

Alfred Bader

Queen's University

Correspondence and Chair
Holder Reports
2005

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August 11, 2005

Ms. Linda Kemp
Senior Awards Officer
Office of the University Registrar
Queen's University
Kingston, ON
CANADA K7L 3N6

Dear Ms. Kemp,

I still remember one day in 1944 waiting in the office of Dr. William McNeill, the Vice President and Treasurer of Queen's University, who had been most helpful to me. There I heard him really lighting into one of his associates who had paid a penny more per roll of toilet paper just purchased. How could he waste the University's money like that, Dr. McNeill asked.

I shudder to think what he would say about the numerous thank you letters you send to Isabel and me, copy of one enclosed. Each one costs the University \$1.45, as again you will see from the enclosed.

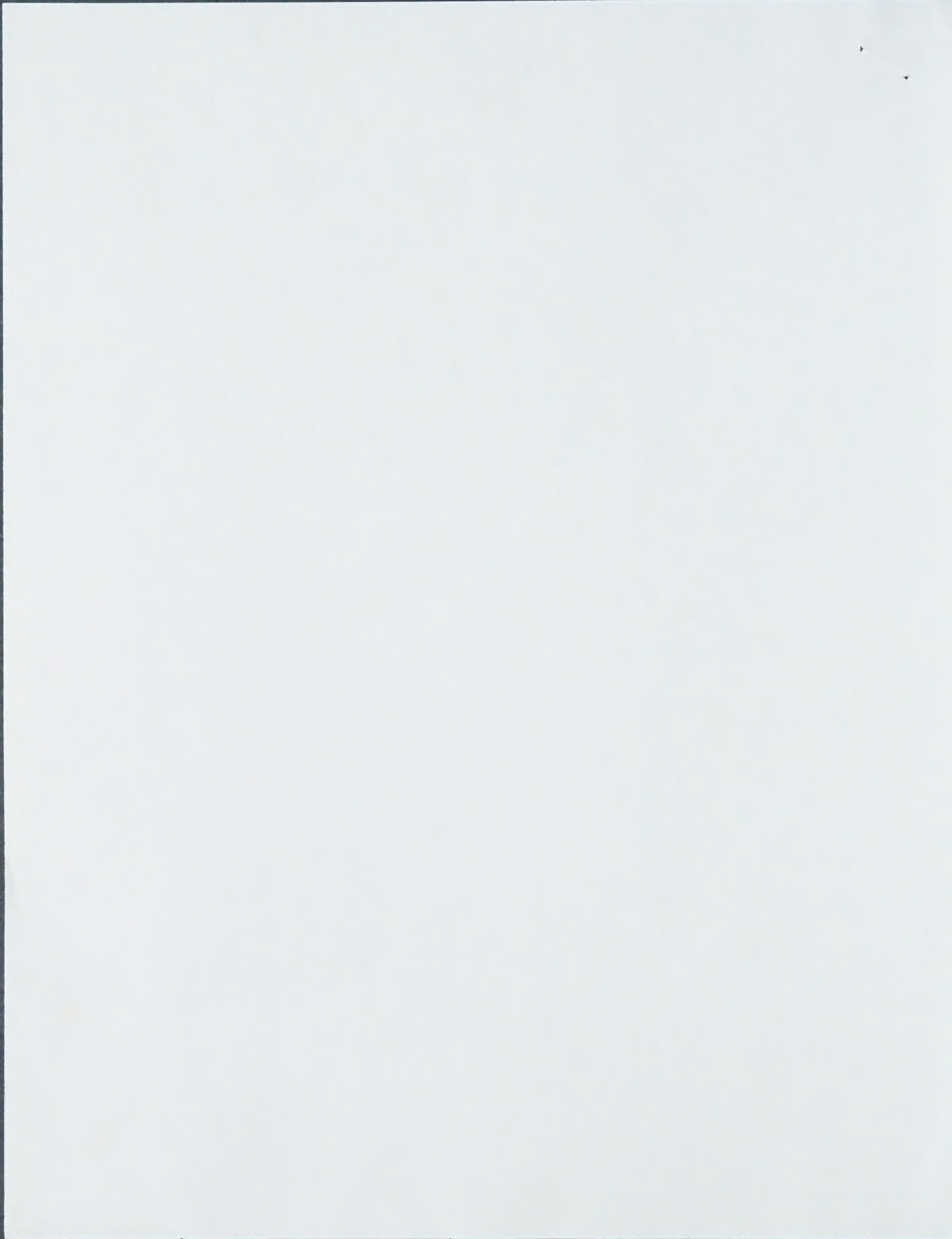
Please stop wasting the University's money and just give all of these thank you letters to Judith Brown, who will hand them to us with a smile when next she sees us.

My whole life has been guided by my education at a great Scottish university which taught me to be careful with money.

With best regards I remain

Yours sincerely,

Alfred Bader
AB/az
~~C.~~ Mrs. Judith Brown



89203



STUDENT AWARDS
OFFICE OF THE
UNIVERSITY REGISTRAR

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

5 August 2005

Dear Dr. Bader:

I am pleased to inform you that **the Martin Wolff Memorial Prize (840-892)** has been granted to *Mr Matthew Chase* for the 2005-2006 academic year.

Funding from donors makes it possible for Queen's to reward the achievements of our outstanding students each year. Students appreciate being recognized for their hard work and excellence. Further, the monetary value of an award does, in a practical sense, reduce the financial stress some students experience due to the costs associated with financing a university education.

On behalf of Queen's University I extend to you our sincerest gratitude for providing an opportunity to acknowledge and reward the accomplishments of our students.

Yours sincerely,

Linda Kemp
Senior Awards Officer
(Student Awards)

