the first 4 pages of the program.

It will be interesting to hear what Schiemenz has to say. I really feel that he and Wotiz go too far in their arguments.

I know that you are the Associate Editor of the Bulletin. What is happening to its publication? I haven't received a copy for a long time.

My autobiography, *Adventures of a Chemist Collector*, has now been published by Weidenfeld in London and is sold in this country by Trafalgar Square and the American Chemical Society. I do hope that you will think my chapter 16 on Loschmidt, Couper, and Anschütz reasonable.

In preparation for my second talk at the Loschmidt Symposium, I have had occasion to look very carefully through your arguments. I have the strong feeling that if you and I could sit down together for an hour or two and look at all the arguments, we would agree on most everything.



Professor Alan J. Rocke May 12, 1995 Page 2

There is no longer any question in my mind but that Kekulé was the first to come up with the cyclohexatriene structure, in 1865. I am equally convinced that Loschmidt thought of benzene containing six carbon atoms in a monocyclic structure, but didn't know what to do with the unsaturation. Hence, Kekulé's cyclohexatriene is certainly an improvement.

The repeated arguments that Loschmidt thought of the diallene structure are, I believe, not correct because he never used the diallene in his many aromatic structures. Of course, all of this will be discussed at length in Vienna.

Best personal regards.

Sincerely,

AB/cw

Enclosures





## ALFRED BADER FINE ARTS

DR. ALFRED BADER

ESTABLISHED 1961

May 12, 1995

Mr. Andrea Risa Pormestarinrinne 6A5 00160 Helsinki Finland

Dear Mr. Risa:

In response to your fax received today, I am sorry to have to tell you that you are almost certainly wasting your time trying to sell De Gelder's "Abraham's Sacrifice" in Italy.

The painting is a fragment and not in good condition, though certainly by De Gelder. It is worth really quite little, and the owner is dreaming if he thinks that you can get \$480,000 for this.

One of these days he will put it up for auction and will then be very lucky to get 10% of that.

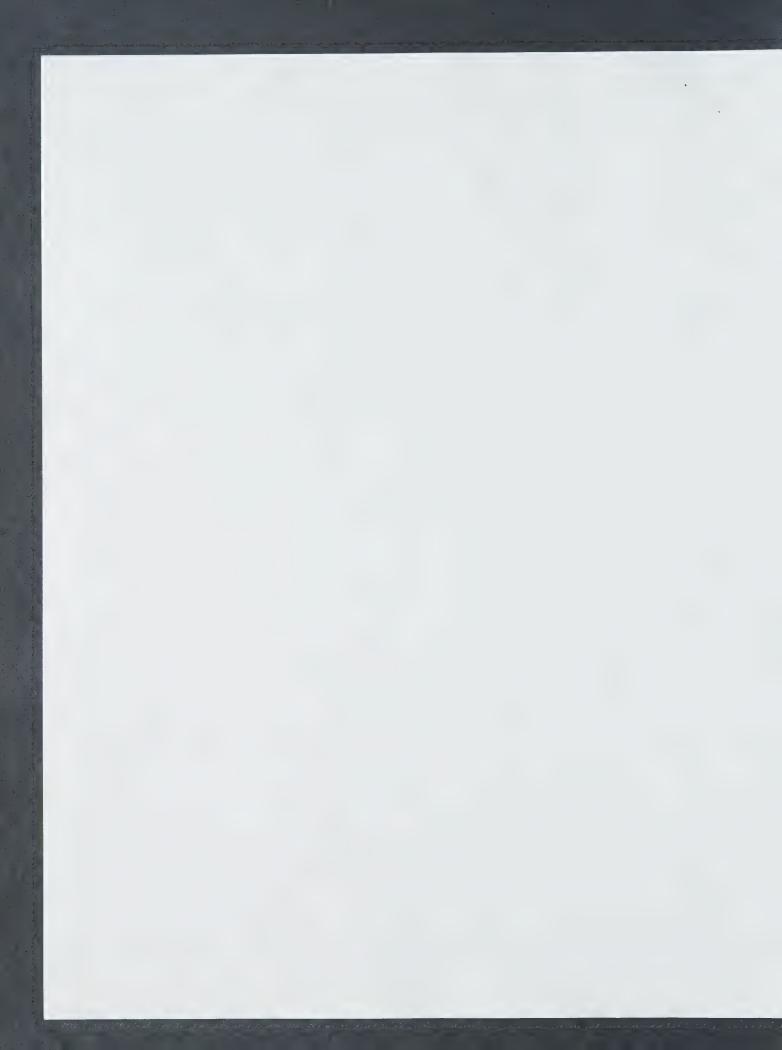
Perhaps someday you will be able to offer me some good paintings at reasonable prices.

Best wishes, as always,

AB/cw

bc: Otto Naumann

By Appointment Only
ASTOR HOTEL SUITE 622
924 EAST JUNEAU AVENUE
MILWAUKEE WISCONSIN USA 53202
TEL 414 277-0730 FAX 414 277-0709



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FAX FROM:

DR. ALFRED R. BADER

Suite 622

924 East Juneau Avenue

Milwaukee, Wisconsin 53202

Telephone: 414-277-0730 Fax No.: 414-277-0709

TOTAL PAGES: 4

DATE: March 1, 1995

TO: Dr. Paul F. DeCusati

Ruetgers-Nease

Fax No.: 814-238-1567

FROM: Dr. Alfred Bader

Dear Dr. DeCusati:

I am saddened to note from your letter of February 24 what poor communication there is between ACS sections and the speakers' office in Washington.

The attached correspondence will be self-explanatory.

Briefly I had hoped to be able to come to Pennsylvania provided that the ACS could arrange for at least five stops, including either Pittsburgh or Baltimore or both. Unfortunately that was not possible.

May I add a personal note: I used to visit Ruetgers in Frankfurt, Weyl in Mannheim and Ruetgers in Castrop-Rauxel every year over many years and it would have given me particular pleasure to visit Ruetgers in the United States.

Perhaps that will be possible next year provided that enough sections would like to hear two or more of my talks.

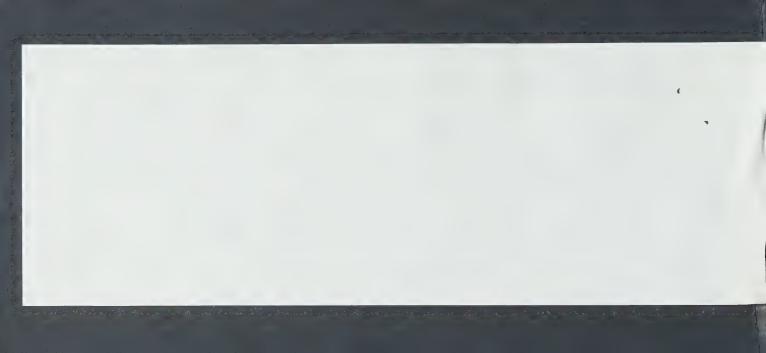
With all good wishes I remain yours,

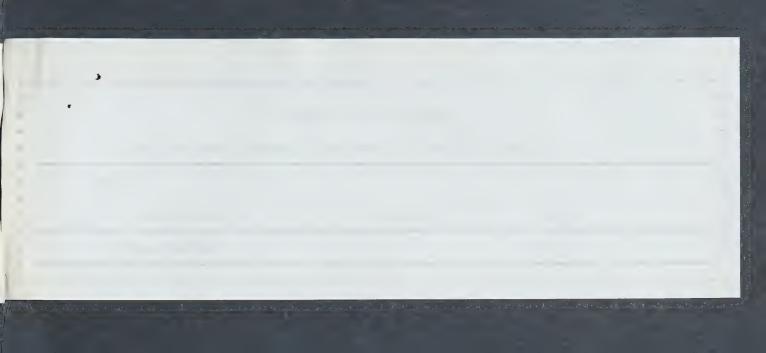
ma laa

Sincerely,











October 19, 1993

Prof. Grace Borowitz
Department of Chemistry
Ramapo College of New Jersey
505 Ramapo Valley Road
Mahwah, New Jersey 07430 1680

Dear Grace:

Please accept Isabel's and my sincere thanks for your and Irv's great care during our visit.

Enclosed, as you requested, is my statement of travel expenses. As you know, calculating this exactly is an impossibility. Flying to Newark and back during the week costs about \$600 each, while if you stay in the east over a weekend it drops to under \$300, but then you have the extra weekend expenses. Hence, I suggest that your share of expenses of \$300 is certainly fair to your section.

Best regards.

Sincerely,

Enclosure

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October 19, 1993

Hudson-Bergen Chemical Society c/o Prof. Grace Borowitz Department of Chemistry Ramapo College of New Jersey 505 Ramapos Valley Road Mahwah, New Jersey 07430 1680

Your share of travel expenses for lectures on October 13th, 1993, per correspondence enclosed

\$300.00



505 Ramapo Valley Road. Mahwah, New Jersey 07430-:680 ● (201) 529-7500

## The School of Theoretical and Applied Science Sigma Xi Club of Ramapo College Ramapo College Chemistry and Biology Clubs invites you to a special program

# The 4th Herman S. Kaufman Memorial Lecture

Speaker: Dr. Alfred R. Bader

Chairman Emeritus, Sigma-Aldrich, USA

Topic: Josef Loschmidt, The Father of Molecular Modeling

Date: Wednesday, October 13, 1993

Time and Place: Luncheon - 12:00 - 1:00 PM

G 310 - Kaufman Memorial Lounge

Lecture - 1:00 - 2:00 PM, G 310

Ramapo College of New Jersey

505 Ramapo Valley Road, Mahwah, NJ 07430

Reservations: K. Finnegan/J. Lafayette, (201) 529-7734,7721

Luncheon \$ 8.00 Members and Guests; Students: Free

Abstract: Dr. Bader received his BSc in 1945 and his MSc in 1947 from Queens University in Kingston, Ontario and his PhD in Organic Chemistry in 1949 from Harvard University with Professor: Louis Fieser In 1951, he founded the Aldrich Chemical Company in Milwaukee. Aldrich has grown from tiny beginnings to one of the largest suppliers of research chemicals. It merged with Sigma, the biochemical supplier in 1975. Dr. Bader has been President, Chairman, and now Chairman-Emeritus of Sigma Aldrich, which employs over 4000 worldwide. Dr. Bader has always been interested in the ABC of his life: art, Bible, and Chemistry, and their histories. He has lectured widely on all three, has been guest curator of old master exhibitions, and has acquired, researched, and had restored many old paintings of the 17th Century Dutch Masters.

That all matter is constructed of molecules and that molecular modeling accurately depicts molecules in space is one of the greatest scientific achievements of the century. Yet, Josef Loschmidt, the first scientist who drew many molecules in space, has been virtually forgotten. He was the first to depict unsaturation through double and triple bonds, to predict cyclopropane, to show benzene as a molecule with 6 carbons in a circle, and ozone as O<sub>3</sub>. His small book "Chemiche Studieren I" contained 368 graphic structures. Loschmidt was a wonderful, unmaterialistic, self-effacing and shy human being. Molecular modeling likely would have developed a century earlier if Kekule and his contemporaries had understood and encouraged Josef Loschmidt.



# The Hudson-Bergen Chemical Society

Sígma Xí Clabs of Ramapo College & FDU Fairleigh-Dickinson University, Chemistry Department invites you to a special program

The 1st Dr. Aart DeKorte Memorial Lecture

Speaker: Dr. Alfred R. Bader

Chairman Emeritus, Sigma-Aldrich, USA

Topic: The Adventures of a Chemist Collector

Date: Wednesday, October 13, 1993

Time and Place: Social - 6:00 - 6:45 PM

Dinner 6:45 - 8:00 PM

Lecture - 8:00 - 9:00 PM

The Multipurpose Room, Student Center

Fairleigh-Dickinson University

1000 River Road at Lone Pine Way, Teaneck, NJ 07666

Reservations: Elaine Stolarz, (201) 692-2330

Dinner \$ 18.00 Members and Guests; Students: \$ 10.00

Abstract: Dr. Bader received his BSc in 1945 and his MSc in 1947 from Queens University in Kingston, Ontario and his PhD in Organic Chemistry in 1949 from Harvard University with Professor: Louis Fieser In 1951, he founded the Aldrich Chemical Company in Milwaukee. Aldrich has grown from tiny beginnings to one of the largest suppliers of research chemicals. It merged with Sigma, the biochemical supplier in 1975. Dr. Bader has been President, Chairman, and now Chairman-Emeritus of Sigma Aldrich, which employs over 4000 worldwide. Dr. Bader has always been interested in the ABC of his life: art, Bible, and Chemistry. and their histories. He has lectured widely on all three, has been guest curator of old master exhibitions, and has acquired, researched, and had restored many old paintings of the 17th Century Dutch Masters.





505 Ramapo Valley Road. Mahwah. New Jersey 07430-1680 • (201) 529-7500

# The School of Theoretical and Applied Science Sigma Xi Club of Ramapo College Ramapo College Chemistry and Biology Clubs invites you to a special program

# The 4th Herman S. Kaufman Memorial Lecture

Speaker: Dr. Alfred R. Bader

Chairman Emeritus, Sigma-Aldrich, USA

Topic: Josef Loschmidt, The Father of Molecular Modeling

Date: Wednesday, October 13, 1993

Time and Place: Luncheon - 12:00 - 1:00 PM

G 310 - Kaufman Memorial Lounge

Lecture - 1:00 - 2:00 PM, G 310

Ramapo College of New Jersey

505 Ramapo Valley Road, Mahwah, NJ 07430

Reservations: K. Finnegan/J. Lafayette, (201) 529-7734,7721

Luncheon \$ 8.00 Members and Guests; Students: Free

Abstract: Dr. Bader received his BSc in 1945 and his MSc in 1947 from Queens University in Kingston, Ontario and his PhD in Organic Chemistry in 1949 from Harvard University with Professor Louis Fieser In 1951, he founded the Aldrich Chemical Company in Milwaukee. Aldrich has grown from tiny beginnings to one of the largest suppliers of research chemicals. It merged with Sigma, the biochemical supplier in 1975. Dr. Bader has been President, Chairman, and now Chairman-Emeritus of Sigma Aldrich, which employs over 4000 worldwide. Dr. Bader has always been interested in the ABC of his life: art, Bible, and Chemistry, and their histories. He has lectured widely on all three, has been guest curator of old master exhibitions, and has acquired, researched, and had restored many old paintings of the 17th Century Dutch Masters.

That all matter is constructed of molecules and that molecular modeling accurately depicts molecules in space is one of the greatest scientific achievements of the century. Yet, Josef Loschmidt, the first scientist who drew many molecules in space, has been virtually forgotten. He was the first to depict unsaturation through double and triple bonds, to predict cyclopropane, to show benzene as a molecule with 6 carbons in a circle, and ozone as  $O_3$ . His small book "Chemiche Studieren I" contained 368 graphic structures. Loschmidt was a wonderful, unmaterialistic, self-effacing and shy human being. Molecular modeling likely would have developed a century earlier if Kekule and his contemporaries had understood and encouraged Josef Loschmidt.

June 14, 1883

Secret you as your wite October 13.
Will pick you up at the lairport and get I hope they are OK. I've reserved a room There are the brochures for you talks marriott glanpoint in Teamach. We have pack for it . The conformation # 15 52 104250 may keesier to take you to peun statem tewark. Best resords, (2011633-2136 with 2 down to beds, non smoking at the We're very much looking forward to Borourt grace Dear Alfred,

August 4, 1993

Dr. Grace Borowitz 912 Eastlawn Drive Teaneck, New Jersey 07666

Dear Grace:

I very much look forward to being with you on Wednesday, October 13th.

However, I note that the first Midwest Express flight from Milwaukee to Newark does not arrive in Newark until 11:35 a.m. I won't mind skipping lunch, but will I be able to make the one o'clock lecture? Or, should we plan to fly to Newark the evening before?

For my talk I will need two projectors and two screens or one large white wall to show two slides simultaneously.