LDK/il





2005 Chair Holder Report

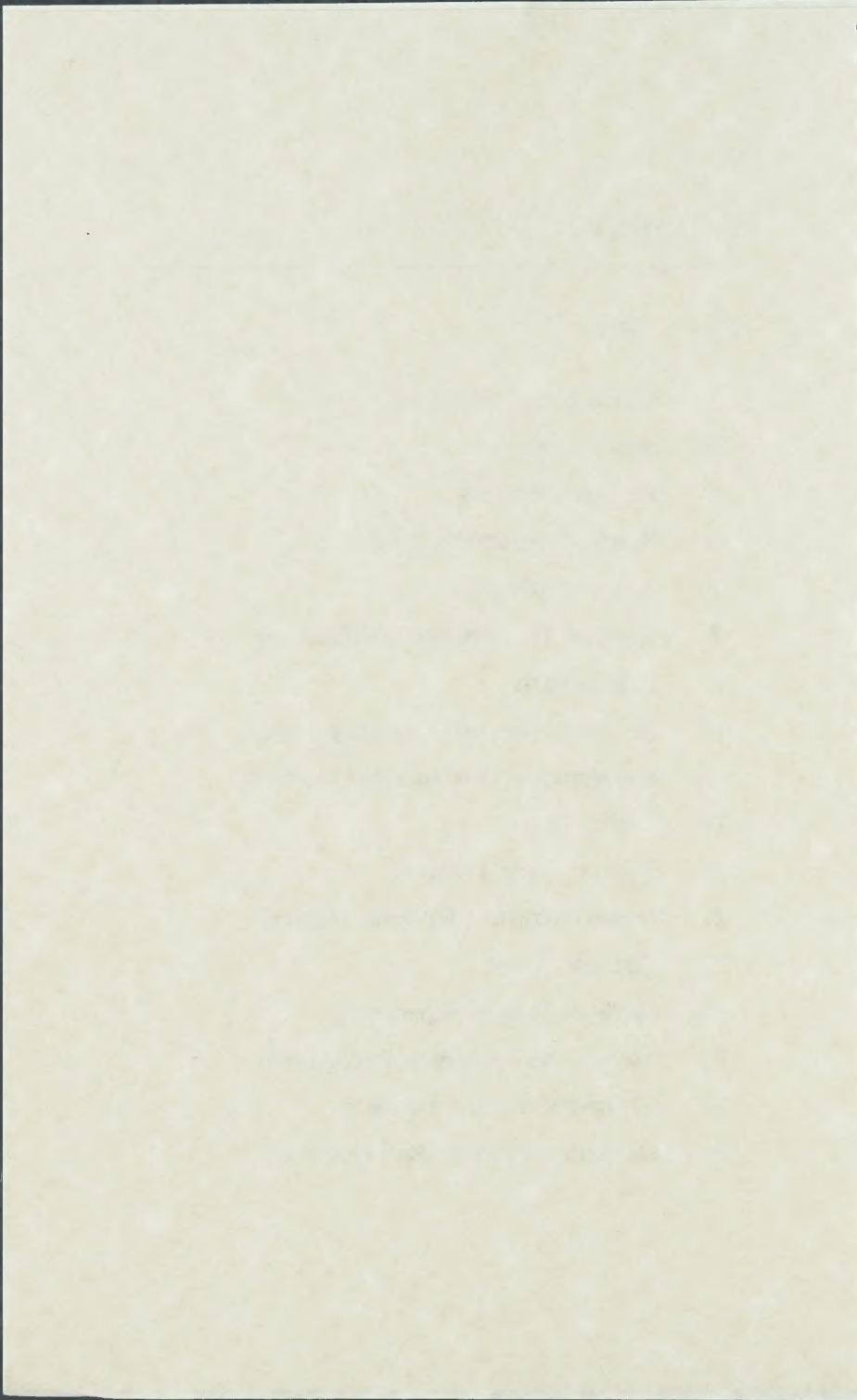


Dr. Victor Snieckus
Bader Chair in Organic
Chemistry

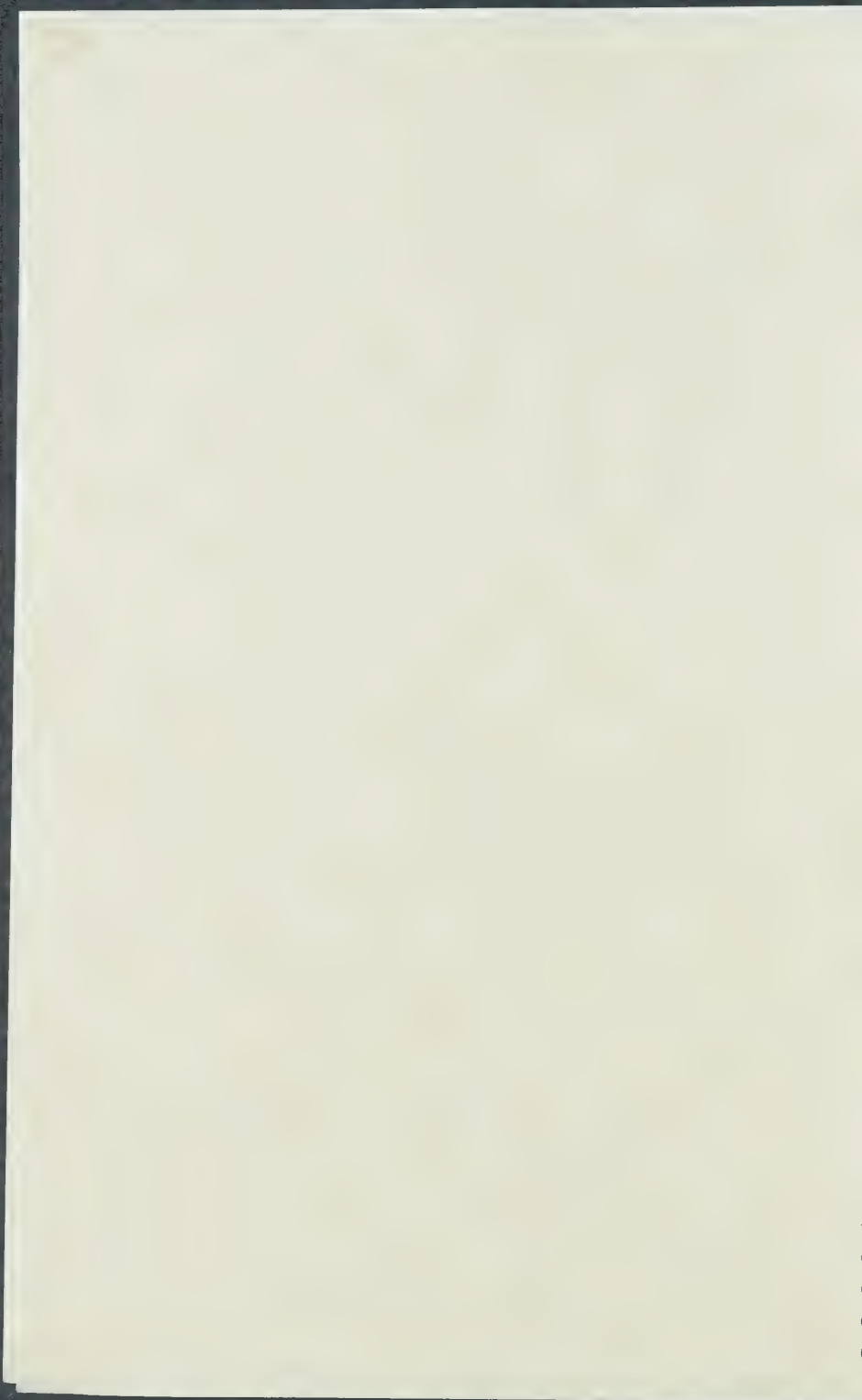


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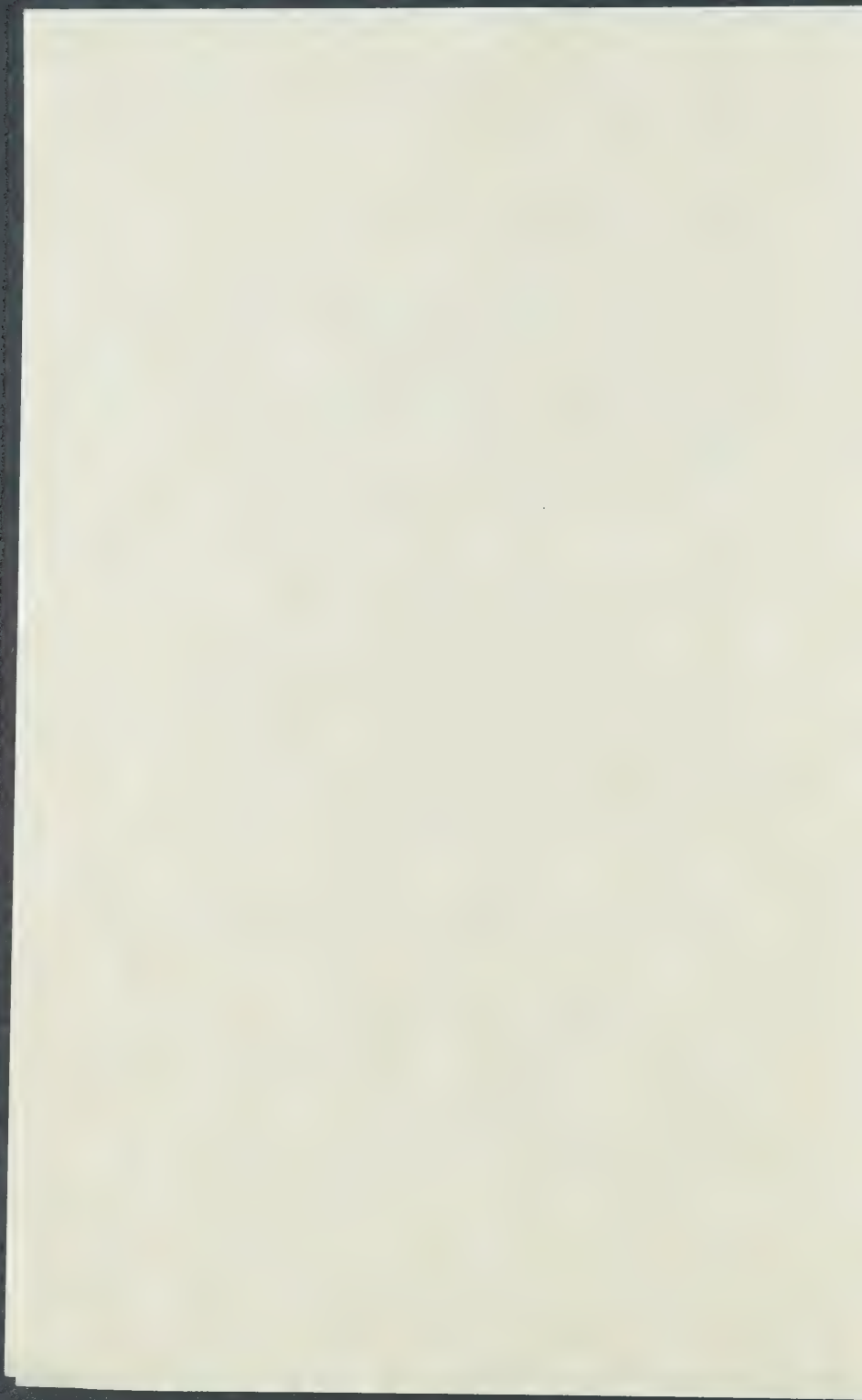
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Message from the Chair:

The year 2004-05 was marked by a number of exciting events, among which the celebration of the 80th Birthday of Alfred Bader was a highlight for Queen's University and the Department of Chemistry. At this Baderfest, two outstanding lectures were delivered by Professor Barry Sharpless (Nobel Prize recipient, 2001) and Professor Gilbert Stork, very old friends of Dr. Bader (see photo), and attracted full lecture theatre audience of students, faculty, and industrial colleagues including the President of Aldrich Canada, David Harvey. The event was reported by Linda Raber in the premier weekly journal of the American Chemical Society, *C & EN News*. At the end of the symposium, Dr. Bader showed delight with the presentation of bound book of letters of congratulation and wishes from friends, colleagues, and associates who were unable to attend and the announcement that a Special Issue of the *Canadian Journal of Chemistry* bearing a cover of Rembrandt's painting, *Old Man in a Cap*, which he had recently donated to Queen's will be published in 2006.

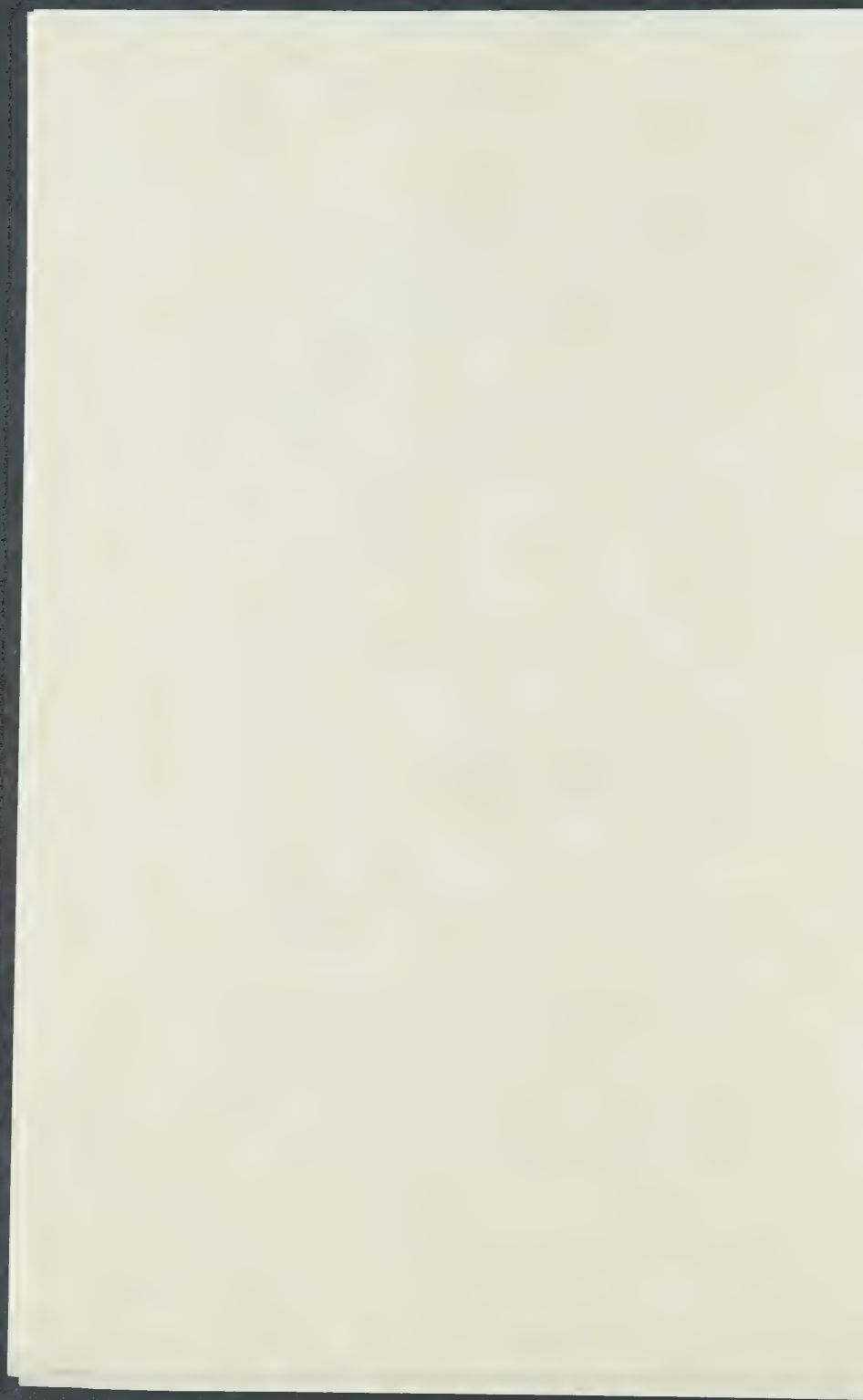
Teaching continues to be a strong commitment with the presentation of a new synthetic organic course in our curriculum to both undergraduate and graduate students. Research activities in the A(lfred) and B(ader) Labs are proceeding at increasingly productive levels with



15-20 students from diverse parts of the world involved in PhD, M.Sc, and post doctoral studies. Postdoctoral students continue to arrive with Fellowships awarded by highly competitive institutions (Humboldt, DAAD, NATO) and depart to enter industrial research scientist positions in Canada, US, and Europe. A significant pleasure has been witnessing the graduation of four M.Sc. and Ph.D. students two of which have initiated successful academic careers in Canadian universities while others have obtain research positions in Canadian and US pharmaceutical industry.

The group continues to thrive in weekly head butts (so named to imply, correctly, the manner in which problems are faced), Wednesday night Group Meetings, and occasional out-of-the-lab activities. Five undergraduates, both 4th Project and NSERC Undergraduate Summer Award students, have added to the enthusiastic atmosphere in the lab. All graduates, post docs, and undergraduates attended several conferences, most recently the American Chemical Society Regional Meeting, Rochester and SISOUM conference in Montreal.

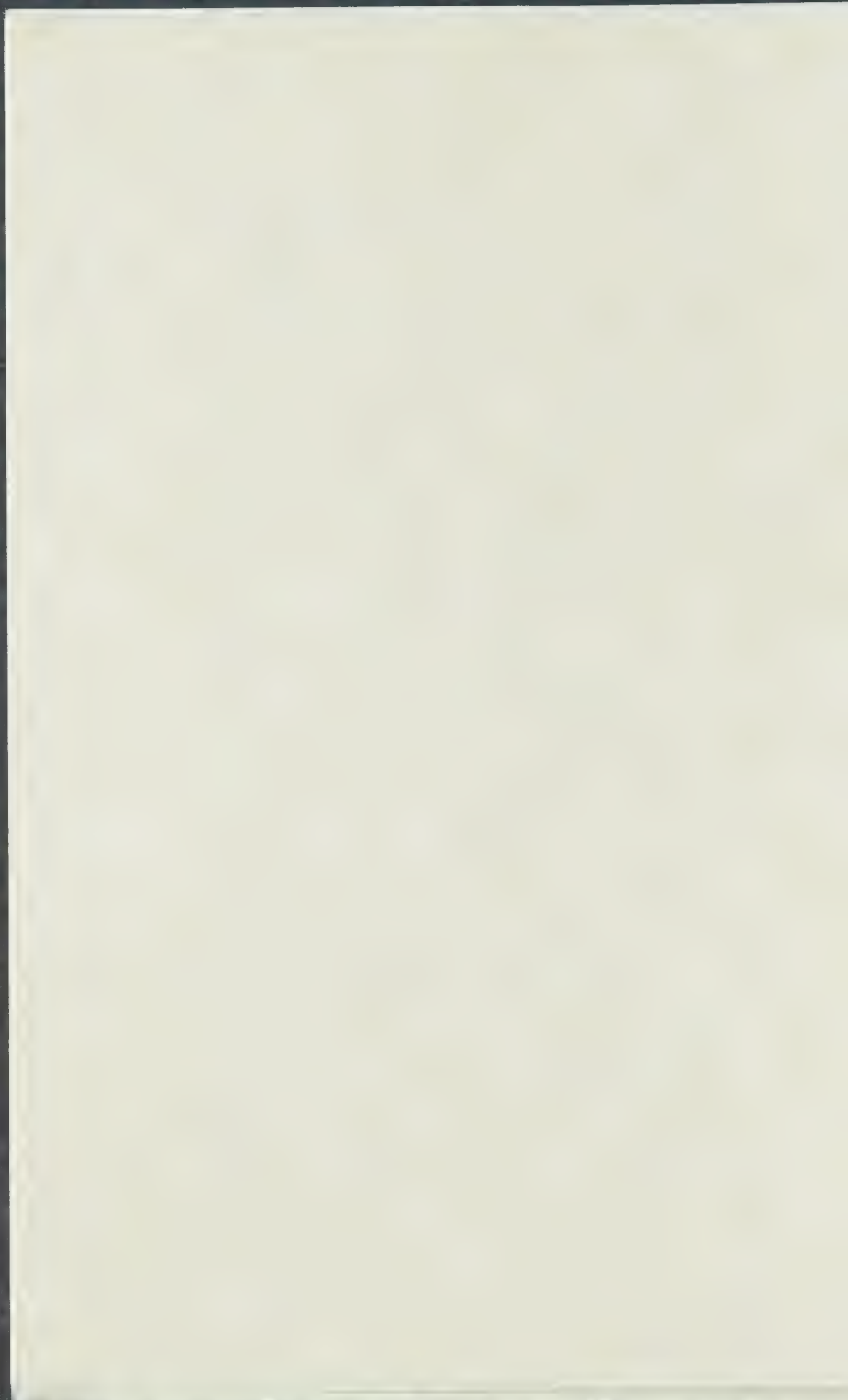
Major NSERC Grant renewal has been awarded and grant and contract research with several pharmaceutical industries are in progress. Fruitful collaboration with colleagues (Lemieux, R. Stan Brown) is in progress and has led to publications. New reactions are being discovered



and receive attention in industry as reliable methods for discovery and large-scale process synthesis of medicinal agents ("When we say, let's do it by Snieckus chemistry, we know exactly what that means" check *C & EN News*, 2004, 82, 49). These efforts have been published in 224 papers and 64 reviews; in the latter category, an update of our chemistry has received status as one of the top 50 prominent papers in synthetic chemistry.

The Bader Chair research programs continue to receive recognition by awards (Novartis Lectureship, Aventis Vision Lectureship and the Canadian Society of Chemistry Belleau Award), Plenary Lecture invitations, consultantships short course presentations at pharmaceutical companies in North America and Europe and organization of organic symposia (Canadian Society of Chemistry conferences, WCMBC and Balticum Organicum Syntheticum). The Belleau Award was a special honor since the outstanding named scientist was the discoverer of an anti-AIDS drug which is truly a Canadian success story and was responsible in large part for the return of the Chairholder to an academic position in his adopted home country.

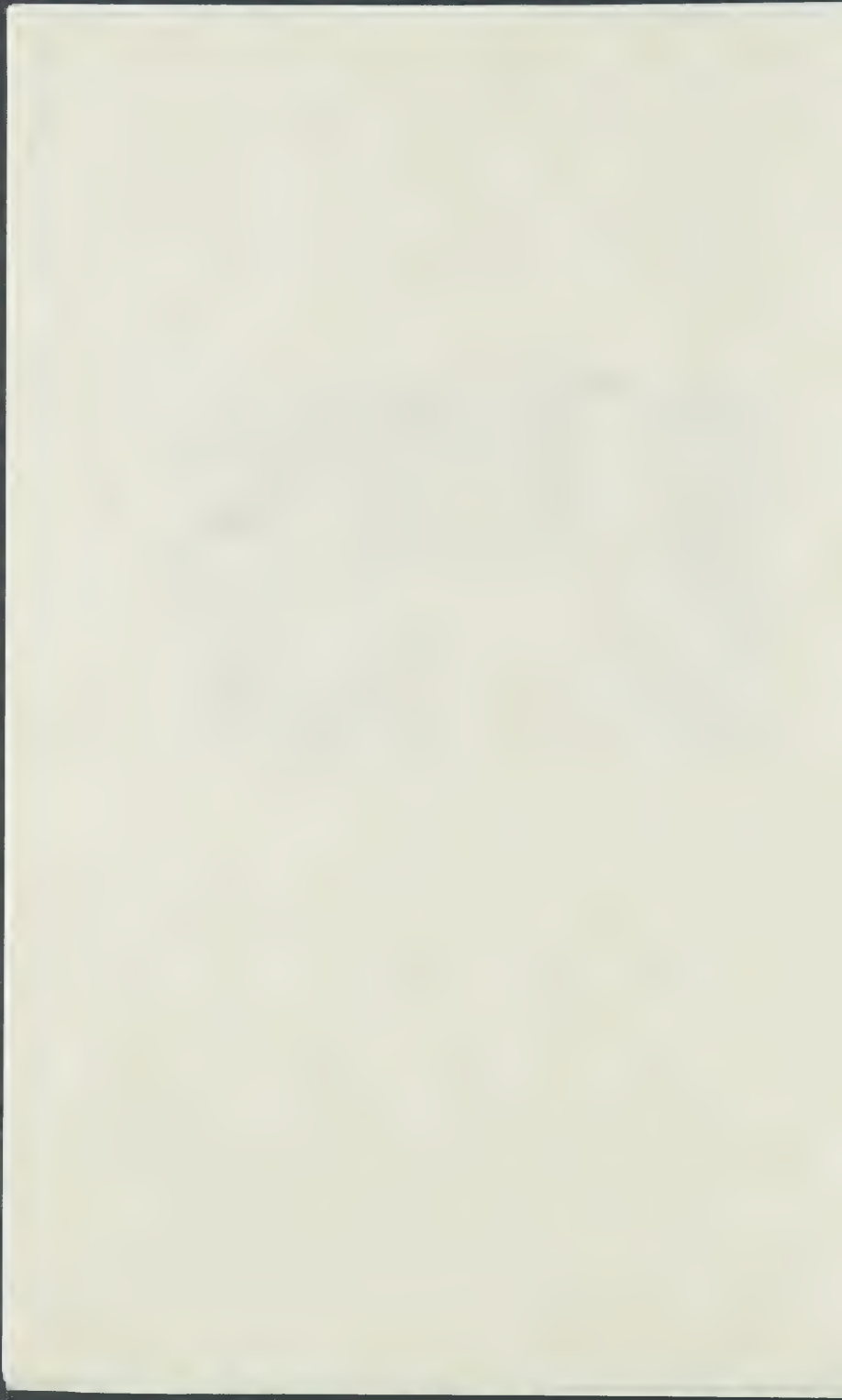
The addition of several bright young faculty members to our department will lead to further collaboration which hopefully will contribute to the recognition of the Department as an outstanding graduate program. Hence, to continue to carry out research and to teach as Bader Chair at Queens is a continuing privilege, honour, and delight. A final



highlight of the year was the birth of a son to the Chairholder's son, Darius.