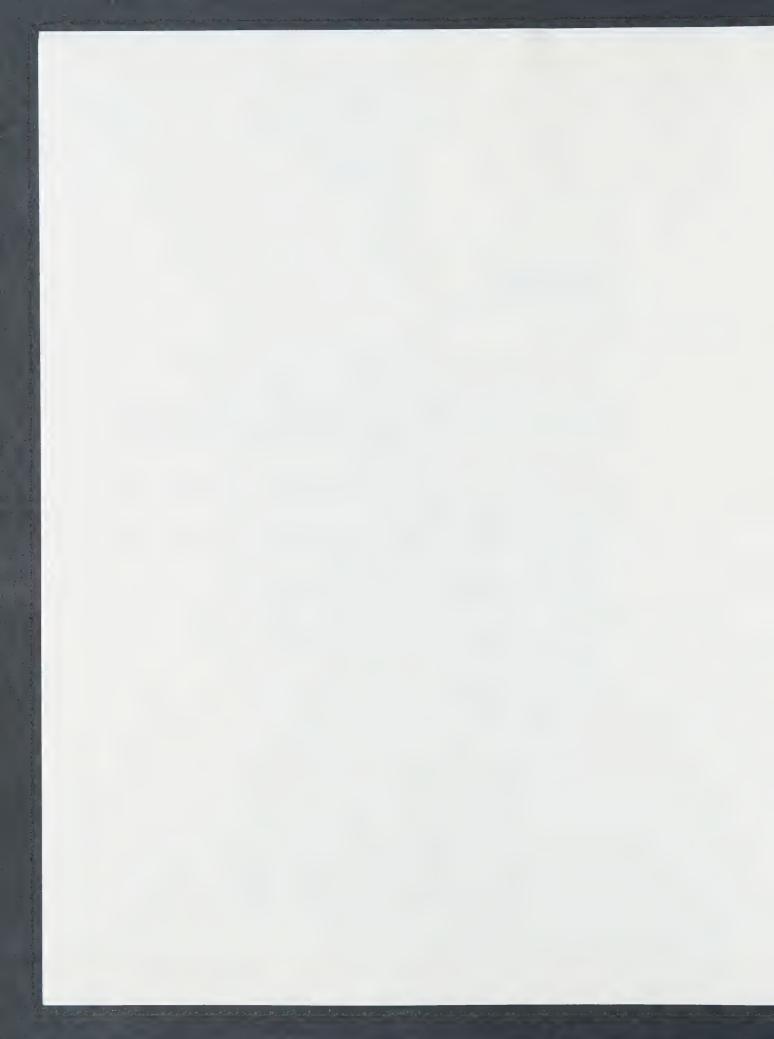
Do you have a fax number at your home or at Ramapo College? If so, please furnish the number.

My office fax number is 414 277 0709; home, 414 962 8322.

My office telephone number is 414 277 0730; home, 414 962 5169.

Best regards.

Sincerely,



fill by at Columbia 212 854 8839 932 1289 ne-201 8332/38



		A.M
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505 Ramapo Valley Road, Mahwah, New Jersey 07430-1680 • (201) 529-7500 912 Eastlawn Drive
Teaneck, NJ 07666
May 16, 1993

Dr. Alfred Bader 2961 North Shepard Avenue Milwaukee, WI 53211

Dear Alfred:

Thank you so much for your gracious response accepting our invitation for delivering the Dr. Aart DeKorte Memorial Lecture for the Hudson-Bergen Chemical Society. "The Adventures of a Chemist Collector" will be a perfect talk for the evening at Fairleigh Dickinson University in Teaneck. Also, we are very grateful for your generous offer to speak on "Joseph Loschmidt, The Father of Molecular Modeling" at Ramapo College for our School of Theoretical and Applied Science on Wednesday afternoon. We are most happy to accept your offer. The topic sounds most fascinating, especially since Irv and I have developed a research interest in molecular modeling using computer programs. We would like to dedicate your afternoon lecture to the memory of the founder of the School of Theoretical and Applied Science at Ramapo College and the Past-Vice President for Institutional Advancement, Dr. Herman Kaufman, who passed away several years ago. Previous Herman Kaufman Memorial Lecturers have been Professor Herman Mark, Professor Murray Goodman, and Professor Eli Pearce. Our Herman Kaufman had been an early student of Dr. Herman Mark at Brooklyn Polytechnic Institute. In his career, Herman had bridged the industrial and academic areas. He was always a good friend to us and was responsible for bringing me to Ramapo College. We would be very proud to announce you as the Fourth Dr. Herman Kaufman Memorial Lecturer at Ramapo College as well as the First Dr. Aart DeKorte Memorial Lecturer at Fairleigh-Dickinson University for the Hudson-Bergen Chemical Society.

We will be glad to pick you up at Newark Airport on Wednesday morning. Then Grace will take you up to Ramapo College. We will schedule luncheon from 11:45-1:00 PM and the talk at 1:00-2:00 PM. After the afternoon lecture, we will and show you around the College. Then I will drive you down to Teaneck, where you and Isabel can refresh yourselves before the evening affair. We can go to FDU before 6:00 PM for the evening program. We will make reservations for you at the local Marriott or at one of the other nearby hotels. We'll drive you to Penn Station Newark early Thursday morning so that you can get the train to Worcester. We will also have a check ready for you for \$300 for our share of the travel expenses. We hope that these plans are okay with you. Please let us know if there are any problems. Irving and I are looking forward to seeing you in October. We shall inform Gilbert Stork of the plans and invite him to come to the lecture Wednesday night.

Sincerely,

grace

Dr. Grace B. Borowitz (201) 833-2138



May 7, 1993

Dr. Grace B. Borowitz 912 Eastlawn Drive Teaneck, New Jersey 07666

Dear Grace:

Thank you for your kind letter of May 5th, but why the formality of calling me Dr. Bader? I look forward to being with you on October 13th, and I would suggest that the talk in the evening be "The Adventures of a Chemist Collector." For that talk I will need two projectors and two screens to show two slides simultaneously. We will bring our own packed Carousels.

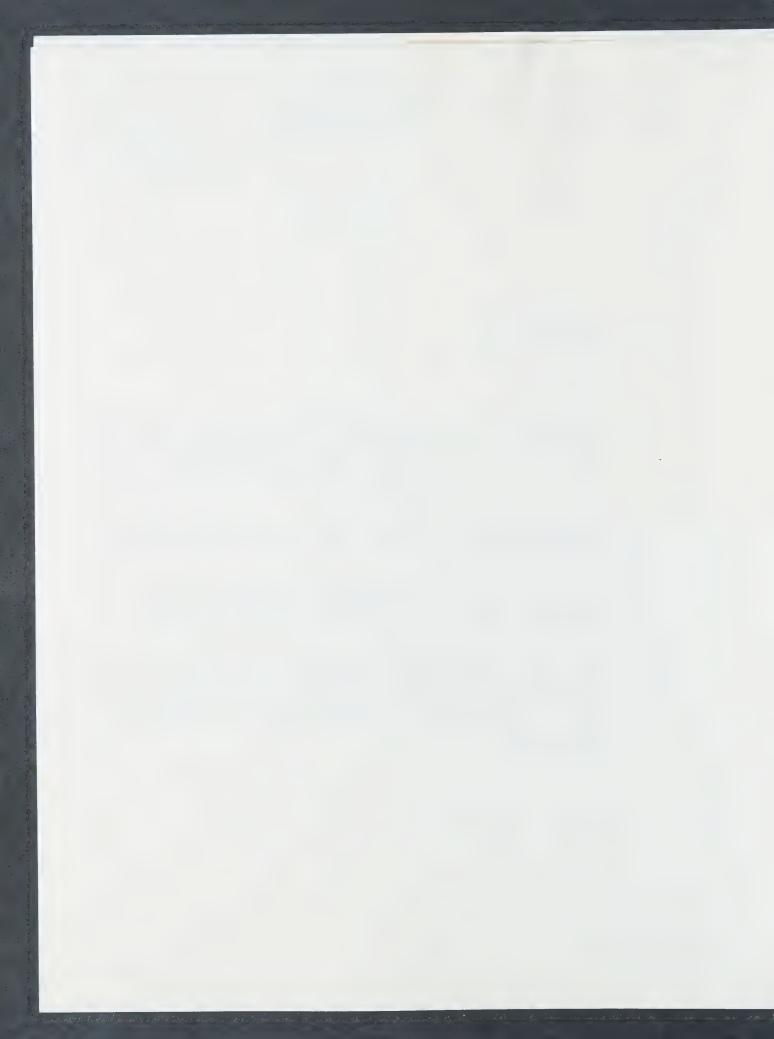
Might the Chemistry Department wish to hear a talk on Josef Loschmidt in the afternoon? An abstract of that talk is enclosed. Again, I will need two projectors and two screens.

We will be rather short of time and propose to fly from Milwaukee to Newark, have someone pick us up and then help us on Thursday morning get to the nearest train station to get a train to Penn Station in New York and thence to Boston.

As I explained, I do not accept honoraria from schools, but expect the travel expenses for my wife and me to be covered. However, they can be shared in part with the Worcester Foundation, and I estimate that your share of the travel expenses will be \$300.00. Please make a reservation at a modest motel nearby for Isabel and me.

All good wishes,

Enclosure





505 Ramapo Valley Road, Mahwah, New Jersey 07430-1680 • (201) 529-7500

912 Eastlawn Drive Teaneck. NJ 07666 May 5, 1993

Dr. Alfred Bader 2961 North Shepard Avenue Milwaukee, WI 53211

Dear Dr. Bader:

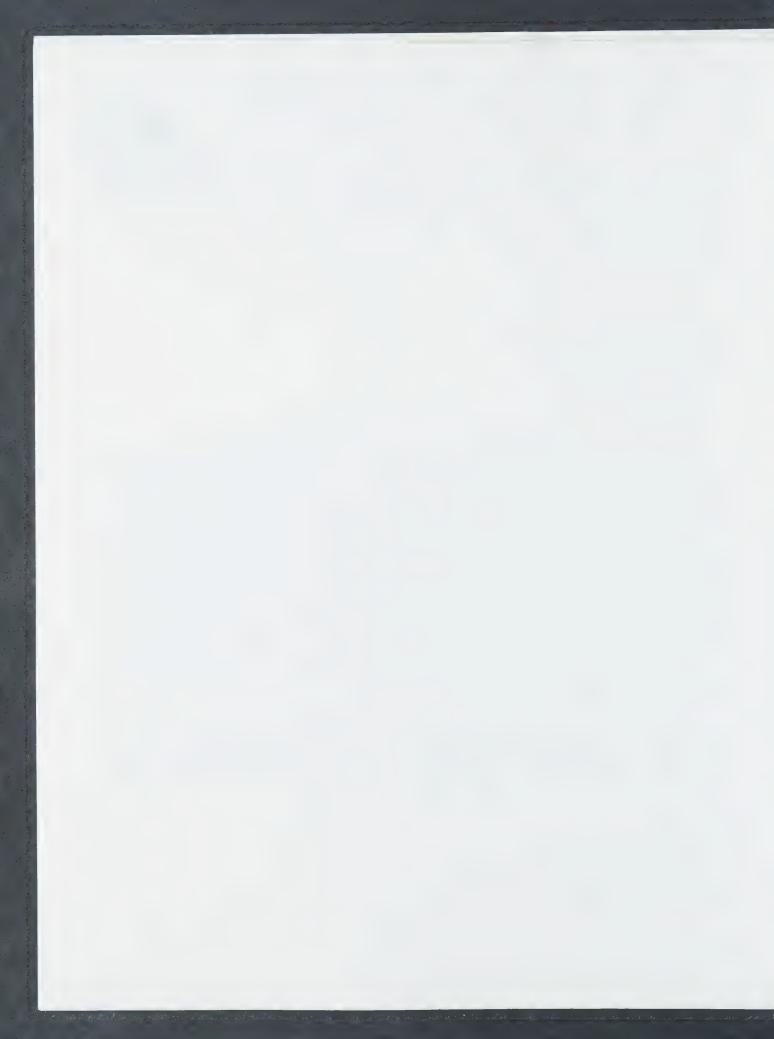
Thank you so much for agreeing to be the first Dr. Aart DeKorte Memorial Lecturer for the Hudson-Bergen Chemical Society. We are pleased that you will be able to stop for our program at Fairleigh Dickinson University in Teaneck on your way to the Worcester Foundation. The presentation is scheduled for Wednesday, October 13, 1993 in the Multipurpose Room of the Student Center. We shall arrange to pick you up at Newark Airport if you send us your schedule. Since Dr. DeKorte was a native of Holland and since he was an avid lover of art and culture in addition to being an exceptionally fine, dedicated, and interdisciplinary scholar and professor, we really felt that you would be the best person to honor his memory for the first lecture. Any program, such as "Through the Detective's Eye" or "After Restoration," about the Dutch Masters paintings which you have uncovered and the chemical/analytical methods you used to restore them would be of great interest and relevance. The Hudson-Bergen Chemical Society, Fairleigh Dickinson University, and Sigma Xi will cosponsor the event. The Social Hour is set for 6:00 PM, Dinner will be served at 6:45 PM, and the talk is scheduled for 8:00 PM.

If you have any questions, I can be reached at (201) 833-2138 (Home), (201) 529-7718 (Ramapo), or (212) 854-8893 (Columbia, May 24-July 2). Thank you again for your generosity in coming to our area and talking to our members, students, and guests about area loved by you and by the late Dr. Aart De Korte.

Sincerely,

Grace B. Borowits

Dr. Grace B. Borowitz Professor of Chemistry



Dr. Alfred Bader 2961 North Shepard Avenue Milwaukee, Wisconsin 53211

March 1, 1993

Dr. Thomas Radil Monell Chemical Senses Center 3500 Market Philadelphia, Pennsylvania 19104 3308

Dear Dr. Radil:

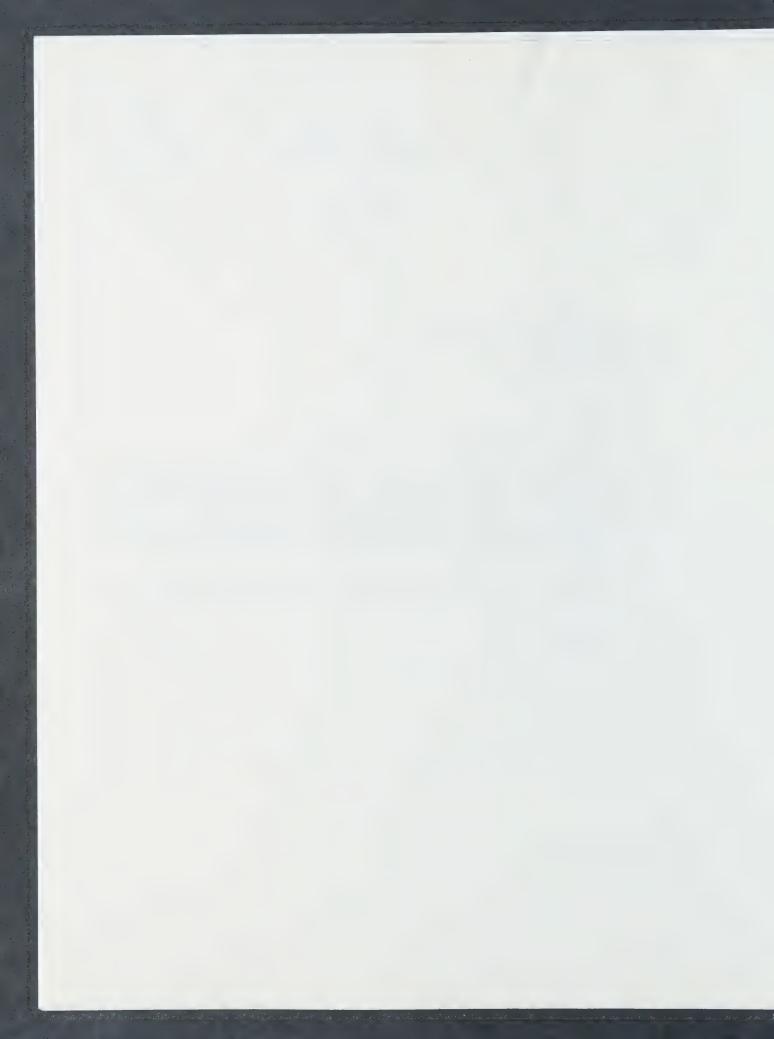
Thank you so much for your letter of February 11.