Gazette, May 17 2004, p 3



Background:

B.Sc. (Honors), University of Alberta, 1959

M.Sc., University of California, Berkeley, 1961
(with D.S. Noyce)

Ph.D., University of Oregon, 1965 (with V.
Boekelheide)

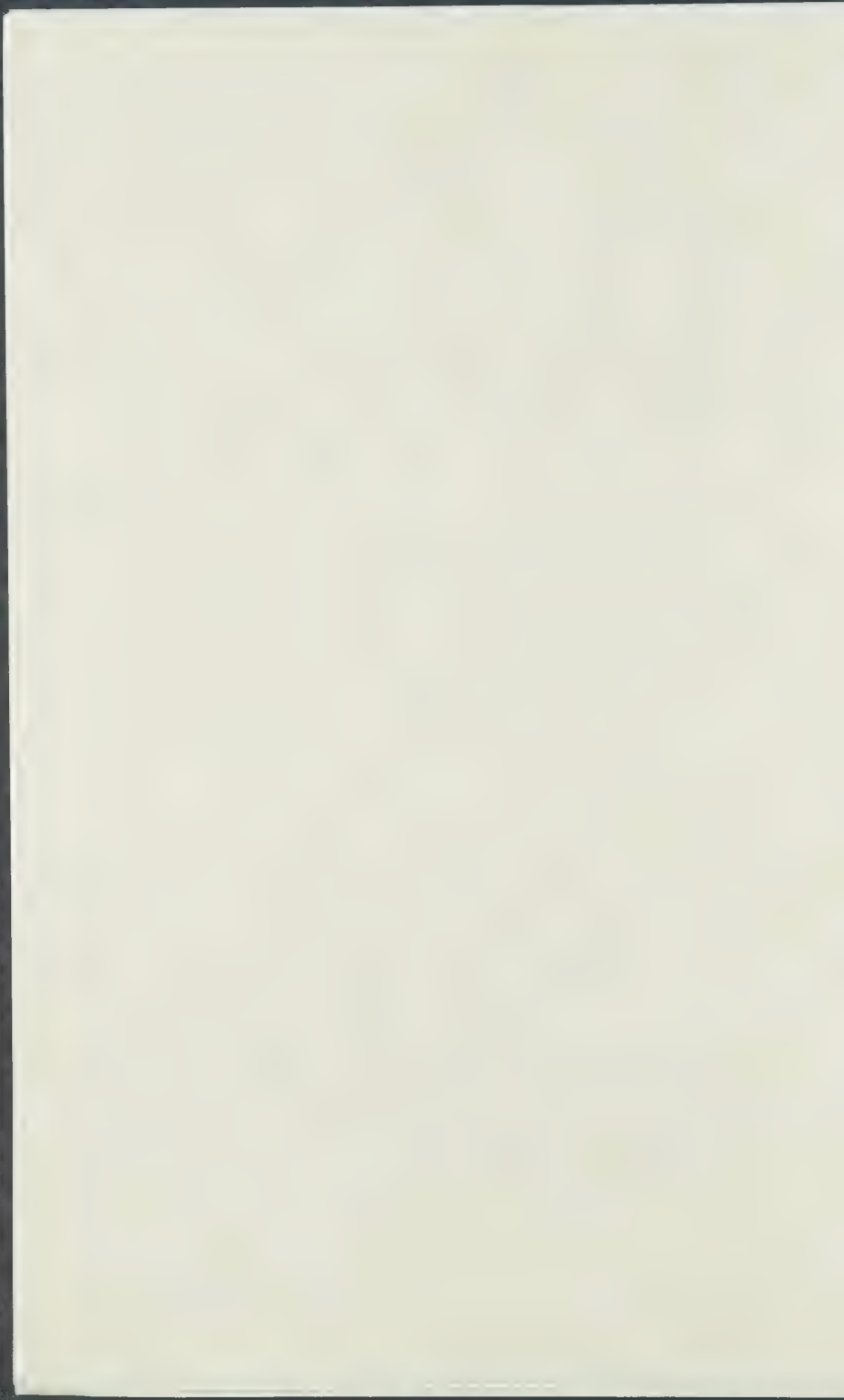
Postdoctoral, National Research Council, Ottawa,
1965-66 (with O.E. Edwards)

University of Waterloo:

- Assistant Professor, 1967-71
- Associate Professor, 1971-79
- Professor, 1979-92
- Monsanto/NSERC Ind Res Chair, 1992-98
- Queen's University, Bader Chair in Organic Chemistry, 1998-present

Research Interests:

New Synthetic methodology and strategy; construction of bioactive molecules, natural products and man-made materials; the Directed *ortho* and remote Metalation reactions (DoM, DreM); Aromatic carbanion chemistry; Transition metal catalyzed coupling reactions, notably cascade reactions (e.g. Heck, Grubbs metathesis); axially chiral biaryl and planar chiral ferrocene ligands for asymmetric organometallic catalysis; solid support DoM and cross coupling processes for scaffolds and small libraries of potential pharmaceuticals.



Research Grants Obtained:

<u>Agency</u>	<u>Amount</u>
Clariant	15,000 CDN
NSERC	112,000 CDN (5 years)
NATO	33,000 USD (2 years)
CFI	3,687,633 (3 years)
Merck Frosst Canada	15,000 CDN (3 years)
OSI Pharmaceuticals	40,000 USD

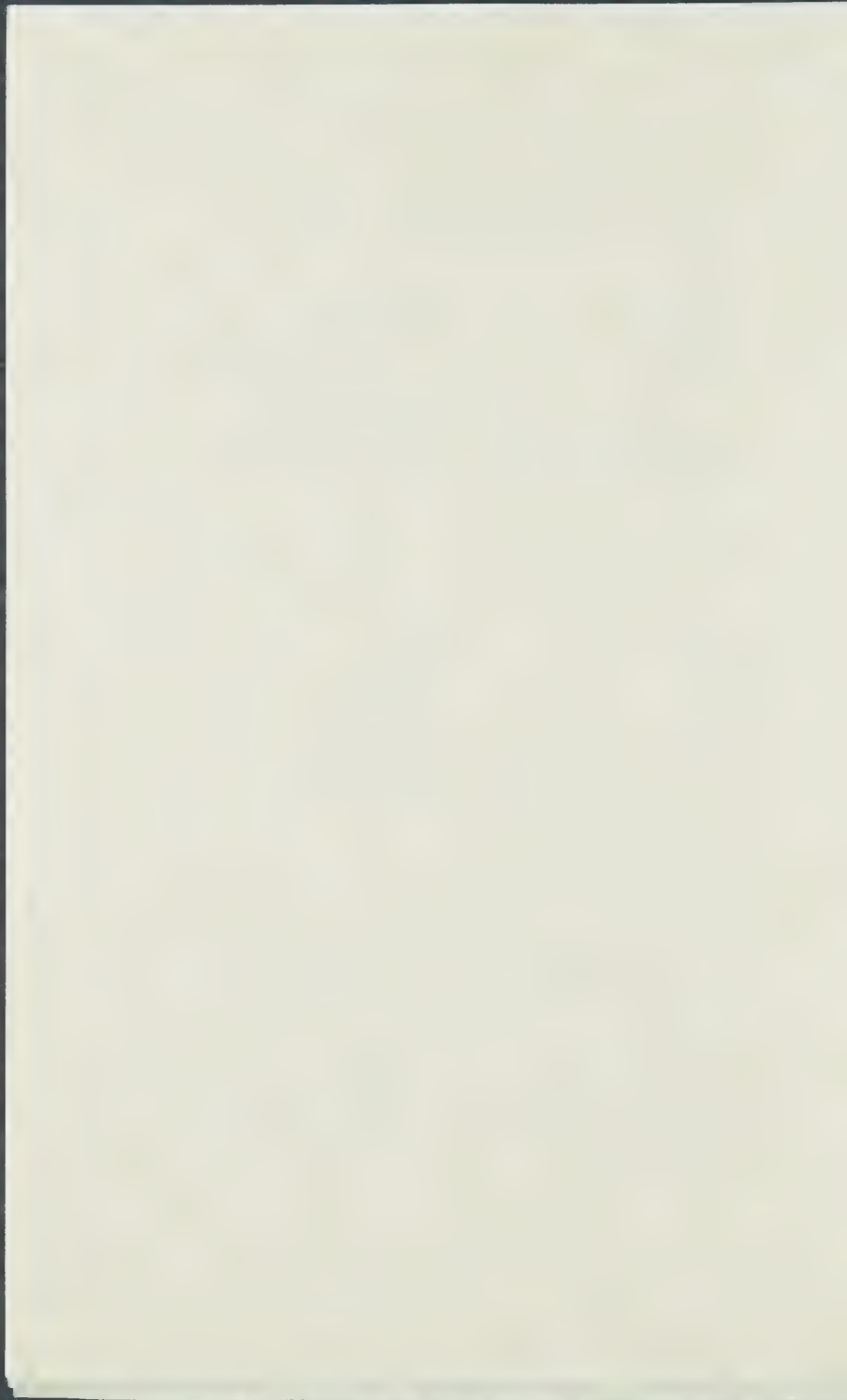
Grants (Applied for but not yet funded):

<u>Agency</u>	<u>Amount</u>
CNTC	50,000 CDN
Pharmacia	43,000 CDN
Solvay	30,000 CDN
CSC Enantioselective	30,000 CDN (2 years)
NIH	1,200,000USD

Research Presentations and Speaking Engagements:

Papers and Posters: Refereed Conference Proceedings

Stevenson, J., Jones, C., Snieckus, V. Directed ortho Metalation (DoM) of Naphthalene 1,8-bis(diethylamide): Research Towards Nerve Growth Factor Inhibitors, SOUSCC, Peterborough, Ontario, March 20, 2004.