The Bader Fellowship at the University of Pennsylvania, like those at Columbia and Imperial College, are meant to be given to young organic chemists to do all of their graduate work towards a Ph.D. at the University of Pennsylvania. A student can learn much more about western research practices by being here for three years, rather than for just a few months to finish work begun in the Czech Republic. I do hope you will understand.

My wife and I plan to be in Prague in June, and if you are there then would much enjoy meeting you.

Best regards.

Sincerely,



Sigma Xi Clabs of Ramapo College & FDU Fairleigh-Dickinson University, Chemistry Department invites you to a special program

The 1st Dr. Aart DeKorte Memorial Lecture

Speaker: Dr. Alfred R. Bader

Chairman Emeritus, Sigma-Aldrich, USA

Topic: The Adventures of a Chemist Collector

Date: Wednesday, October 13, 1993

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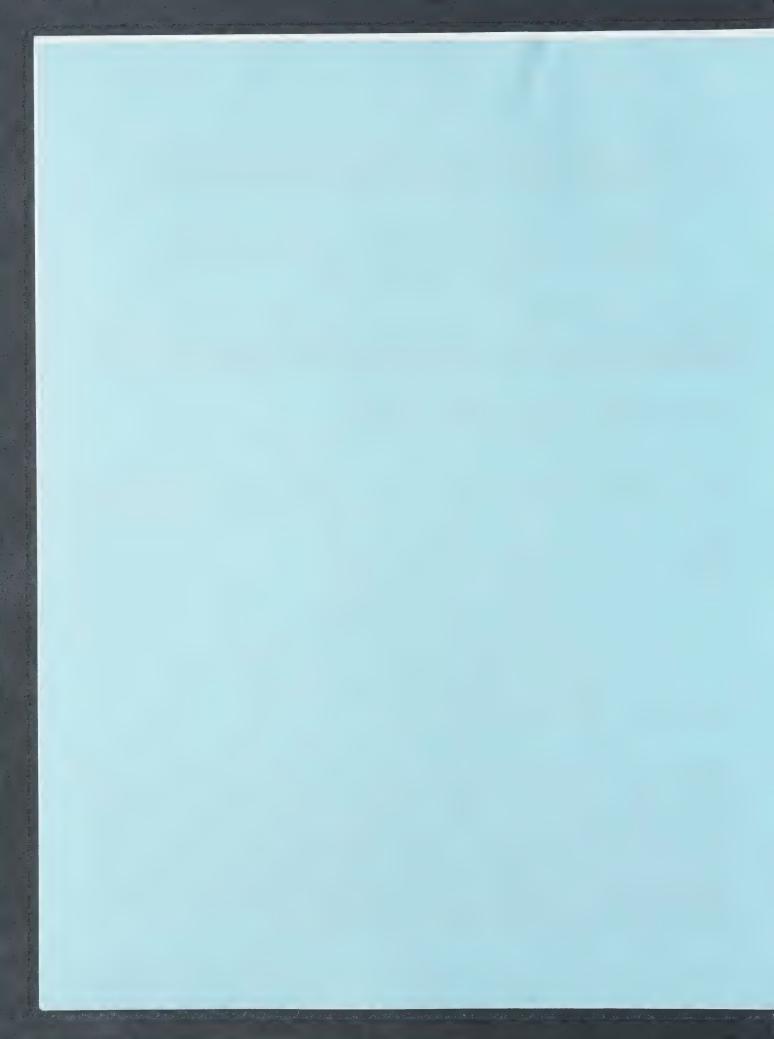
The Multipurpose Room, Student Center

Fairleigh-Dickinson University

1000 River Road at Lone Pine Way, Teaneck, NJ 07666

Reservations: Elaine Stolarz, (201) 692-2330

Dinner \$ 18.00 Members and Guests; Students: \$ 10.00



Sigma Xi Clabs of Ramapo College & FDU Fairleigh-Dickinson University, Chemistry Department invites you to a special program

The 1st Dr. Aart DeKorte Memorial Lecture

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Reservations: Elaine Stolarz, (201) 692-2330

Dinner \$ 18.00 Members and Guests; Students: \$ 10.00



Sigma Xi Clabs of Ramapo College & FDU Fairleigh-Dickinson University, Chemistry Department invites you to a special program

The 1st Dr. Aart DeKorte Memorial Lecture

Speaker: Dr. Alfred R. Bader

Chairman Emeritus, Sigma-Aldrich, USA

Topic: The Adventures of a Chemist Collector

Date: Wednesday, October 13, 1993

Time and Place: Social - 6:00 - 6:45 PM

Dinner 6:45 - 8:00 PM Lecture - 8:00 - 9:00 PM

The Multipurpose Room, Student Center

Fairleigh-Dickinson University

1000 River Road at Lone Pine Way, Teaneck, NJ 07666

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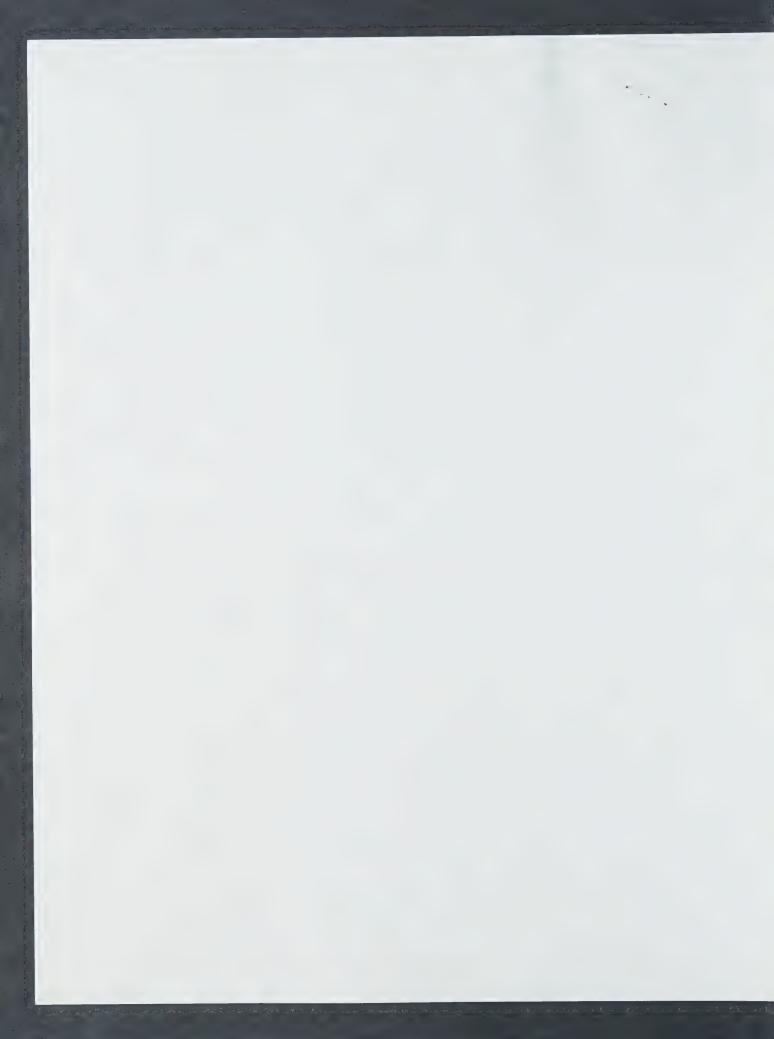
1000 River Road at Lone Pine Way, Teaneck, NJ 07666

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**FAX FROM** · .... DR. ALFRED R. BADER Suite 622 924 East Juneau Avenue Milwaukee, Wisconsin 53202 Telephone 414-277-0730 Fax No. 414-277-0709 Sugar Till The Maurice Strange Text Linding And has there de col our for for the second I william the met gray for construction " I have I thank, every in the to then made (colors to separate for hell-E Harriston (3) - 10 months have 9. months to filelistes finding House J. T. we know I st however Fyyl .... 



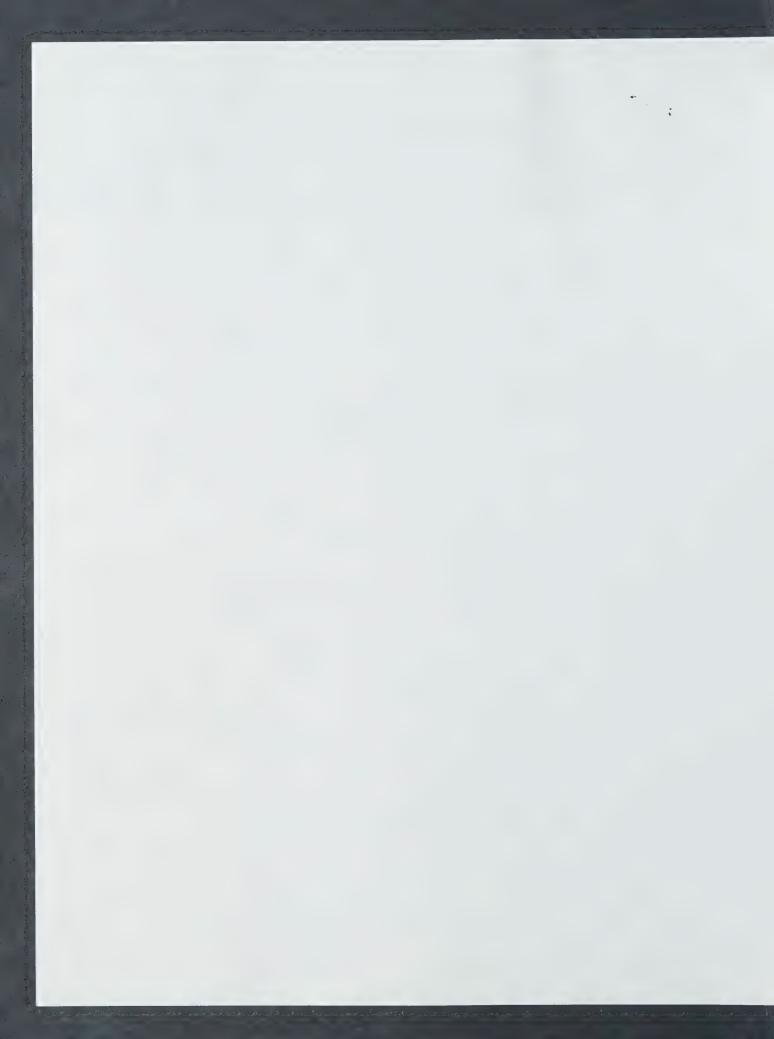
#### ■ Moly ■ 25,644-7 Molybdocene dichloride, 98% [12184-22-4] (dicyclopentadienylmolybdonum 1 dichloride) FW 297.04 FT-IR 1(2),1155B Safety 2,2473B Disp. O MOISTURE-SENSITIVE IRRITANT Molybdophosphoric acid, see 22,185-6, Phosphomolybdic acid page 1012 Monitors, see page 1803 25,509-2 Monobromoborane-methyl sulfide complex [55652-52-3] (boron ... monobromide-methyl sulfide complex, bromoborane-methyl sulfide complex) (CH<sub>3</sub>),S·BH,Br FW 154.87 d 1.452 Fp 50°F(10°C) Safety 2.44 FLAMMABLE LIQUID MOISTURE-SENSITIVE Reagent for hydroboration and synthesis of bromodialkylboranes. J. Org. Chem, 44, 2417, 2422 (1979). (Packaged under nitrogen in SurelSeaſ™ bottle) 26,206-4 Monobromoborane-methyl sulfide complex, 1.0M solution in dichloro-methane [55652-52-3] (boron monobromide-methyl sulfide complex, bromoborane-methyl sulfide complex (CH<sub>3</sub>),S-BH<sub>3</sub>Br FW 154.87 d Fp 50°F(10°C) Safety 2,2474C Disp. A FLAMMABLE LIQUID MOISTURE-SENSITIVE (Packaged under nitrogen in SurelSeaſ™ bottles) Reagent for hydroboration and synthesis of chlorodialkylboranes. J. Org. Chem. 44, 2417 (1979) (Packaged under nitrogen in SurelSeal™ bottle) Monoglyme, see Ethylene glycol dimethyl ether 28,320-7 Monoperoxyphthalic acid, magnesium salt hexahydrate, tech., 80% [84665-66-7] (magnesium monoperoxyphthalate, MMPP) (HO,CC,H,CO,),Mg-6H,O FW 494.65 mp 93° (dec.) Fleser Safety 2,2475B Disp A OXIDIZER MOISTURE-SENSITIVE Fieser 14,197 28,152-2 Montmorillonite K 10 [1318-93-0] Merck Index 11,6168 Safety 2,24750. Surface area 220-270 m²/g. Bulk density 300-370 g/l (send for Bulletin No. AL-143) 28,153-0 Montmorillonite KSF [1318-93-0]. Surface area 20-40 m²/g. Bulk density 800-850 g/l (send for Bulletin No. AL-143) Monuron, see 33,299-2, 3-(4-Chlorophenyl)-1,1-dimethylurea page 304 MOPEG, see 14,879-2. DL-4-Hydroxy-3-methoxyphenylglycol, piperazine saft page 704 16,377-5 MOPS, 99% [1132-61-2] (4-morpholinepropanesulfonic acid) FW 20926 mp 277° (dec.) Merck Index 11,6173 NMR 2(2),794C FT-IR 1(1),892A Safety 2,2476A Disp. A IRRITANT Safety 2.24 of Disp. A Hilliam Buffer useful in the physiological pH range. pKa = 7.20 at 20 °C. Biochemistry. \$467 (1966) See also Aldrichimica Acta, 16(2), 35 (1983) 28,527-7 MOPS, sodium salt monohydrate, 98% (4-morpholinepropanesulfonic acid) DISD. A 28,481-5 MOPSO, 99% [68399-77-9] (β-hydroxy-4-morpholinepropanesulfonic acid) \* FW 225.27 mp 273-274° Safety 2,2476B Disp. A IRRITANT Buffer useful in the physiological pH range. pKa = 6.9. Mordant Black 3, see 20,149-9, Eriochrome® Blue Black B page 562 Mordant Black 11, see 85,839-0, Eriochrome® Black T page 562 Mordant Black 13, see 23,403-6, Alizarin Blue Black B page 36 Mordant Black 17, see 21,673-9, Palatine Chrome Black 6BN page 962 Mordant Blue 3, see 23,406-0, Chromoxane Cyanine R page 320 CI - Mo - C

297 100 1 [3624-68-8] [C.I. 14855, 6-(5-chloro-2-hydroxy-3-sulf Mirzy:-naphthalenesulfonic acid, disodium salt] FW.

m FT-IR 1(2),982B UV-Vis 473 Disp. A -50% 10, see 12,450-8, Gallocyanine page 643 13, see 20,172-3, Plasmocorinth B page 1023 14, see 20,634-2, Celestine Blue page 260 14, 566 20,054-21, Ohrome Azurol S page 318 The 79, see 19,953-2, Chrome Azard 5 page 320 10 79, see 21,451-5, Chromotrope FB page 320 10 1 1 [3564-15-6] {C.I. 20110, 5-{2,4-diamino-5-{2-hydro-memberylazo}-1-naphthalenesulfonic acid, sodium sait 1 10 20 mm FT-IR 1(2),990B UV-VIS 474 Disp. A 1 [C.I. 11335, 2-(4,6-diamino-m-tolylaz 2 [C.I. 11335, 2-(4,6-diamino-m-tolyl DISP. A IRRITANT Tom 6 [6247-28-5] (C.I. 11875, 4,6-dinitro-4'-methyl-2.2 with the first state of the firs 24 [6370-46-3] [C.I. 11880, 5'-(3,5-dinitro-2-hydro-FW 375.30 Amax 400nm FT-IR Disp. A IRRITANT 10-20%
10-20 33 [3618-62-0] [C.I. 13250, 2,4-diamino-5-(2-hydr numberzenesulfonic acid, sodium salt] FW 375.27 Turn 48 [6232-53-7] [C.I. 11300, 2-(5-chloro-2,4-diamir Turn 48 [6232-53-7] [C.I. 11300, 2-(5-chloro-2,4-di 1000-1 [2243-76-7] [Alizarine Yellow R. C.I. 14030.5]
1000-1 [2243-76-7] [Alizarine Yellow R. C.I. 140 10.0 10mm2 6 [3564-27-0] (C.1. 26520) FW 470.38 \(\lambda\) max 38 (Max 38) FT/R 1(2),979B UV-V/S 482 Disp. A 100 °/0 1884,301 UV-Vis 483 Disp. A OFT, BILL 1 see 11,996-2, Alizarin Red S monohydrate pag 11, see 12,277-7. Alizarin page 36 19,517-0 19,518 19,519-7 21,460-4

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#### FAX TRANSMITTAL SHEET

FROM:

DR. ALFRED BADER

2961 North Shepard Ave. Milwaukee, Wisconsin 53211

PHONE:

(414) 962-5169

FAX:

(414) 962-8322

TO:

Dr. Marvin Sternfeld Research Organics, Inc. FAX 216 883 1576

DATE: August 4, 1993

Dear Dr. Sternfeld:

Please do not mind that a very long trip to Europe has delayed my responding to your fax of May 27th with the Sigma accounting.

I distinctly remember finding some years ago that Sigma had paid you royalties for only one compound and then back-tracking and paying you the royalties due to you in one year. However, the accounting which you now have shows a steady progression which looks satisfactory, but which may not be correct. Could you please double check to see whether you did receive about \$1500 in 1986, \$2900 in 1987, \$4200 in 1988, \$4000 in 1989 and \$4200 in 1990. But if not, please let me know what royalties you did receive in these years, and we will take it from there.

I look forward to hearing from you.

Best wishes,

Tile Cos





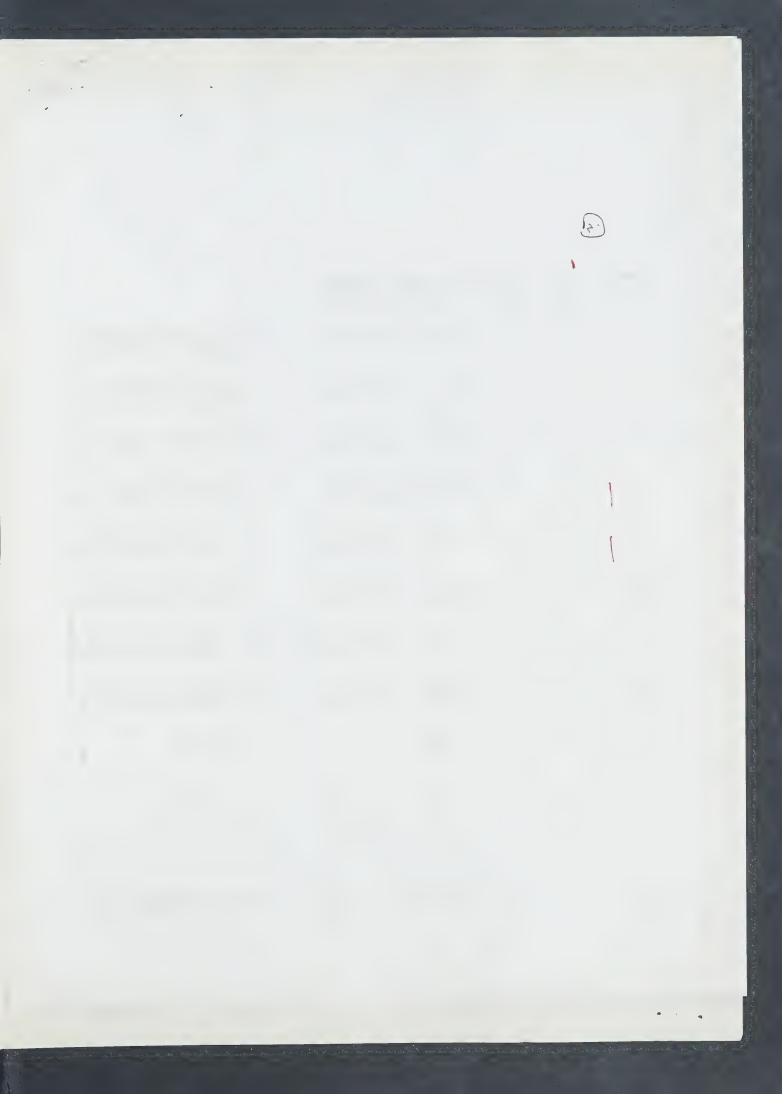


Organics Inc.



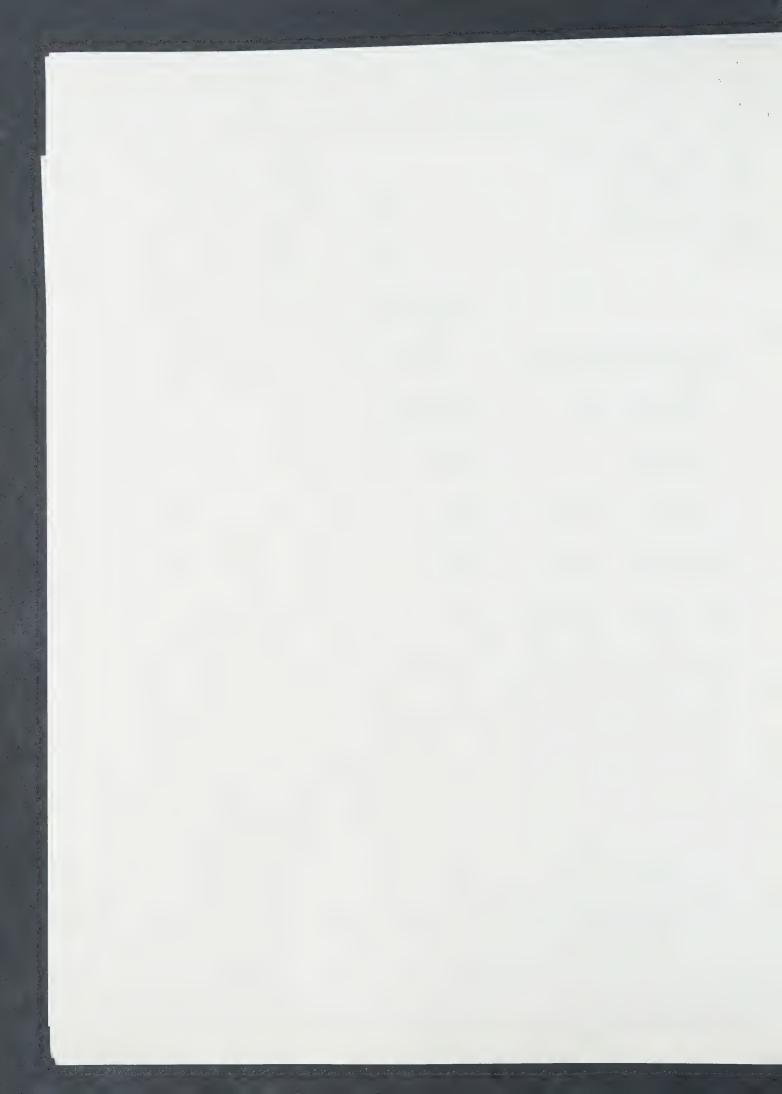












Dr. Alfred R. Bader 2961 North Shepard Avenue Milwaukee, Wisconsin 53211

June 1, 1993

Dr. Marvin Sternfeld Research Organics Inc. 4353 East 49th Street Cleveland, Ohio 44125

Dear Dr. Sternfeld:

Your fax to Dr. Bader of May 27th has been received while Dr. Bader is out of the country until July 26th.

This matter will be brought to his attention when he returns.

Cordially,

Marilyn Hassmann Secretary to Dr. Bader



#### **FAX TRANSMITTAL SHEET**

Dr. Alfred Bader

2961 North Shepard Avenue Milwaukee, Wisconsin 53211 Telephone 414 962 5169 FAX 414 962 8322

September 21, 1993

TO: Mr. Fred Sternfeld Research Organics Inc. 216 883 1576

Dear Mr. Sternfeld:

It was a pleasure talking to you, and I now understand the accounting Sigma sent to you.

You might like to ask them whether they paid you any interest for the monies not paid between 1984 and 1988, and if so how it was calculated.

Much more important is the fact that you are not getting any royalties from Aldrich and Fluka. Fluka sells a good deal in the U.S., and if you have a Swiss patent you should be getting royalties on the sales there, also. Keep in mind that if you are told that Sigma pays royalties on what Sigma sends to Aldrich and Fluka, then you will find that Sigma pays you the 7.5% royalties on the intercompany sales, not on the sales to the final customers. It seems to me that you should be getting the royalty based on sales to final customers.

As I explained to you, sales to foreign customers by Aldrich's foreign subsidiaries are difficult to compute. So, time and again Aldrich has agreed to pay to recipients of royalties a royalty based on twice the intercompany sales to Aldrich's foreign subsidiaries.

Also of course, you are correct in demanding that all the catalogs, and not just Sigma's, say that these compounds are licensed under your patents. What a pity that your expensive attorneys didn't insist that the catalogs state that these compounds are licensed under ROI patents.

Do let me know what develops.

Best wishes to you and your father.

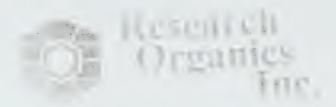
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Sincerely,

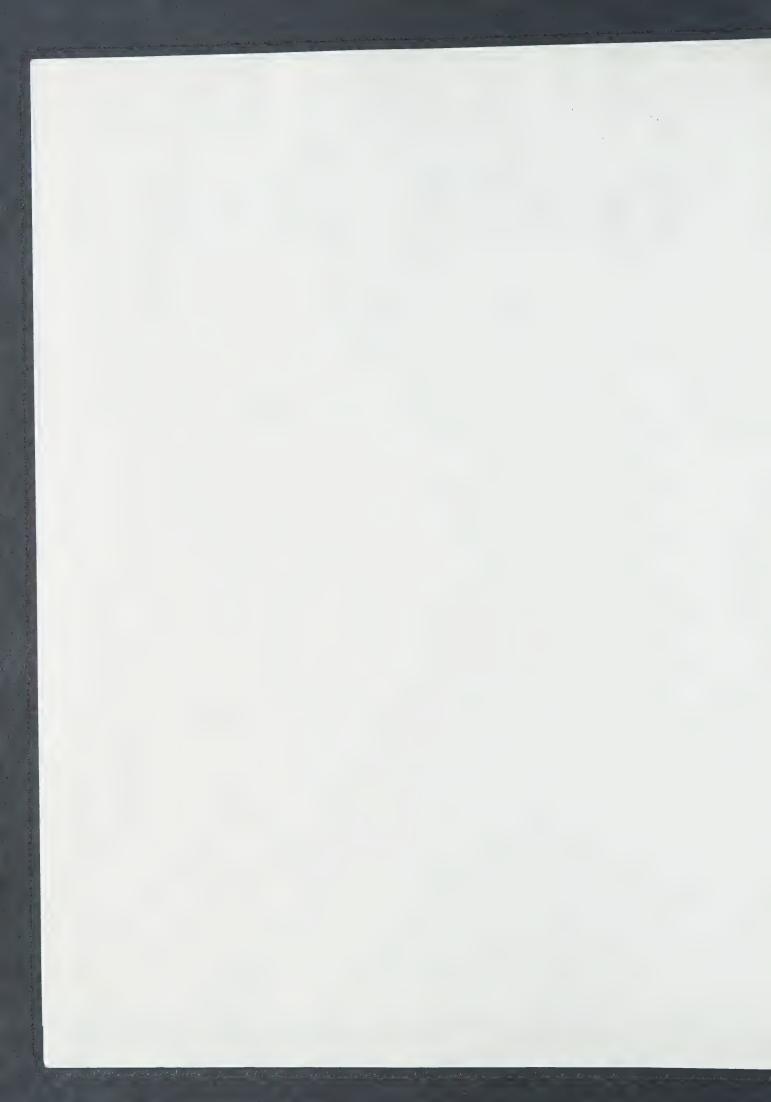


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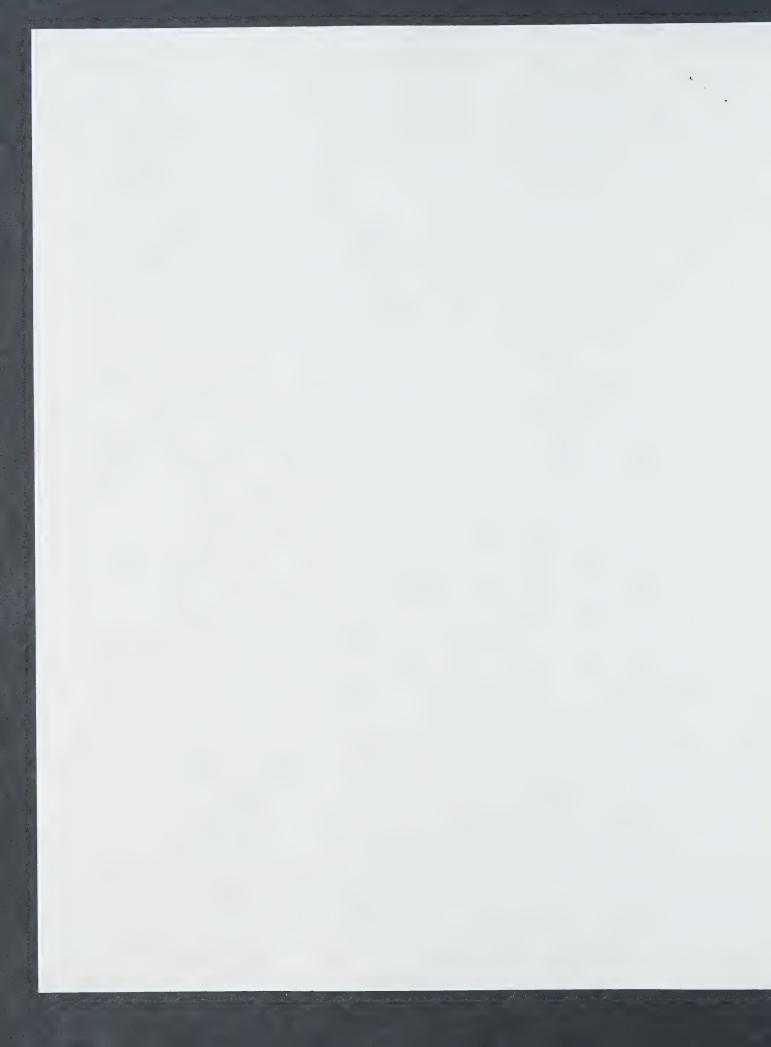


To Dr. Martin Reenfeld The

Nelson Leonard at the University of Illinois in Urbana told me that the university had patented several compounds which Sigma had added to its catalog. The claims were compound-of-matter claims; that is, Sigma could not offer these purines legally without a license from the university. Nelson had written to Sigma many times, twice by registered mail, without receiving a reply. When I inquired, Aaron told me that it was Sigma's policy not to reply to such letters. Let them sue Sigma, and if the patent is found valid in court Sigma would pay. What arrogance! When I checked the sales of the patented compounds at Sigma, I found them to be very small; at most, a few hundred dollars per compound. I was really embarrassed and offered Nelson to settle the matter by my personally giving the university 100 shares of Sigma-Aldrich stock, then worth about \$4000. And I was glad the university accepted. For many years, Aldrich paid many chemists teaching show to make interesting compounds a 5% royalty on sales--this without patents. I don't think for a moment that was giving the store away. It costs us several thousand dollars to develop a new procedure, and to pay 5% for five or ten years seemed eminently fair. But to refuse even to answer patent owners!

Chemists often asked me how it happened that Aldrich frequently advertised the availability of new products which had only just been published. The answer was simple: many of our friends sent us their manuscripts before they were published. I wonder how many manuscripts scientists send to a man who believes that there are no friends in business.