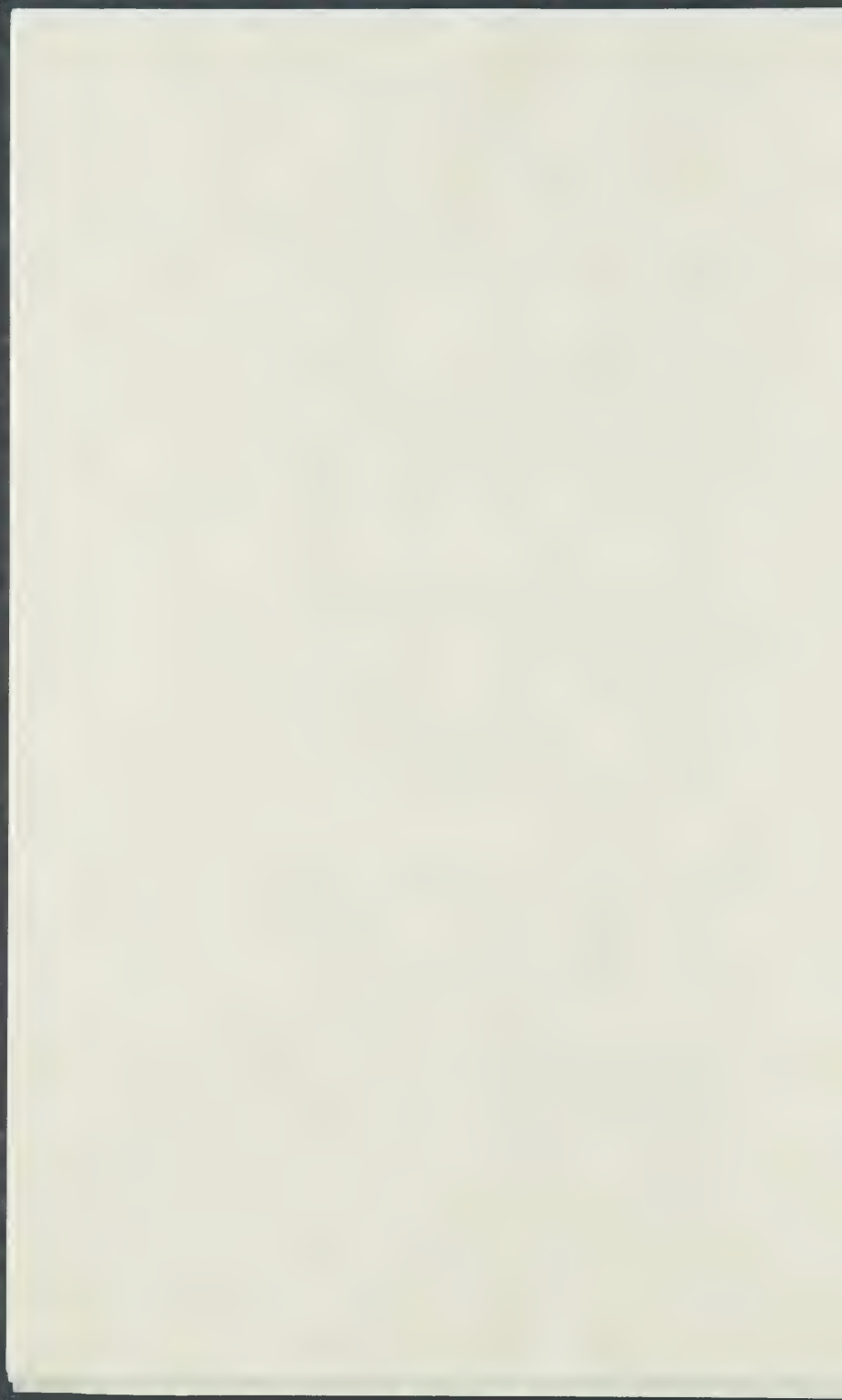
Research Presentations and Speaking Engagements (con't):

Cai, X., Snieckus, V. Combined Directed *ortho* and remote Metalation – Cross Coupling Strategies. General Methodology for Benzo[a]carbazoles and the Synthesis of an Unnamed Indolo[2,3-a]carbazole Alkaloid. 87th Canadian Chemistry Conference and Exhibition, London, Ontario, May 27-June 1, 2004.

E.J.-G. Anctil, O. Familoni, V. Snieckus. Synthetic Carbanionic Aromatic Chemistry. A General and Short Route to 2-Aryl-3-hydroxybenzofurans from Salicylamide Derivatives and its Application toward the Total Synthesis of Anigopressin A, 87th Canadian Chemistry Conference and Exhibition, London, Ontario, May 27-June 1, 2004.

Jones, C., Snieckus, V. Directed *ortho*-Metalation (DoM) of 1,8-Naphthalene Diamides, 87th Canadian Chemistry Conference and Exhibition, London, Ontario, May 27-June 1, 2004.

Jagusch, T., Snieckus, V. The NHBoc Directed Metalation Group for the Synthesis of Planar Chiral Ferrocenes, 87th Canadian Chemistry Conference and Exhibition, London, Ontario, May 27-June 1, 2004.



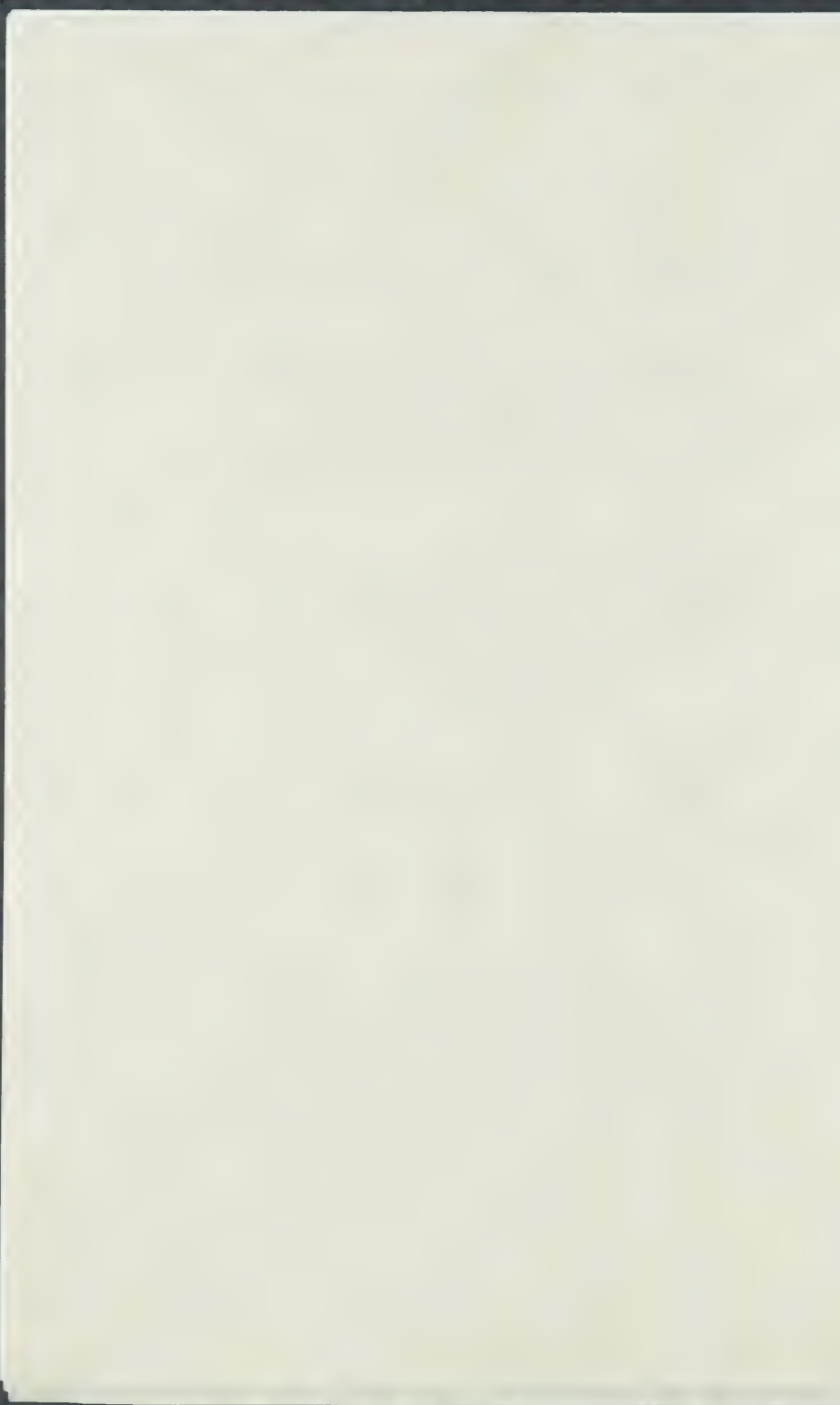
Research Presentations and Speaking Engagements (con't):

McCubbin, A., Lemieux, R., Zhao, Y., Snieckus, V. Synthesis and Characterization of Substituted Fluorene Liquid Crystals: The Effect of Stereopolar Coupling, 87th Canadian Chemistry Conference and Exhibition, London, Ontario, May 27-June 1, 2004.

Morin, J., Snieckus, V. Directed *ortho* Metalation (DoM) of Aryl O-Carbamates. New Synthetic Methodology for Substituted Naphthalenes, 87th Canadian Chemistry Conference and Exhibition, London, Ontario, May 27-June 1, 2004.

Lopez, S., Ogilvie, K., Alessi, M., Green, L., Snieckus, V. Directed *ortho* Metalation – Cross Coupling Connections. Regioselective Routes to Azabicyclics via Pyridyl Boronates, 87th Canadian Chemistry Conference and Exhibition, London, Ontario, May 27-June 1, 2004.

Zhao, Z., Snieckus, V. Directed *ortho* Metalation - Electrophile-Induced *Ips*-Desilylation Reactions. Towards Unconventional Aromatic Substitution Patterns, 87th Canadian Chemistry Conference and Exhibition, London, Ontario, May 27-June 1, 2004.



Research Presentations and Speaking Engagements (con't):

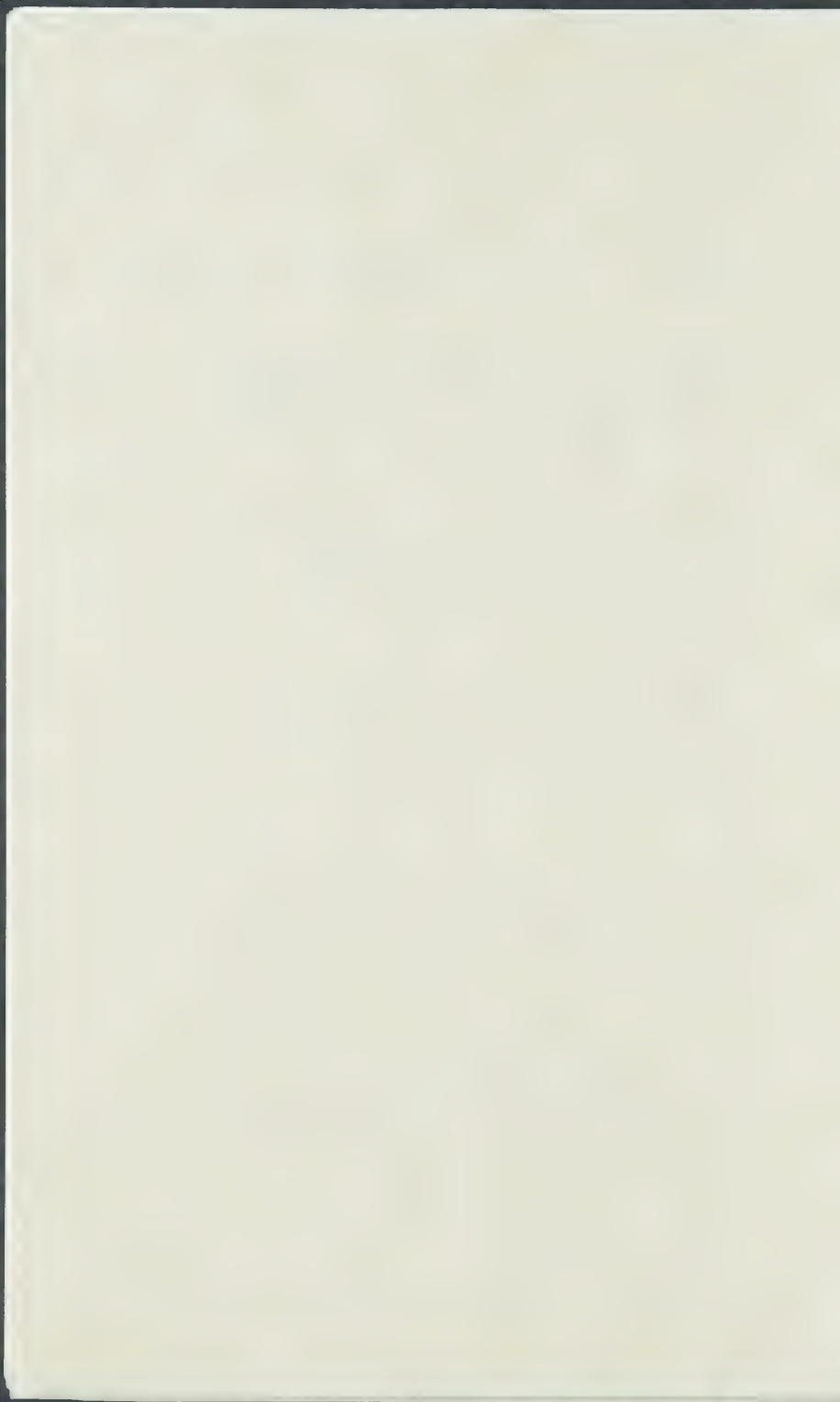
Snieckus, V. The Directed *ortho* Metalation – Cross Coupling Symbiosis in Aromatic Synthesis, 87th Canadian Chemistry Conference and Exhibition, London, Ontario, May 27-June 1, 2004.