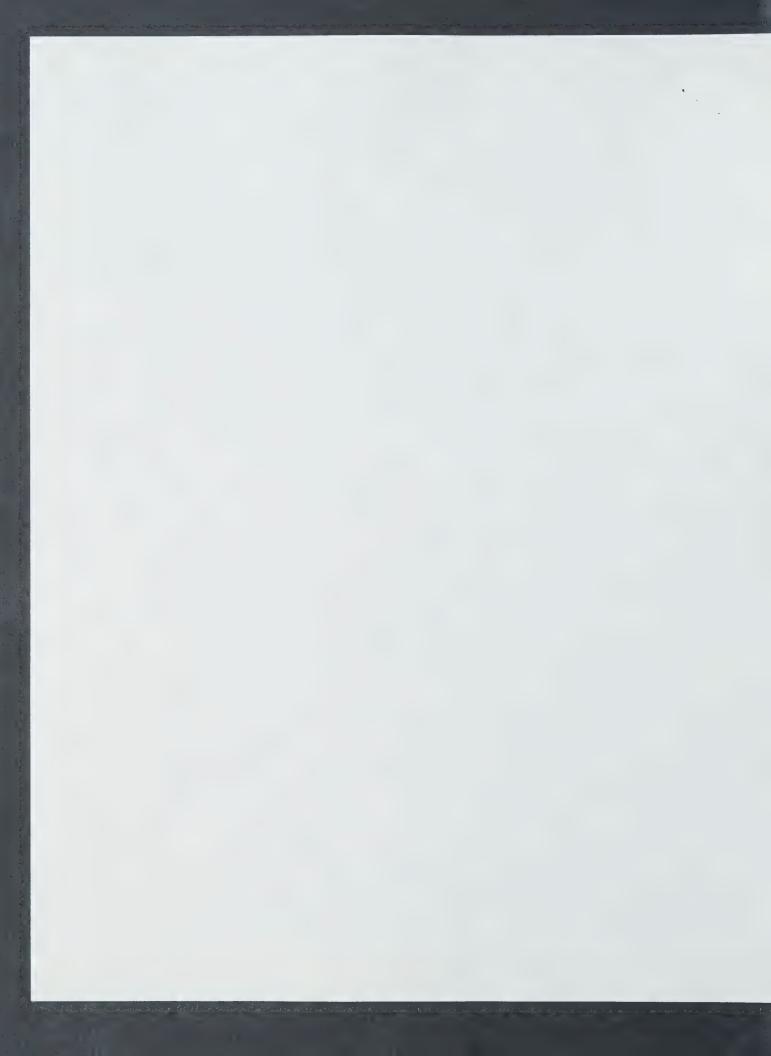
Another patent argument concerned me even more. A competitor of Sigma, Research Organics in Cleveland, headed by Dr. Marvin Sternfeld, received two U.S. patents, Nos. 4,169,950 and 4,246,194, on a series of six biological buffers with the catchy names AMPSCO, CAPSO, DIPSO, MOPSO, POPSO and TAPSO. Sigma was selling them without a license.

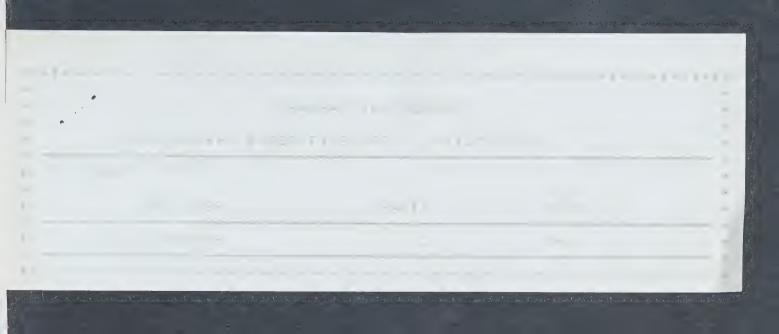


When I asked Tom at a Sigma board meeting why he didn't want to pay royalties, his answer was, "I don't like Sternfeld." Research Organics filed suit, and in 1982 Sigma had to agree to pay a 7.5% royalty and to cite the two patents in the Sigma catalog. In 1989, I checked on Sigma's sales of these compounds and discovered that they were selling quite well, but Sigma was paying a royalty on only one--an oversight I was told. I suggested that we calculate what should have been paid, pay the difference plus interest, and tell Sternfeld of our mistake. Sternfeld must have been surprised when the royalty for 1989 jumped to \$6857 from \$1672 in 1988, but I was overruled on telling Sternfeld why

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Dr. Alfred R. Bader 2961 North Shepard Avenue Milwaukee, Wisconsin 53211

August 11, 1993

Dr. Marvin Sternfeld Research Organics, Inc. 4353 East 49th Street Cleveland, Ohio 44125 1083

Dear Marvin:

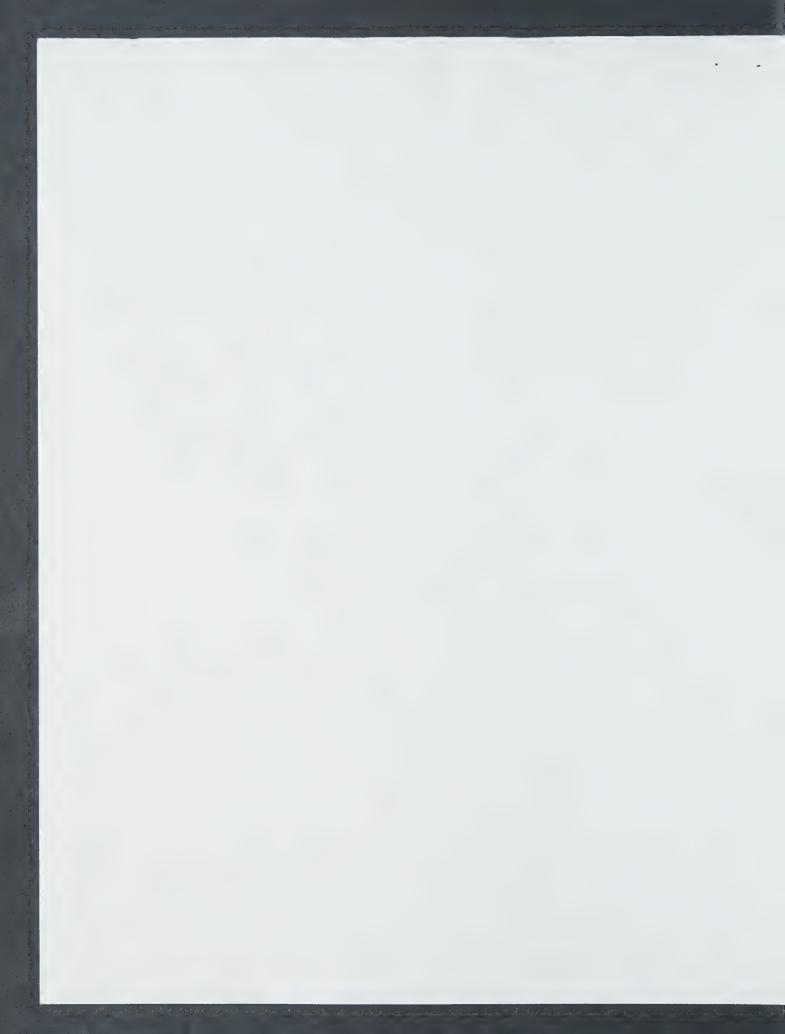
About a year ago I wrote the chapter dealing with some of Sigma's relations with suppliers and competitors, and I enclose part of that document, which includes a paragraph on your lawsuit. You will see that the royalties reported in that paragraph are quite different from the royalties reported in the breakdown which Sigma has now sent to you. Which is correct?

If you really received the royalties which they now report to you, then I was mistaken. I think, however, that more likely they cooked the results to what they should have paid you. If that is the case, may I suggest that you just write to them and say you received the following royalties in the following years and this does not correspond with what you have now sent me. Please explain.

I look forward to hearing from you.

Sincerely,

Enclosure



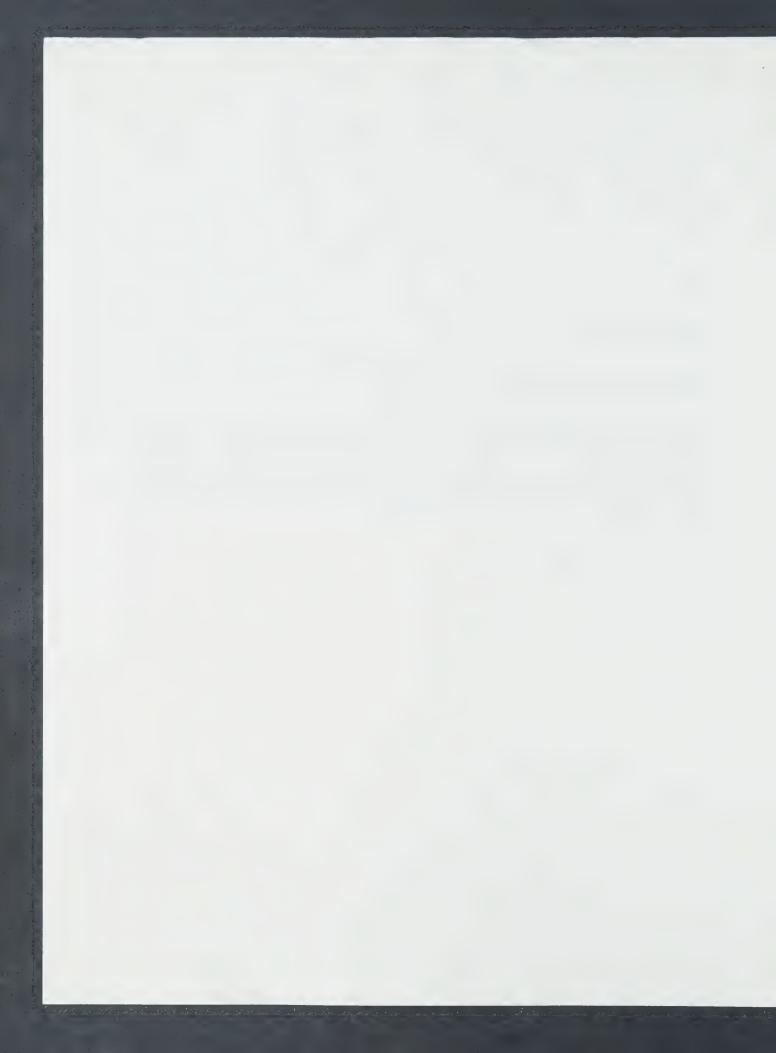
Dear Dr. Sternfeld:

Please do not mind that a very long trip to Europe has delayed my responding to your fax of May 27th with the Sigma accounting.

I distinctly remember finding some years ago that Sigma had paid you royalties for only one compound and then back-tracking and paying you the royalties due to you in one year. However, the accounting which you now have shows a steady progression which looks satisfactory, but which may not be correct. Could you please double check to see whether you did receive about \$1500 in 1986, \$2900 in 1987, \$4200 in 1988, \$4000 in 1989 and \$4200 in 1990. But if not, please let me know what royalties you did receive in these years, and we will take it from there.

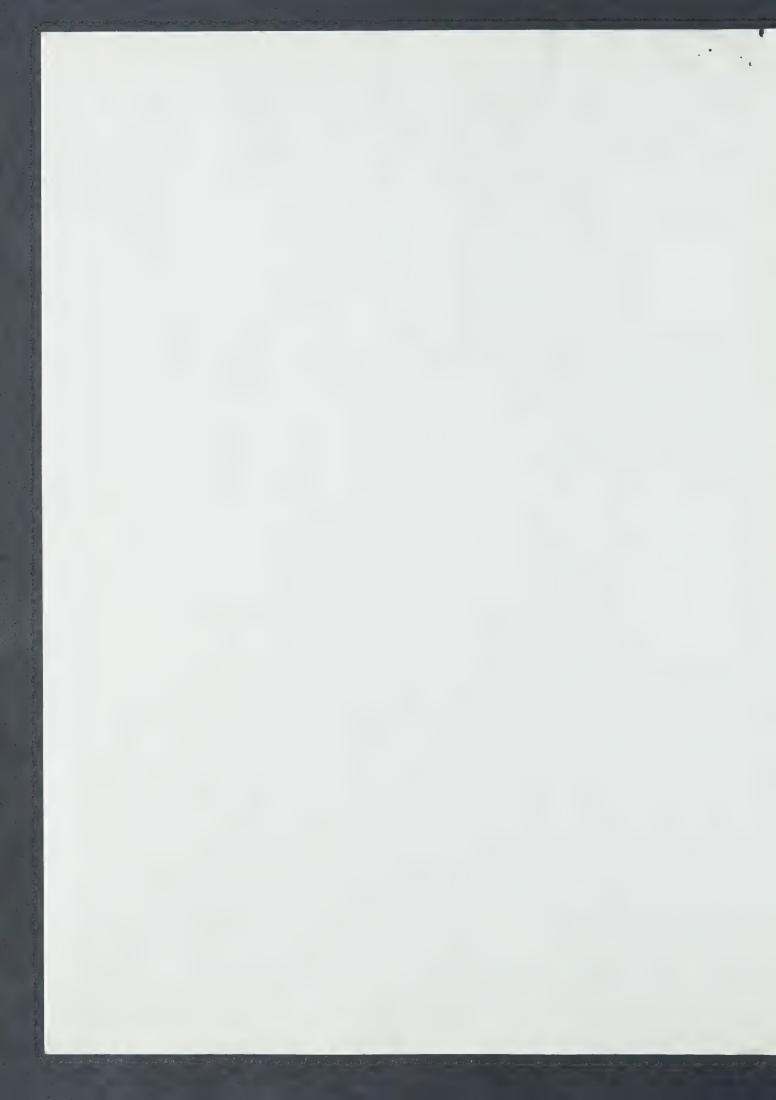
I look forward to hearing from you.

Best wishes,

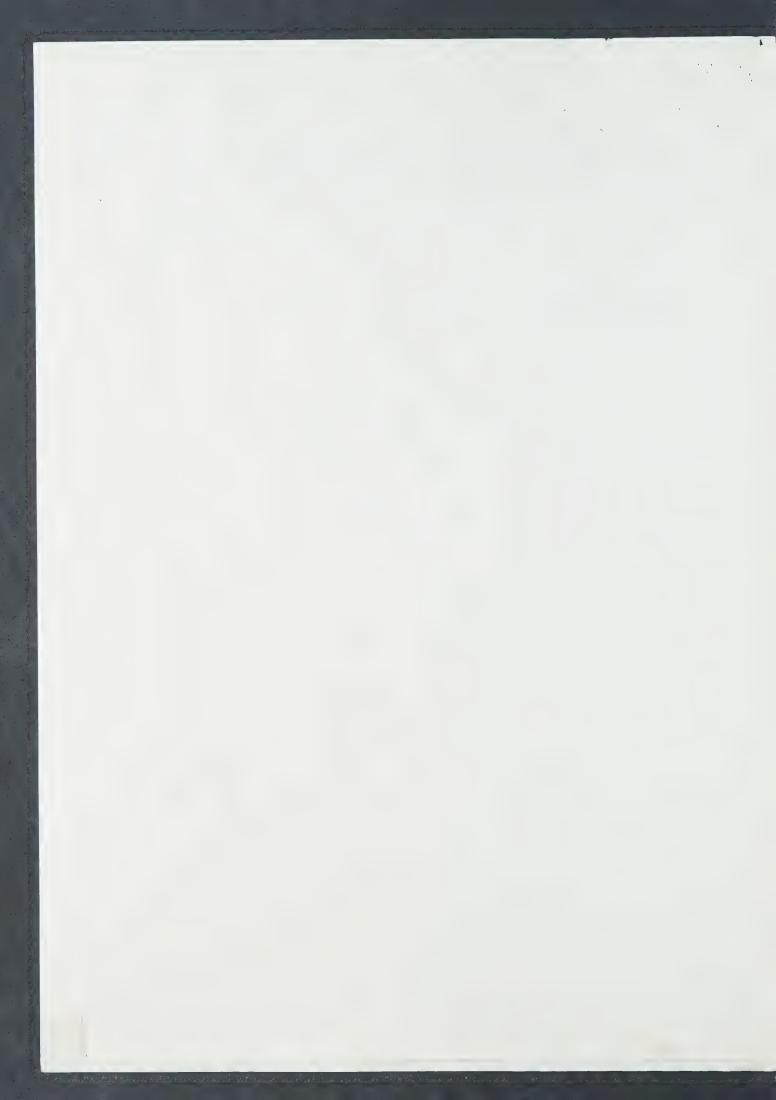


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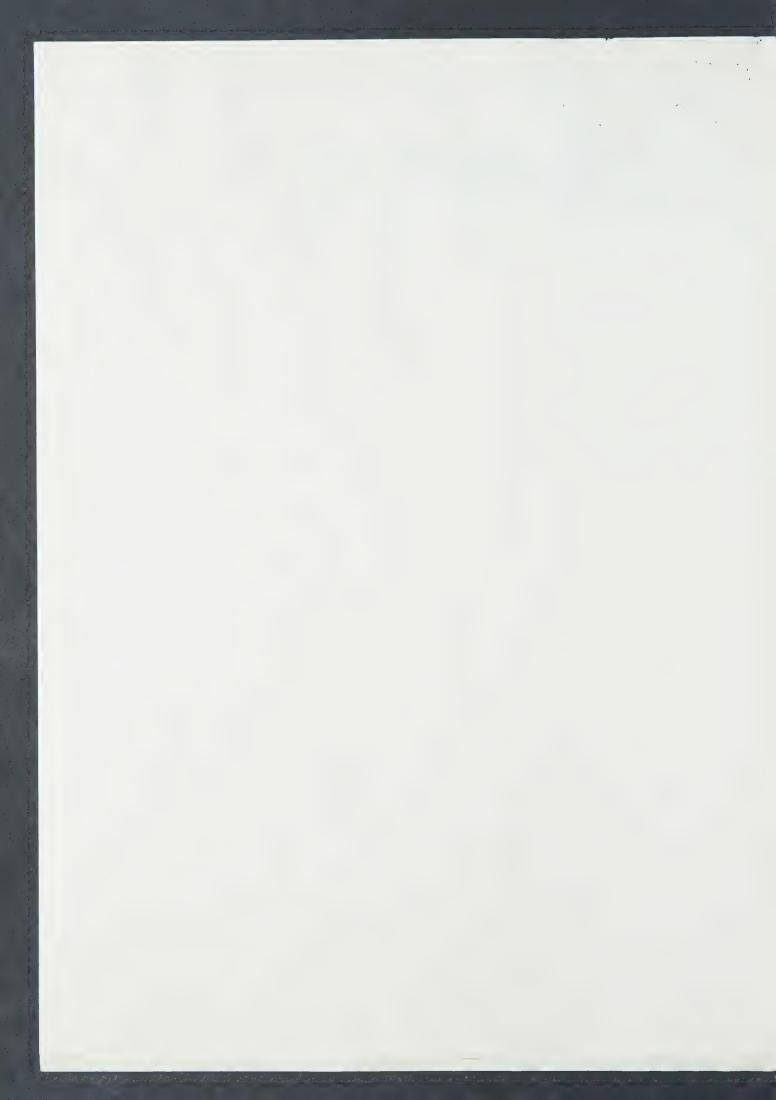
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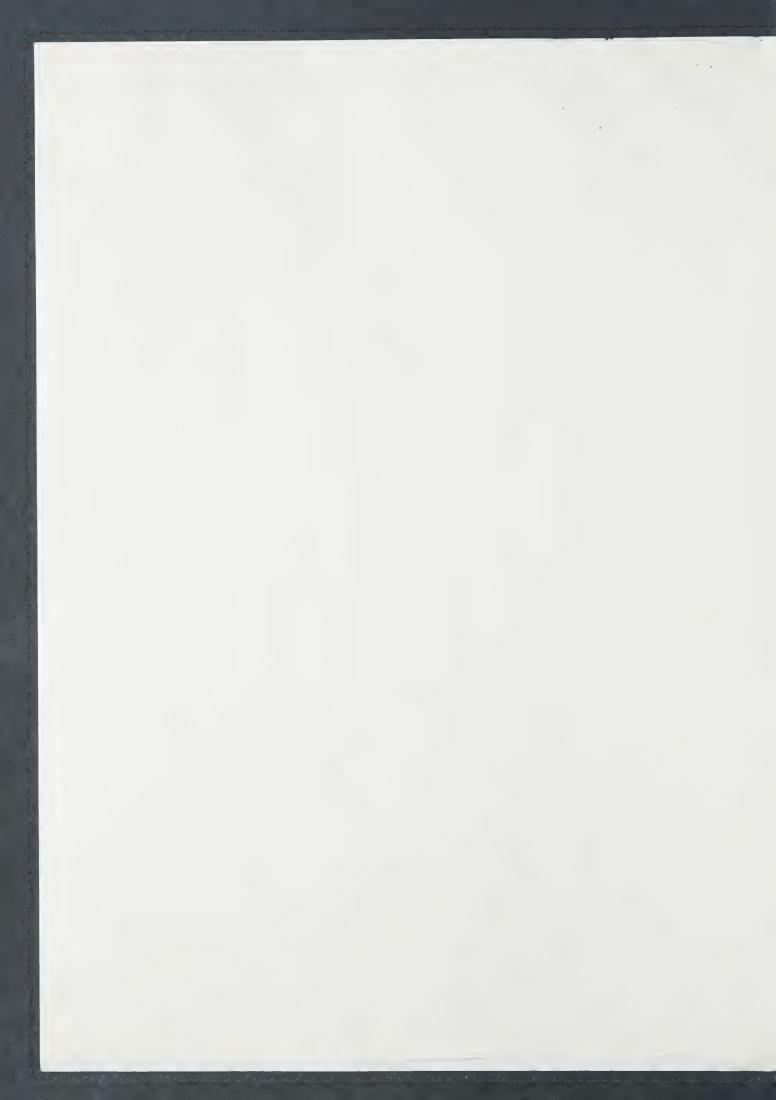
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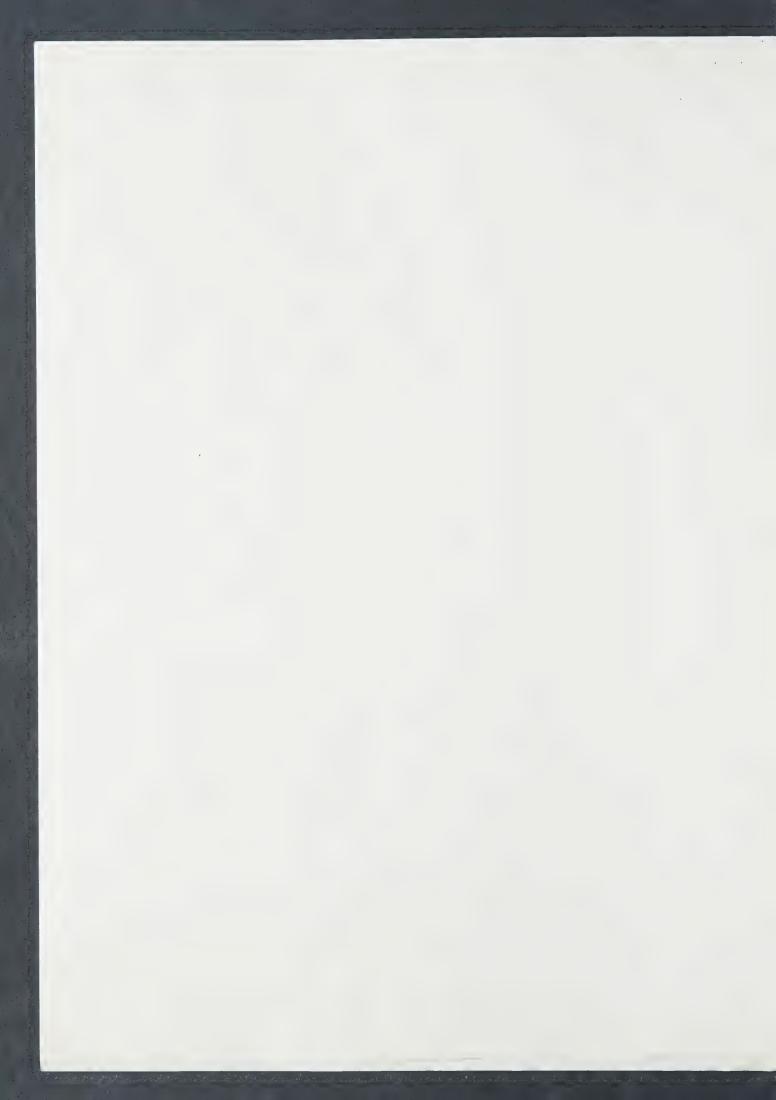




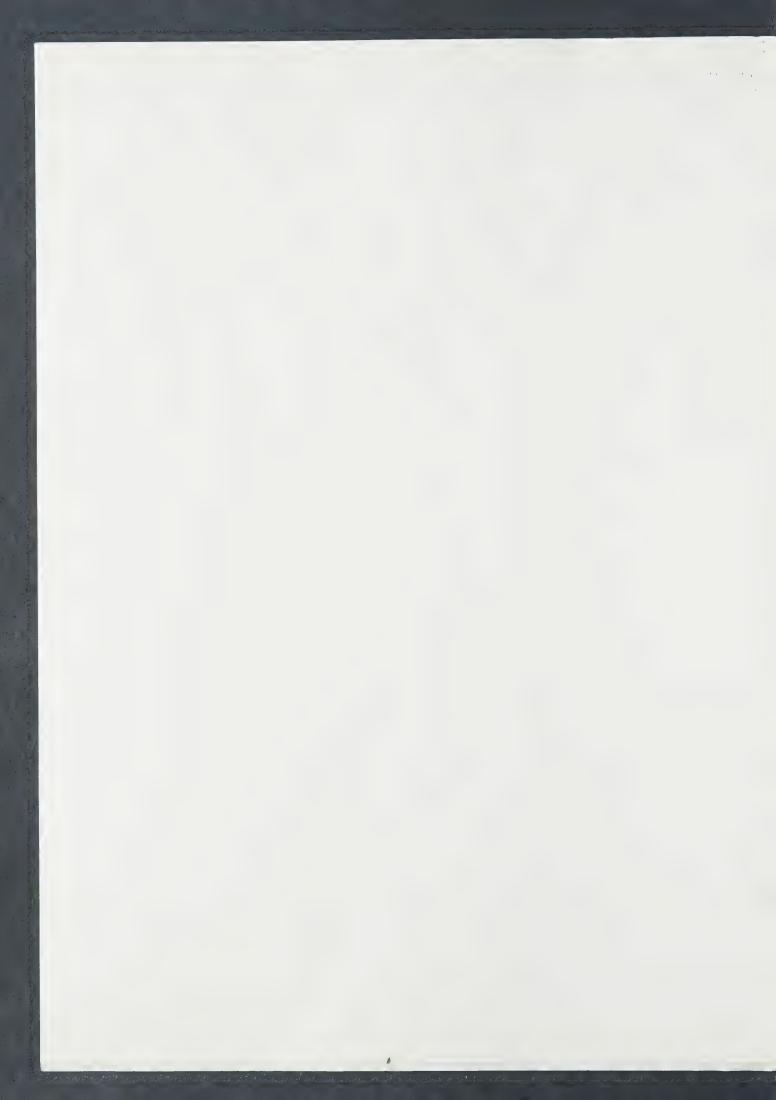


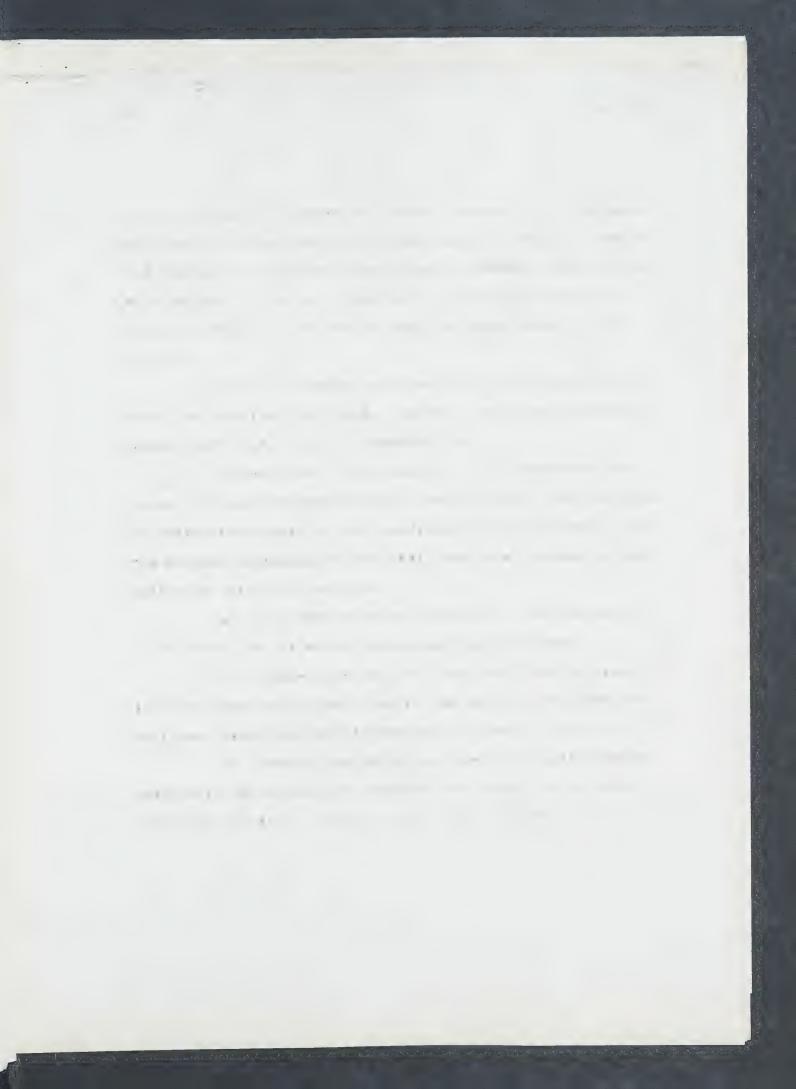
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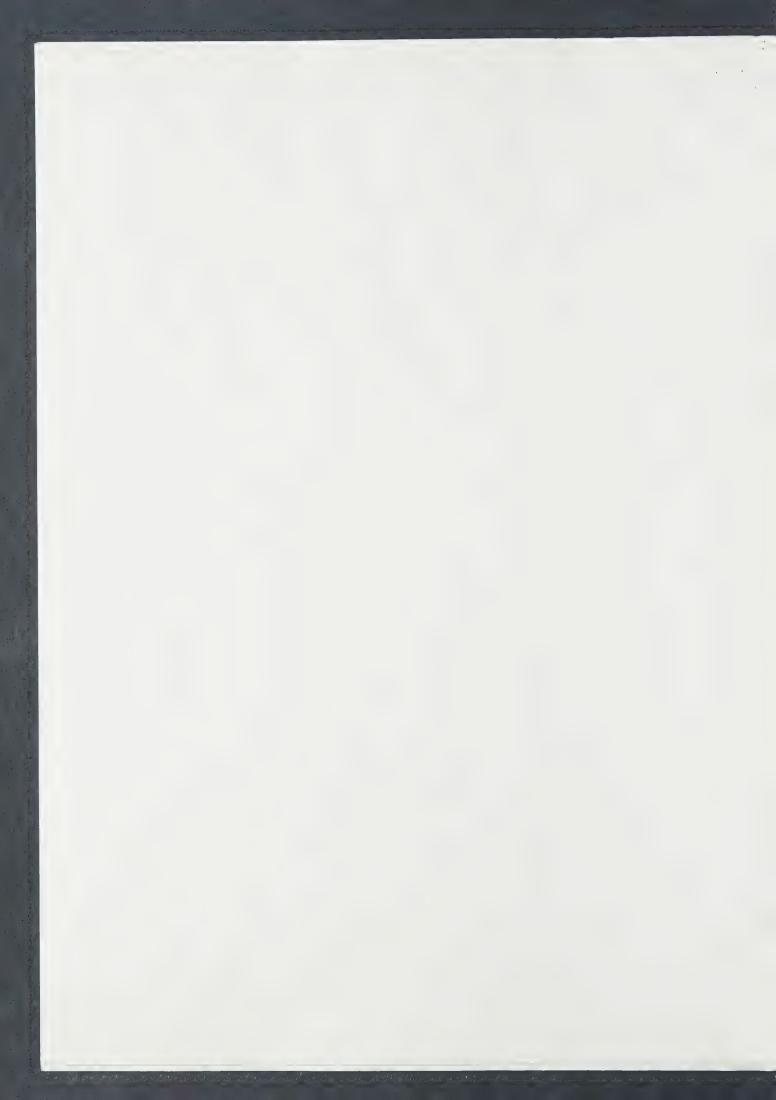