Snieckus, V. Historical Footnotes to the Field of Organic Synthesis in the 20th Century. 87th Canadian Chemistry Conference and Exhibition, London, Ontario, May 27-June 1, 2004.

Macklin, T., Snieckus, V. Evaluation of the *N,N*-Diethylsulfamate as a New Latent *ortho* Directing Metalation Group. 7th International Symposium on Carbanion Chemistry, BOS 2004, Riga, Latvia, June 27-July 1, 2004.

Macklin, T., Snieckus, V. Evaluation of the *N,N*-Diethylsulfamate as a New Latent *ortho* Directing Metalation Group. 7th International Symposium on Carbanion Chemistry, Alicante, Spain, July 7-11, 2004.

Jones, C., Snieckus, V. Directed *ortho*-Metalation (DoM) of 1,8-Naphthalene Diamides. 7th International Symposium on Carbanion Chemistry, BOS 2004, Riga, Latvia, June 27-July 1, 2004.



Research Presentations and Speaking Engagements (con't):

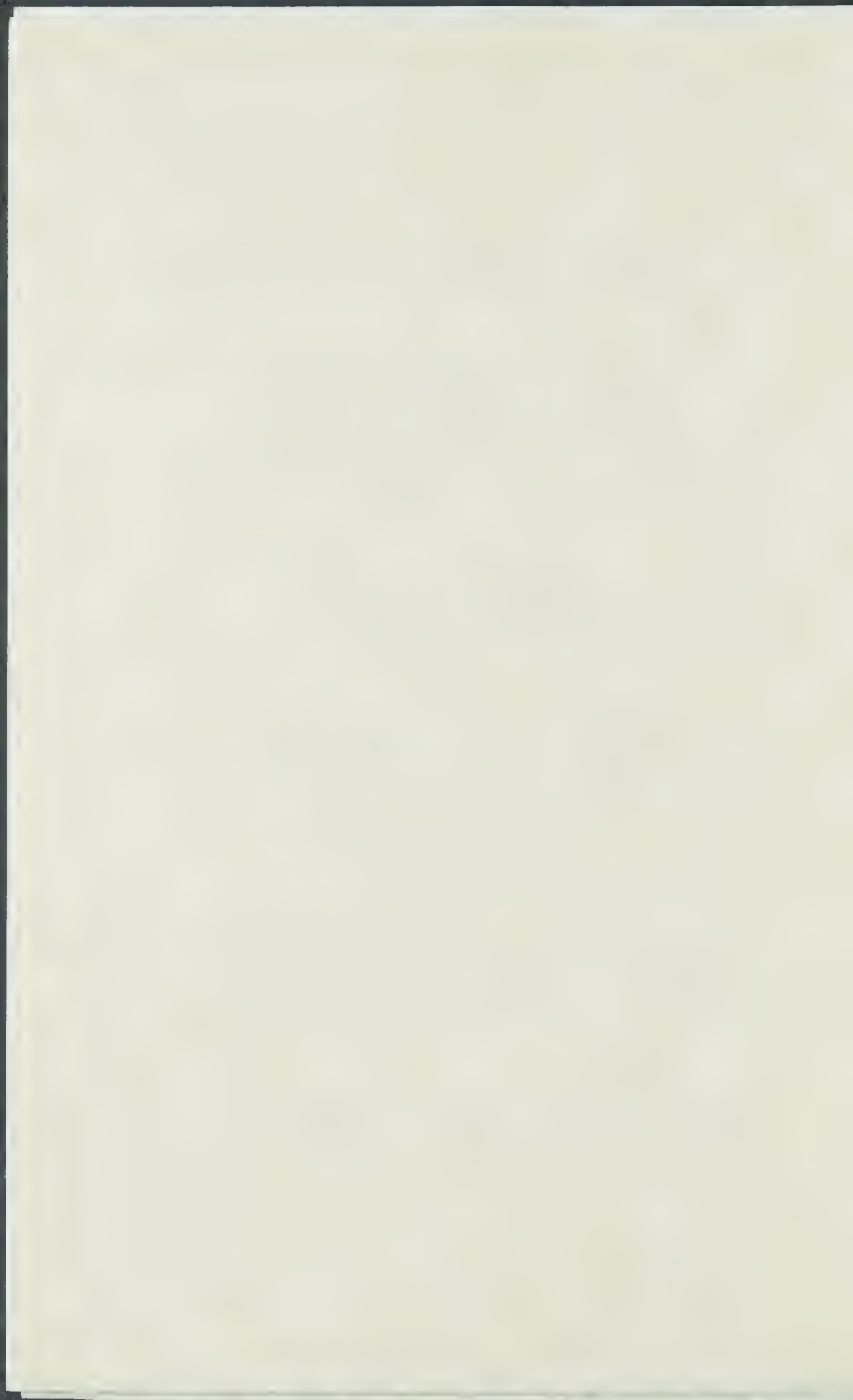
Alessi, M., Reed, M., Snieckus, V. O→C 1,5-Carbamoyl Translocation in 2-*O*-Carbamoyl Stilbenes. Towards the Total Synthesis of Isoprekinamycin. 7th International Symposium on Carbanion Chemistry, Alicante, Spain, July 7-11, 2004.

Jones, C., Snieckus, V. Directed *ortho*-Metalation (DoM) of 1,8-Naphthalene Diamides. 7th International Symposium on Carbanion Chemistry, Alicante, Spain, July 7-11, 2004.

Zhao, Z., Snieckus, V. Directed *ortho* Metalation - Electrophile-Induced Ipso-Desilylation Reactions. Towards Unconventional Aromatic Substitution Patterns, ICOS, Nagoya, Japan, August 1-6, 2004.

Cai, X., Snieckus, V. Combined Directed *ortho* and remote Metalation - Cross Coupling Strategies. General Methodology for Benzo[*a*]carbazoles and the Synthesis of an Unnamed Indolo[2,3-*a*]carbazole Alkaloid. ICOS, Nagoya, Japan, August 1-6, 2004.

Macklin, T., Snieckus, V. Evaluation of the N,N-diethylsulfamate as a New Directed *ortho*



Metalation Group. ICOS, Nagoya, Japan, August 1-6, 2004.

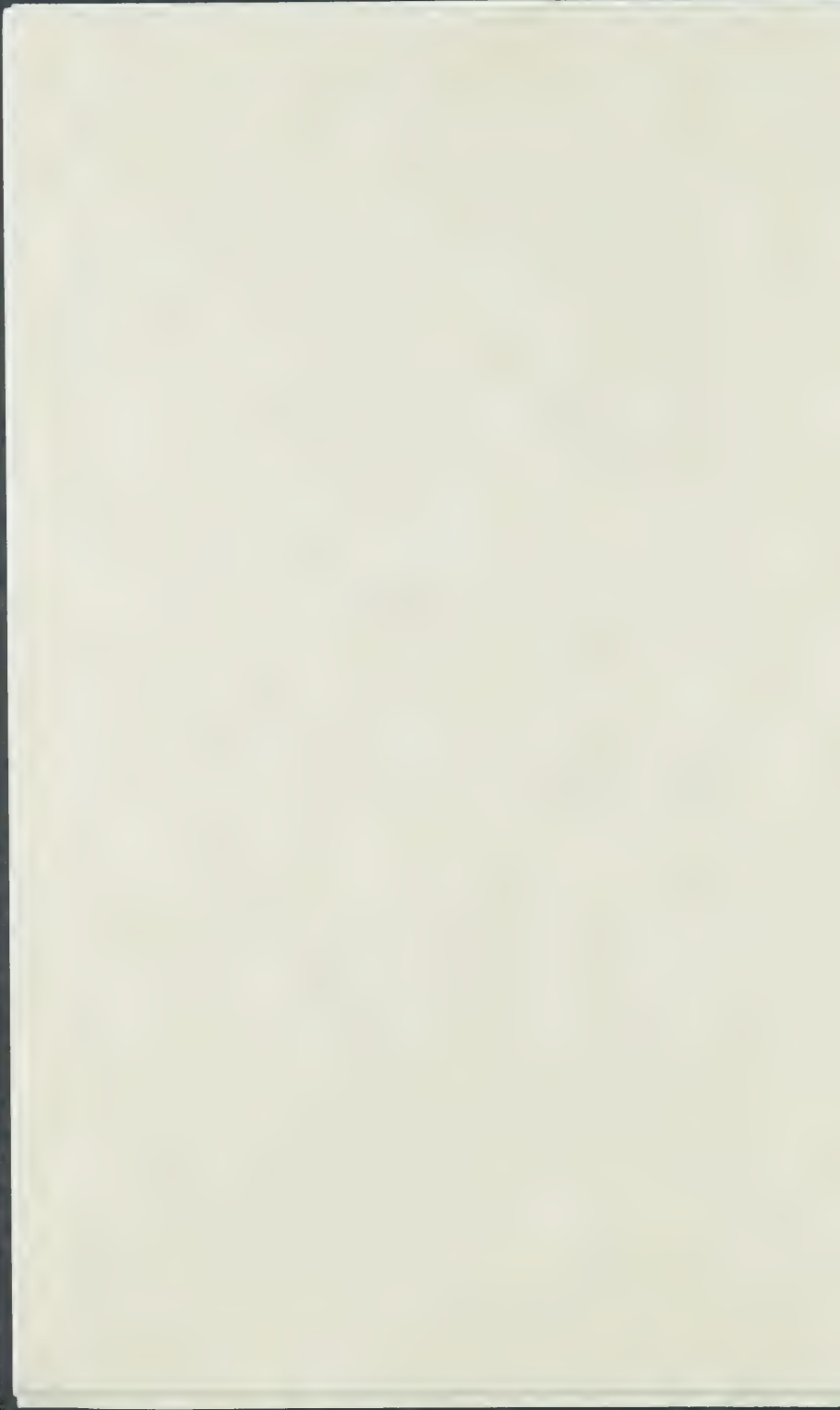
Research Presentations and Speaking Engagements (con't):

Pouliot, M., Boukouvalas, J., Snieckus, V.
Enantioselective Total Synthesis of Panacene. 228th
ACS National Meeting, Philadelphia, PA, August
22-26, 2004.