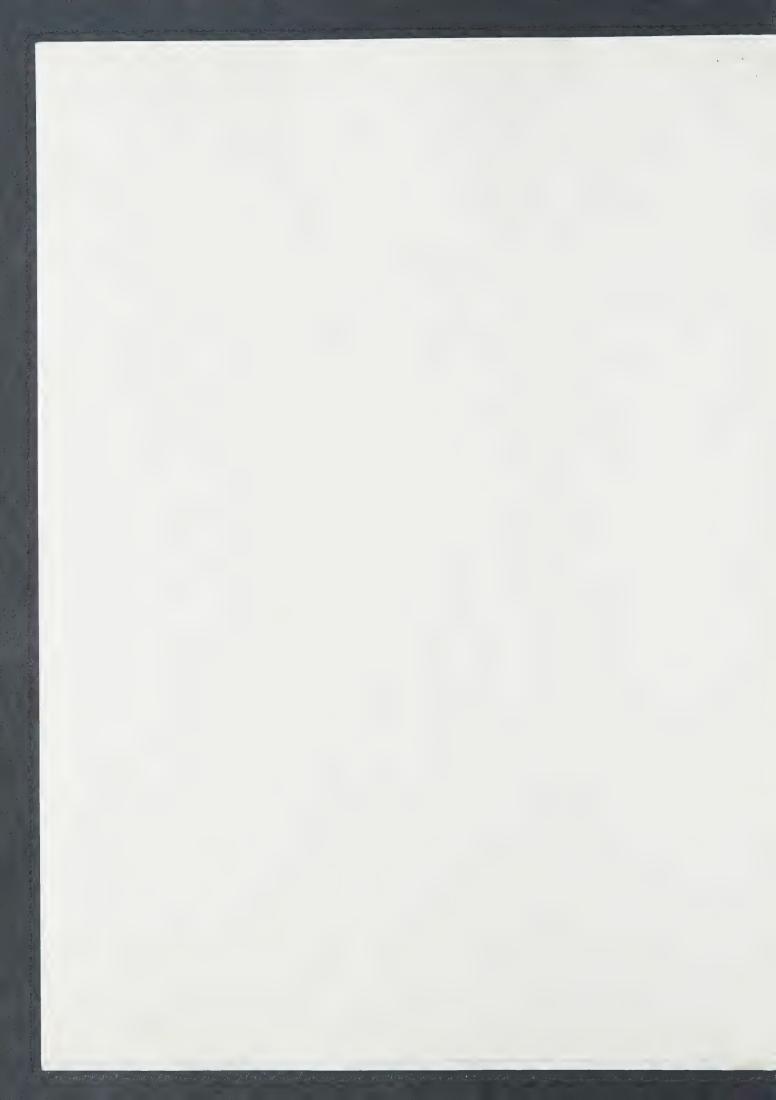
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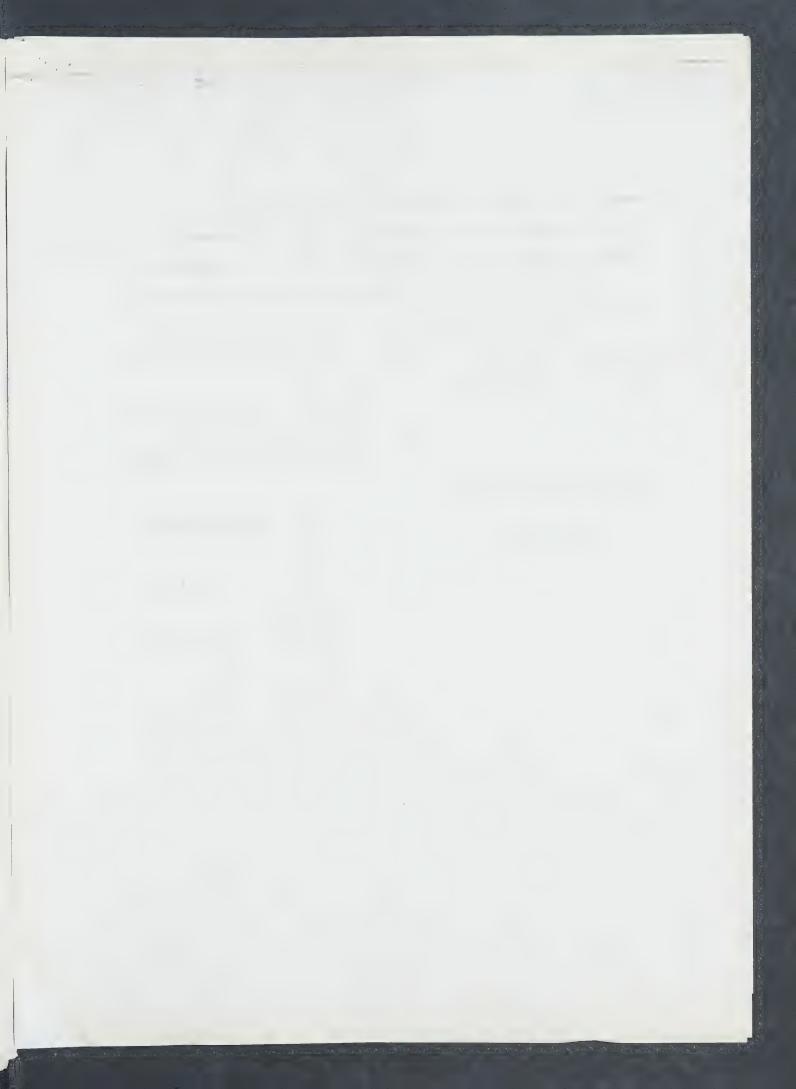




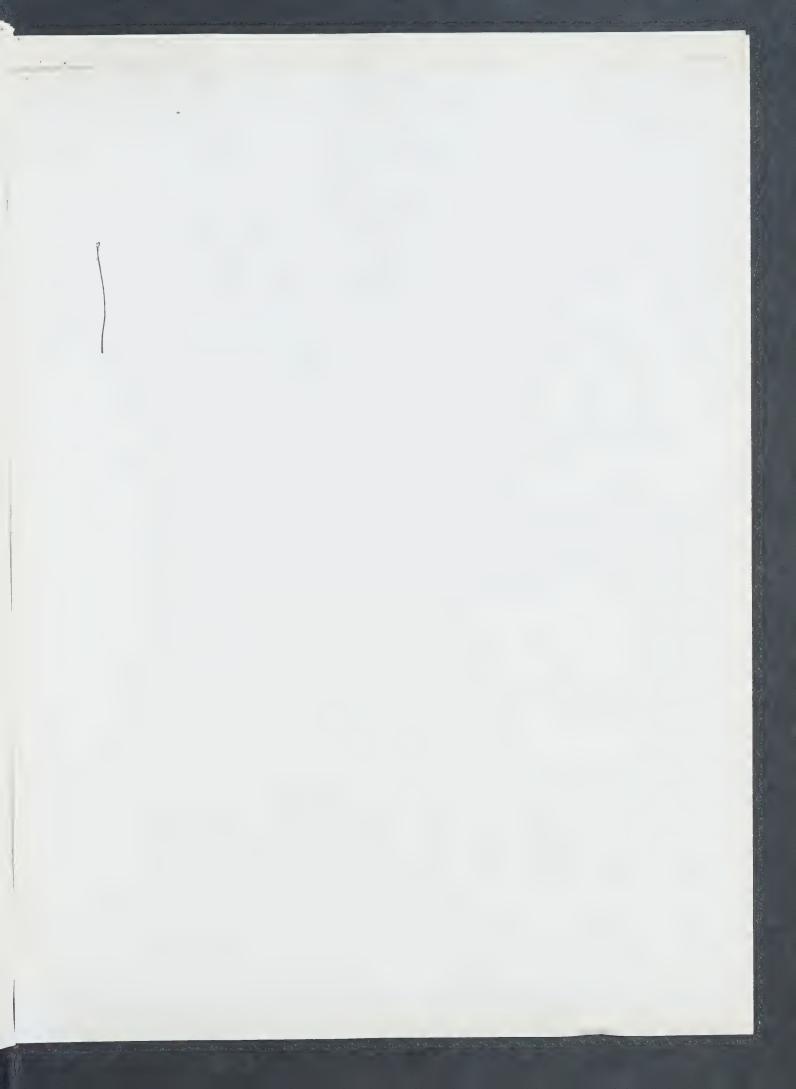


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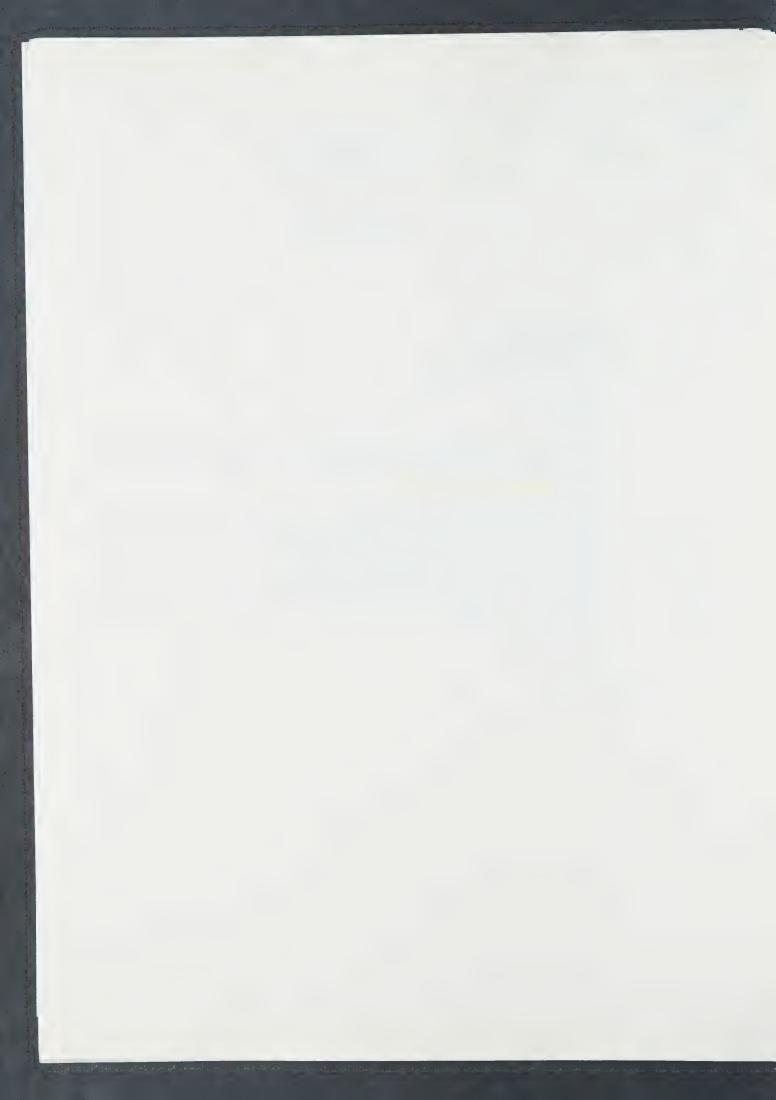








Dr. Alfred Bader 2961 North Shepard Avenue Milwaukee, Wisconsin 53211 1 810 0070 February 26, 1993 Dr. Marvin Sternfeld Research Organics, Inc. 4353 East 49th Street Cleveland, Ohio 44125 1083 Dear Marvin: Isabel and I look forward to being in Cleveland between the 13th and 15th of April, and I would very much like to have a chance to visit with you, if convenient, the morning of Wednesday the 14th. I am just working on my autobiography, much of which deals with Sigma and Aldrich. I am writing about the way you were treated and your lawsuit, and want to make certain that what I write is factually correct. Could you please supply me with the details, perhaps best with the complaint filed by your attorney. Also, I would like to mention my discovery years later that you were not paid for all the royalties due to you and would appreciate the amounts and dates. Have you been treated correctly recently? All good wishes. Sincerely,



Dr. Alfred Bader 2961 North Shepard Avenue Milwaukee, Wisconsin 53211

April 19, 1993

Dr. Barry Jacobson Ricerca, Inc. 7528 Auburn Road Painesville, Ohio 44077

Dear Dr. Jacobson:

Isabel and I so enjoyed being with you last week.

I trust that the enclosed correspondence regarding expenses will be self-explanatory.

Best wishes.

Sincerely,

Enclosures



Ricera, Inc.
7528 Burona Bood
P.O. Box 1000
Painewrille. Oh 44077-1000

Dear An Bader:

I have inclosed for the No of section

your reimbursement of fifty do line Who wish to thanh you and your wife for the wish to thanh you and your wife for the wish Your lecture was very interesting and visit Your lecture was very interesting and I wish to thank you for sharing your

interest and knowledge in this area

Kust Frantases Treasures. NE Theo BES section





# American Chemical Society Northeastern Ohio Section

002 Officers

1993 Officers

CHAIRMAN Barry Jacobson Ricerca, Inc. 7528 Auburn Road P.O. Box 1000 Painesville, Ohio 44077 216/357-3220

CHAIRMAN-ELECT Thomas Magee Ricerca, Inc. 7528 Aubum Road P.O. Box 1000 Painesville, Ohio 44077 216/357-3323

SECRETARY Susan Branchick Ricerca, Inc. 7528 Auburn Road P.O. Box 1000 Painesville, Ohio 44077 216/357-3462

TREASURER Kurt Huhtanen Ricerca, Inc. 7528 Auburn Road P.O. Box 1000 Painesville, Ohio 44077 216/357-3356 March 11, 1993

Dr. Alfred R. Bader 2961 North Shepard Ave. Milwaukee, WI 53211

Dear Dr. Bader:

Thank you for your letter of March 2. Although a few of the older members of the section do recall your talk, in the last five years there has been a very large turnover in section membership, especially the active membership, so the section's executive committee still believes there will be a much larger audience for "The Adventures of a Chemist Collector" than for your other talks.

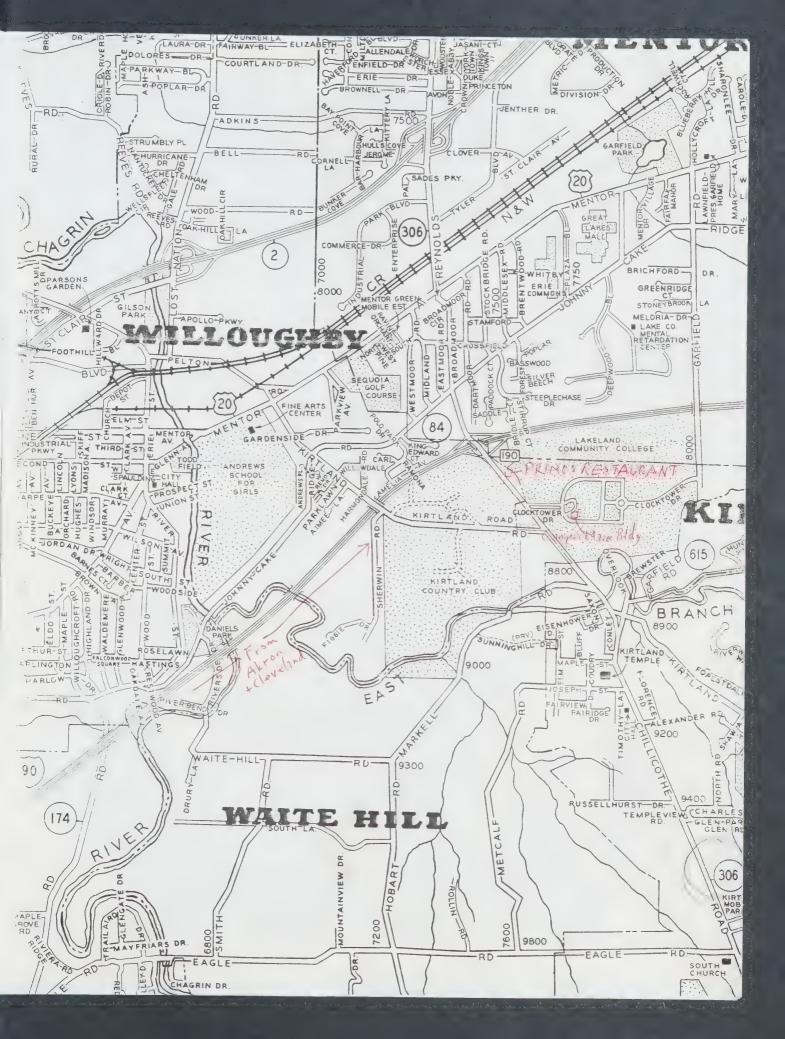
A map is enclosed of the routes to the restaurant where we will have dinner and to the Lakeland Community College site where the talk will be given. I do not know the room number yet for the talk, but will send that along as soon as I have it. The dinner reservations are for 5:30 P.M. If you would prefer to be picked up before dinner, that can also be arranged.