Alessi, M., Reed, M., Snieckus, V. O→C 1,5-
Carbamoyl Translocation in 2-*O*-Carbamoyl
Stilbenes. Towards the Total Synthesis of
Isoprekinamycin. NERM, Rochester, NY,
November 1-2, 2004.

Zhao, Z., Snieckus, V. Directed ortho Metalation -
Electrophile-Induced Ipso-Desilylation Reactions.
Towards Unconventional Aromatic Substitution
Patterns, NERM, Rochester, NY, November 1-2,
2004.

Cai, X., Snieckus, V., Combined Directed ortho
and remote Metalation - Cross Coupling Strategies.
General Methodology for Benzo[a]carbazoles and
the Synthesis of an Unnamed Indolo[2,3-
a]carbazole Alkaloid. NERM, Rochester, NY,
November 1-2, 2004.



Research Presentations and Speaking Engagements (con't):

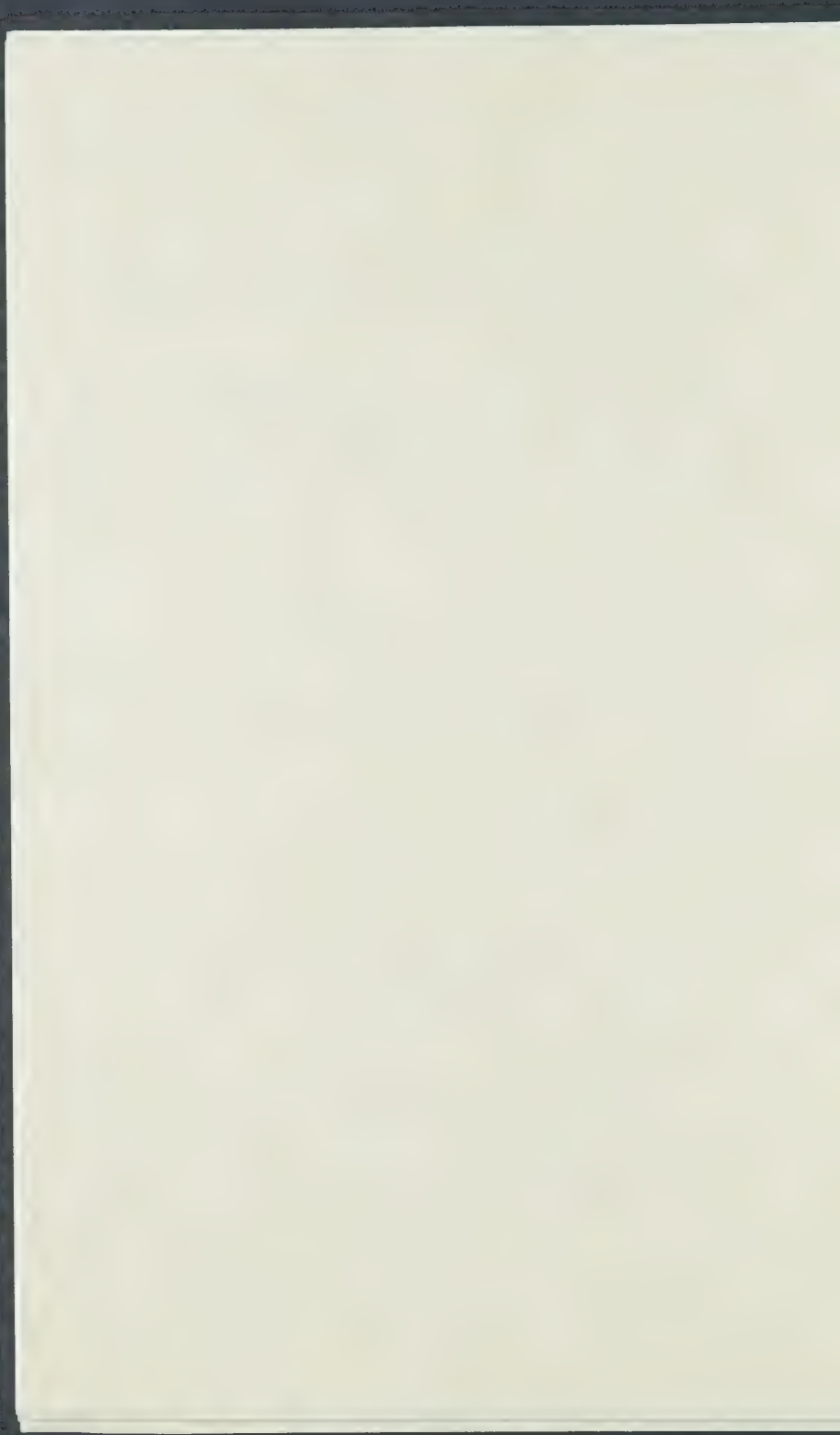
Jones, C., Snieckus, V. Directed ortho Metalation – Cross Coupling Methodology of Naphthalene 1,8-bis-Diethylamide. 6th Winter Conference on Medicinal and Bioorganic Chemistry (WCMBC), Steamboat Springs, Colorado, January 23rd -31st, 2004.

Macklin, T. Snieckus V. Evaluation of the *N,N*-Diethylsulfamate as a New Directed *ortho* Metalation Group. 6th Winter Conference on Medicinal and Bioorganic Chemistry (WCMBC), Steamboat Springs, Colorado, January 23rd -31st, 2004.

Seminars & Lectures

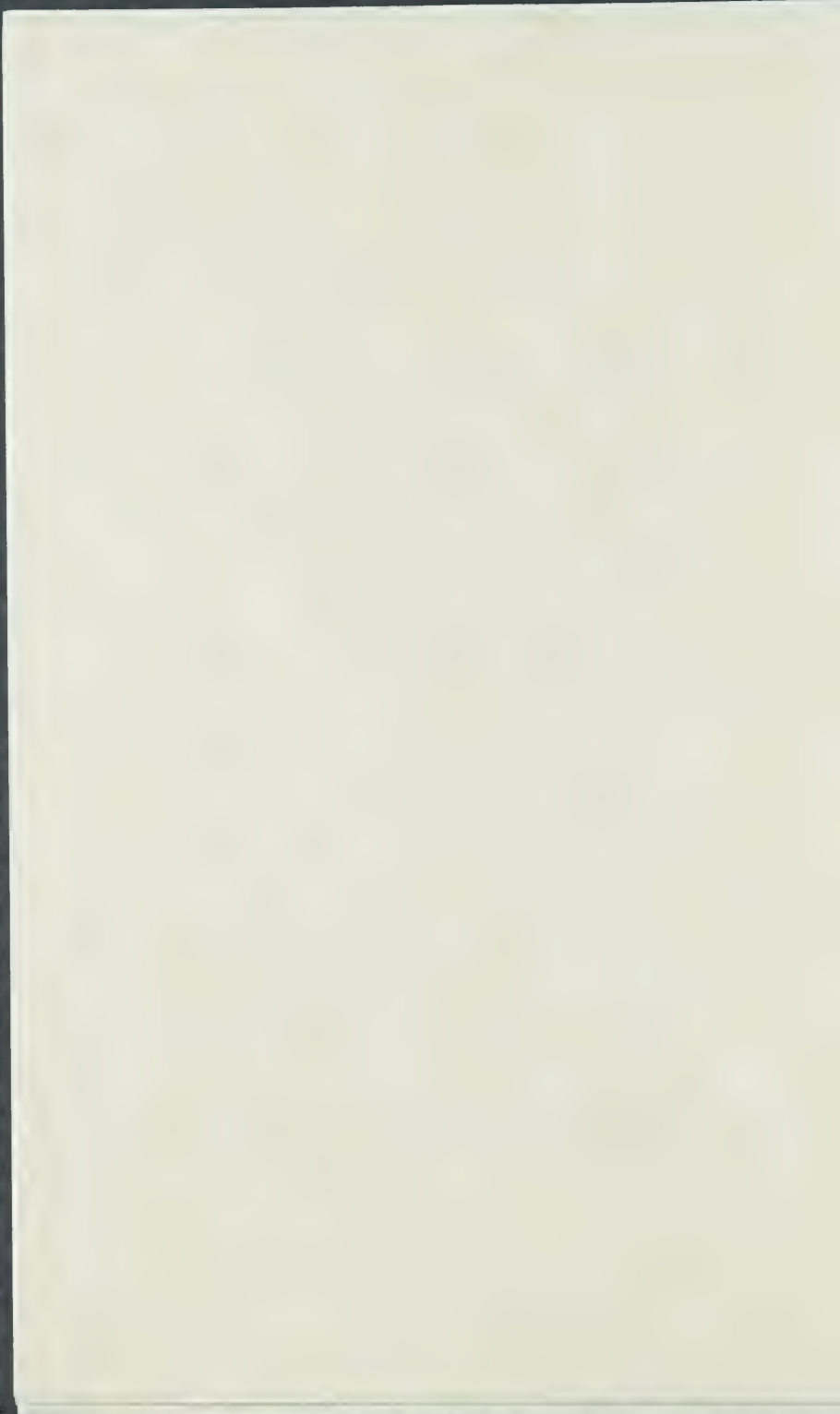
Plenary:

- Krohn Symposium, Universität Paderborn, Paderborn, Germany, April 23, 2004.
- Canada-France Congress, Nice, France, April 26, 2004.
- 50th Anniversary of A.N. Nesmeyanov Institute of Organoelement Compounds, Moscow, Russia, June, 2, 2004.
- Queguiner Symposium, Rouen, France, June 24, 2004



Research Presentations and Speaking Engagements (con't):

- 7th International Symposium on Carbanion Chemistry (ISCC-7), Alicante, Spain, July 7-10, 2004.
- ICOS-15, Nagoya, Japan, August 1-6, 2004.
- 6th Winter Conference on Medicinal and Bioorganic Chemistry (WCMBC), Steamboat Springs, Colorado, January 23 - 29, 2005.
- Current Aspects of Synthetic Organic Chemistry Symposium (Symposium in Honor of Alfred Bader), 229th American Chemical Society National Meeting, March 13 - 16, 2005.
- Vision Symposium, Aventis, Bridgewater, New Jersey, May 24th, 2005.
- 88th Canadian Society for Chemistry Conference, Saskatoon, Saskatchewan, May 27-June 1, 2005.
- Lithuanian Academy of Arts & Sciences Meeting, Vilnius, Lithuania, June 30th-July 3rd, 2005.
- 14th European Symposium on Organic Chemistry, Helsinki, Finland, July 4th-July 7th, 2005.
- Polish Academy of Sciences Meeting (Symposium in Honor of M. Makosza), July 14th-16th, 2005.