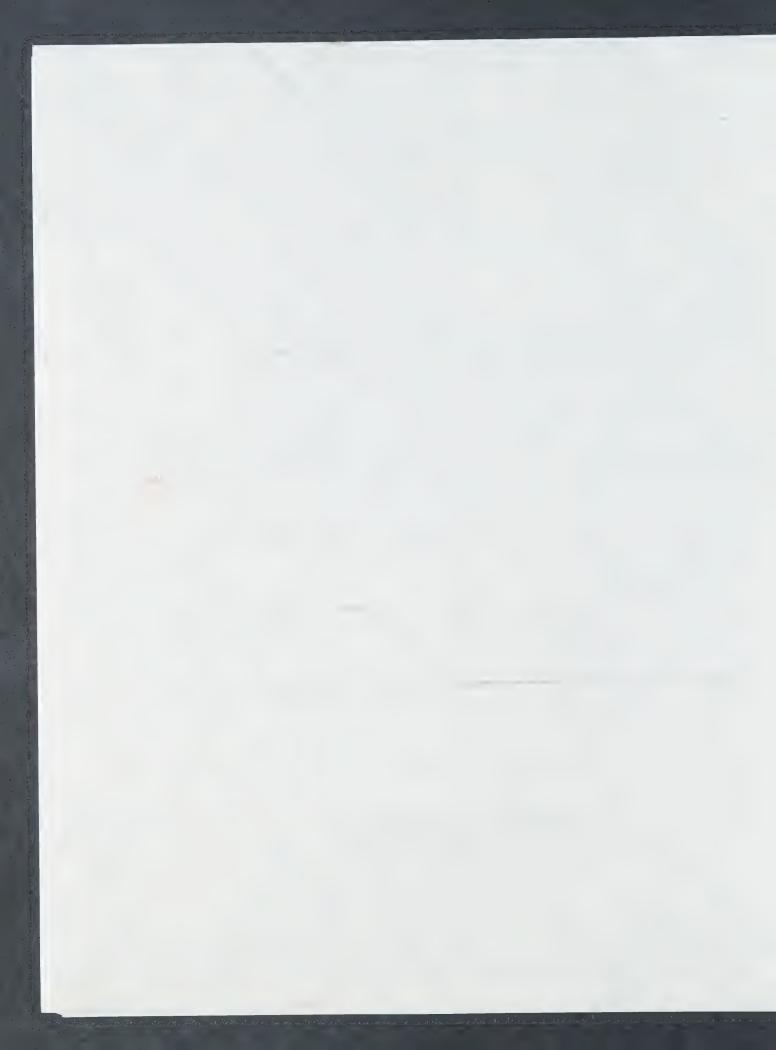
Very truly yours,

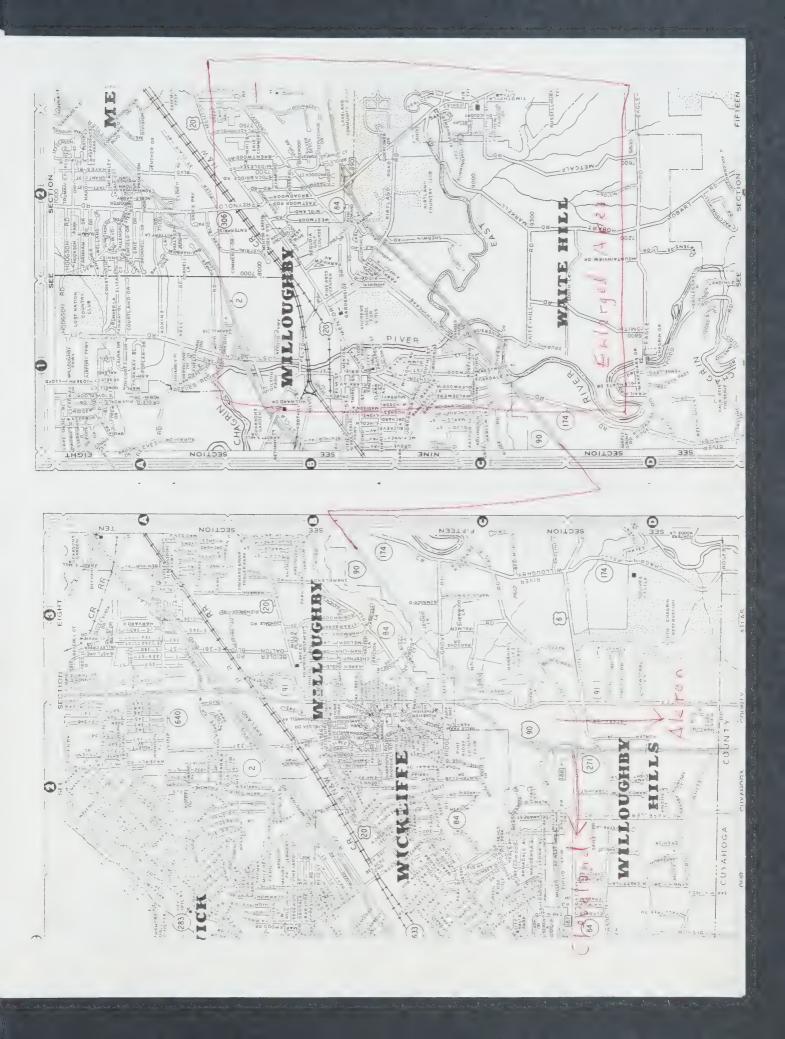
Barry M. Jacobson

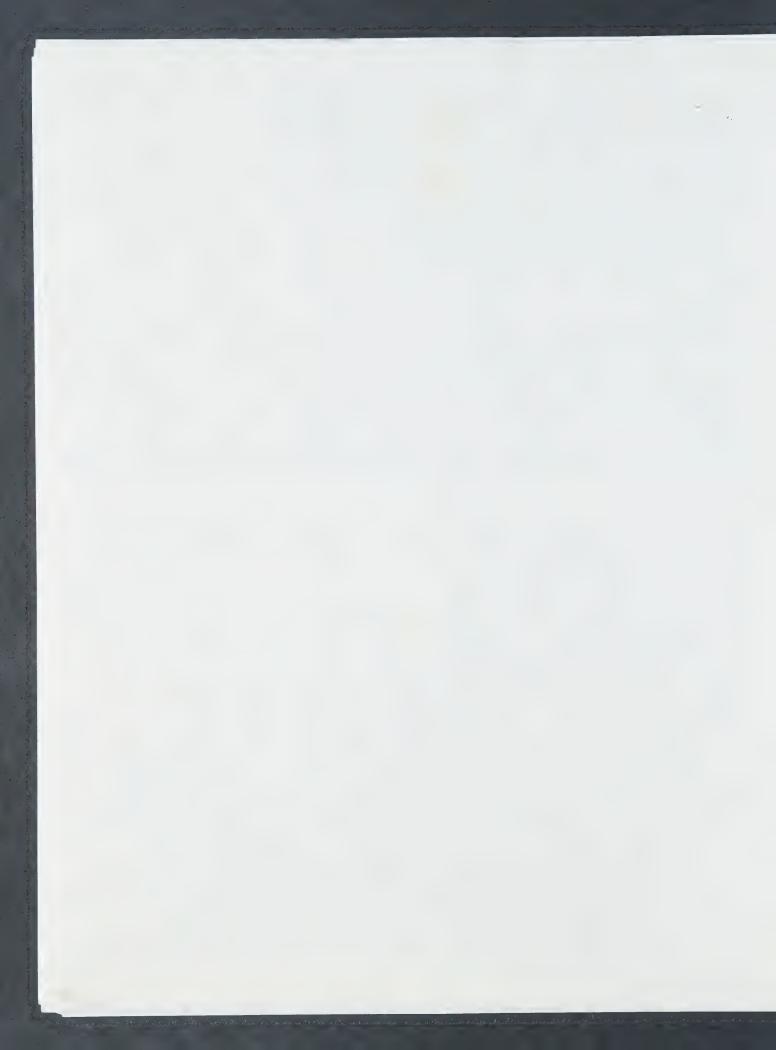
Chairman, N.E.O section A.C.S.











Dr. Alfred Bader 2961 North Shepard Avenue Milwaukee, Wisconsin 53211

March 2, 1993

Dr. Barry M. Jacobson Ricerca, Inc. 7528 Auburn Road P.O. Box 1000 Painesville, Ohio 44077

Dear Dr. Jacobson:

My wife and I look forward to being with you on Wednesday evening, April 14th, and we will be happy to join you for dinner. We will be driving, and I would appreciate your sending me a map showing where we should be, when.

Of course I could give the talk "The Adventures of a Chemist Collector", but you should know that I gave this talk to your section some years ago. Perhaps a better talk, and certainly of interest to every chemist, is the talk entitled "Josef Loschmidt-The Father of Molecular Modelling." In a way, this is very much a detective story, and even non-chemists would be interested.

I enclose abstracts of both, and for each talk I will need two projectors and either one large screen or two small screens to show two slides simultaneously. We will bring our packed Kodak Carousels.

There will be no need for motel reservations.

Many thanks.

Sincerely,

Enclosures





## American Chemical Society Northeastern Ohio Section

## 1993 Officers

CHAIRMAN Barry Jacobson Ricerca, Inc.

7528 Auburn Road P.O. Box 1000 Painesville, Ohio 44077 216/357-3220

## CHAIRMAN-ELECT

Thomas Magee Ricerca, Inc. 7528 Auburn Road P.O. Box 1000 Painesville, Ohio 44077 216/357-3323

#### SECRETARY Susan Branchi

Susan Branchick Ricerca, Inc. 7528 Auburn Road P.O. Box 1000 Painesville, Ohio 44077 216/357-3462

#### TREASURER

Kurt Huhtanen Ricerca, Inc. 7528 Auburn Road P.O. Box 1000 Painesville, Ohio 44077 216/357-3356 February 26, 1993

Dr. Alfred R. Bader 2961 North Shepard Ave. Milwaukee, WI 53211

Dear Dr. Bader:

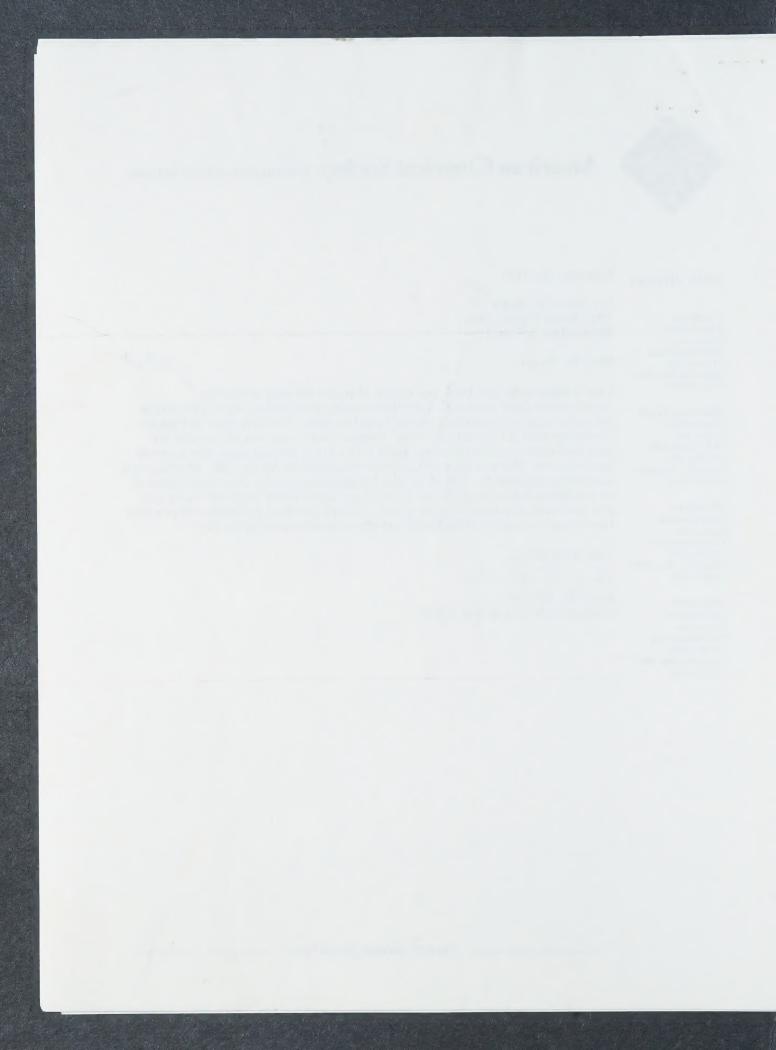
I am writing to let you know our choice of topics for your talk at the Northeastern Ohio local A.C.S. section meeting Wednesday, April 14th and to ask about other arrangements we will need to make. I believe your talk on the "Adventures of a Chemist-Collector" is most likely to attract the section; we have had better attendance at meetings with a more general topic than a purely chemical one. We will have a slide projector available for the talk. Meetings are normally scheduled for 7:30 P.M., but I hope you would be able to join some of us for dinner beforehand. If you desire, I can make room reservations for you and your wife at a local lodge or motel. If there are other requirements you may have I can be reached at the letterhead phone number during the day.

, w.a.

Very truly yours,

Barry M. Jacobson

Chairman, N.E.O section A.C.S.



Subject: Neuberg

Date: Fri, 31 Mar 2000 22:43:57 +0200

From: "Robert Rosner" <robert.rosner@netway.at>
To: "Alfred Bader" <Baderfa@execpc.com>

### Lieber Alfred,

In Neuberg scheint das Hotel Post nicht mehr zu existieren.Im Gasthof Borkenkäfer wären in der Woche vom 4-11 Juni Zimmer frei. Alle Zimmer haben Shower und WC. Bitte sage mir für wann und für wieviel Nächte ich Zimmer reservieren lassen soll.Soll ich 3 Zimmer reservieren?

Heute habe ich Kopien von den 3 Briefen von Boltzmann an Loschmidt bekommen. Sie zeigen sehr eindrucksvoll, welchen großen Respekt Bolzmann für Loschmidt hatte. Den letzten Brief hat Loschmidt nicht mehr erhalten,der ist am Tag seines Todes abgeschickt worden. Falls Du die Kopien nicht schon hast, sende ich sie Dir nächste Woche.

Übrigens habe ich kürzlich Peter Marlis, den Urenkel von Benedikt Margulies in Hamburg, N.Y. ausfindig gemacht. Ich wollte wissen ob es in der Familie noch Korrespondenz von Loschmidt gibt. Er hat mir handschriftlich nur mit einem Satz mitgeteilt, daß er mir nicht helfen kann. Der Mann ist 87 und aus der Schrift habe ich den Eindruck, daß er vielleicht nicht mehr sehr gut beeinander ist. Ich habe ihm die Kopie eines Artikels in der Österreichischen Chemikerzeitung geschickt, in dem ich die Leistungen der Familie Margulies von 1847 bis 1938 für die Chemische Industrie gewürdigt habe. Er hat eigenartigerweis dazu überhaupt nicht Stellung genommen. Die Familie war wirklich sehr interessant. Die Söhne von B. Margulies hatten enge Verbindung zu Fritz Haber. Ich werde Dir auch eine Kopie schicken.

Mit herzlichen Grüßen Bobby