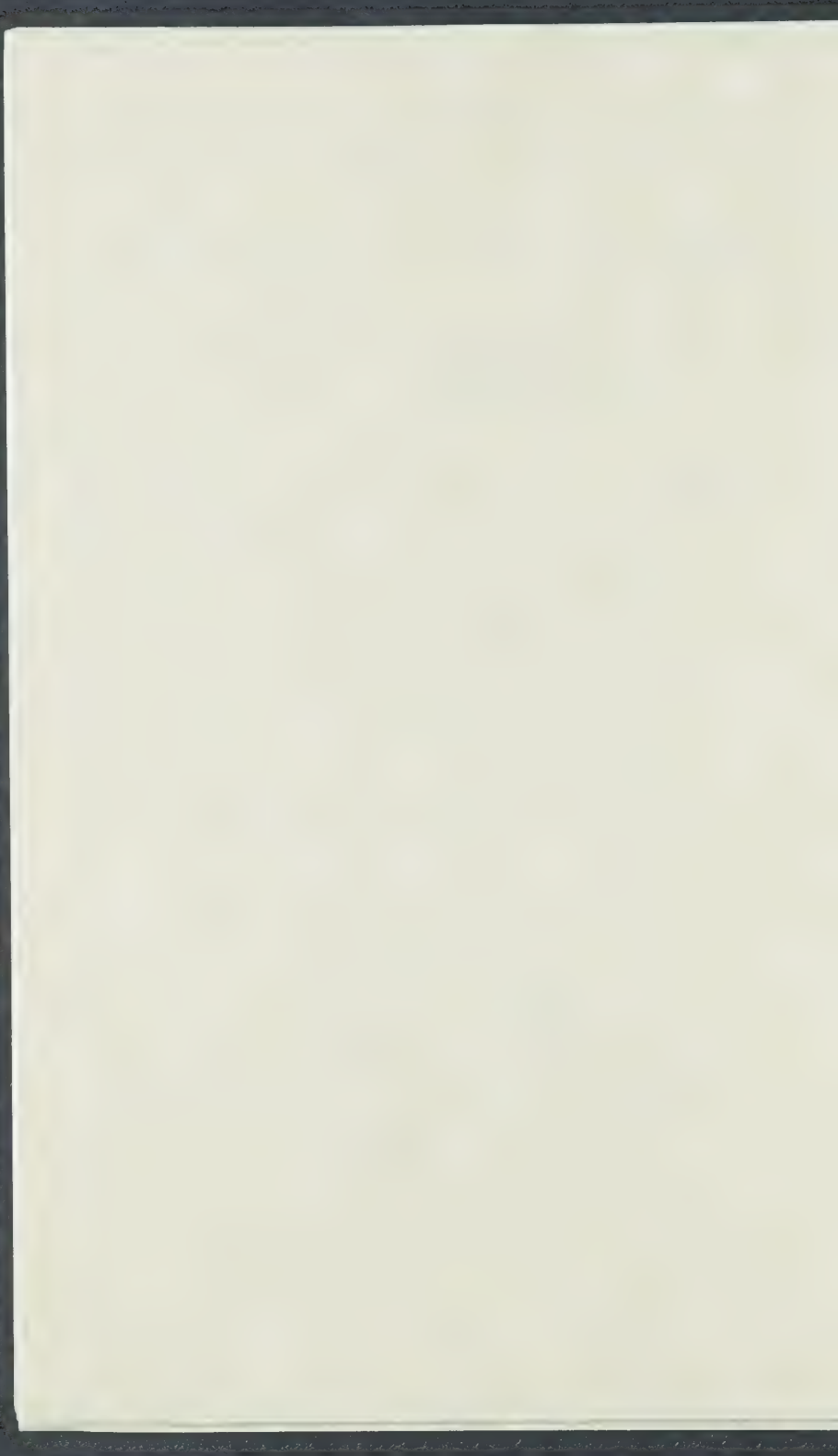


Research Presentations and Speaking Engagements (con't):

- Novartis Distinguished Lectureship, 2005
Pacifichem 2005, Honolulu, Hawaii,
December 15-20, 2005.

Invited:

- Scios, Inc., Fremont, California, February 17,
2004.
- Dartmouth College, Hanover, New
Hampshire, February 19, 2004.
- Balticum Organicum Syntheticum, June 27-
July 1, 2004.
- Biogen, Cambridge, MA, September 8, 2004.
- Bristol-Myers Squibb, Candiac, Quebec,
September 13, 2004.
- Bristol-Myers Squibb, Syracuse, New York,
September 15, 2004.
- BASF, Germany, October 11-13, 2004.
- NERM Symposium, November 1-2, 2004.
- Lund University, Sweden, December
6, 2004.
- University of Stockholm, Stockholm,
Sweden, December 9-10, 2004.
- Bristol-Myers Squibb, Candiac,
Quebec, April 19, 2005.
- DuPont Stine Crop Protection,
Newark, Delaware, May 16-17, 2005.



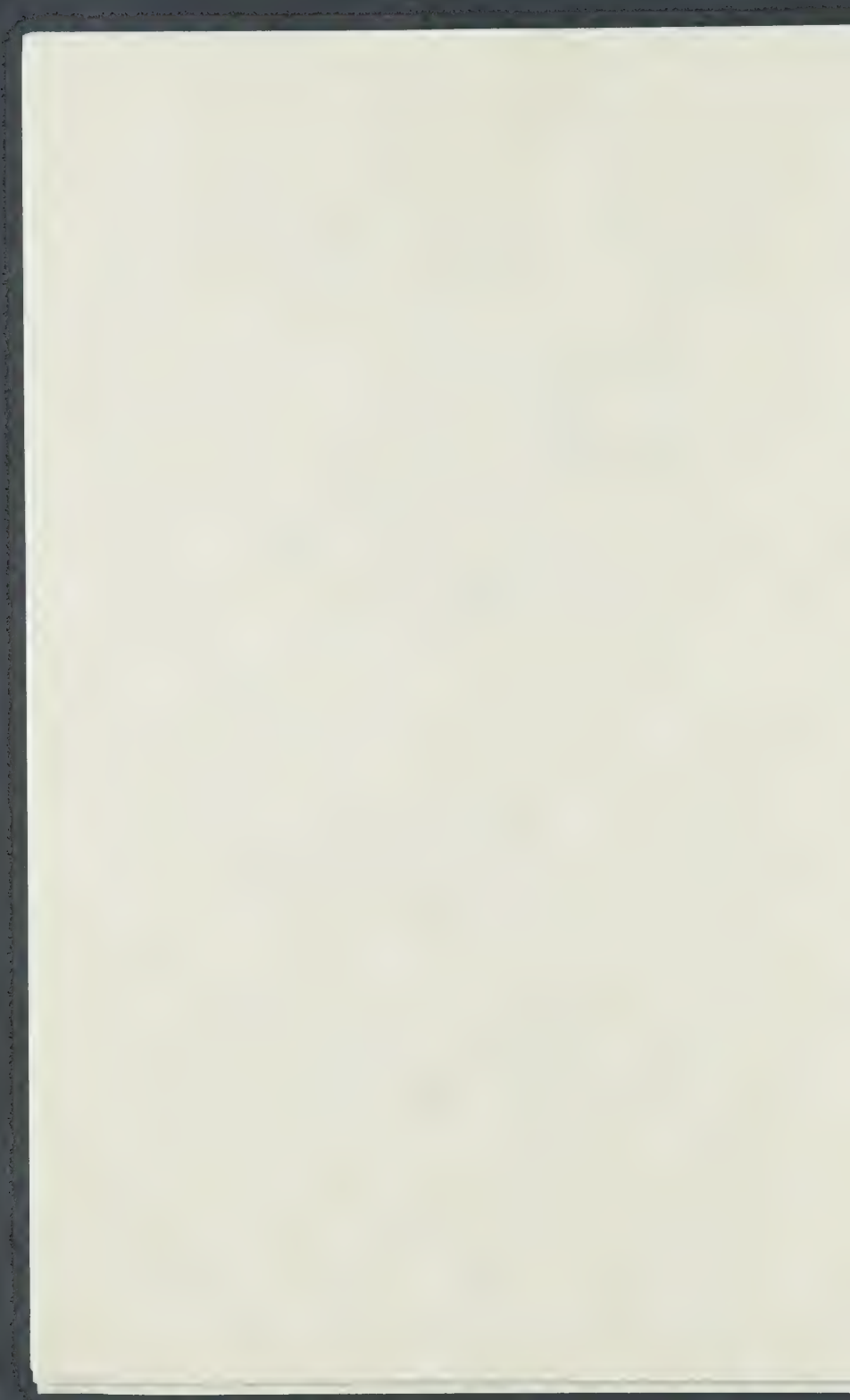
Research Presentations and Speaking Engagements (con't):

- Sorono International S.A., Geneva, Switzerland, July 7, 2005.
- Bristol-Myers Squibb, Candiac, Quebec, September 16, 2005.
- Bristol-Myers Squibb, Wallingford, Connecticut, September 26, 2005.
- Bristol-Myers Squibb, Princeton, New Jersey, September 27, 2005.
- Albany Molecular Research, Inc., Syracuse, New York, September 28, 2005.

Publications:

The Tertiary Sulfonamide as a Latent Directed Metalation Group. Ni(0)-Catalyzed Reductive Cleavage and Cross Coupling Reactions of Aryl Sulfonamides with Grignard Reagents. Milburn, R.R.; Snieckus, V. *Angew. Chem. Int. Ed.* 2004, 42, 888-891.

The *ortho*-Anisylsulfonyl(Ans) as a New Protective Group for Secondary Amines. Mild Ni(0)-catalyzed hydrodesulfonylation. Milburn, R.R.; Snieckus, V. *Angew. Chem. Int. Ed.* 2004, 42, 892-894.



Publications (con't):

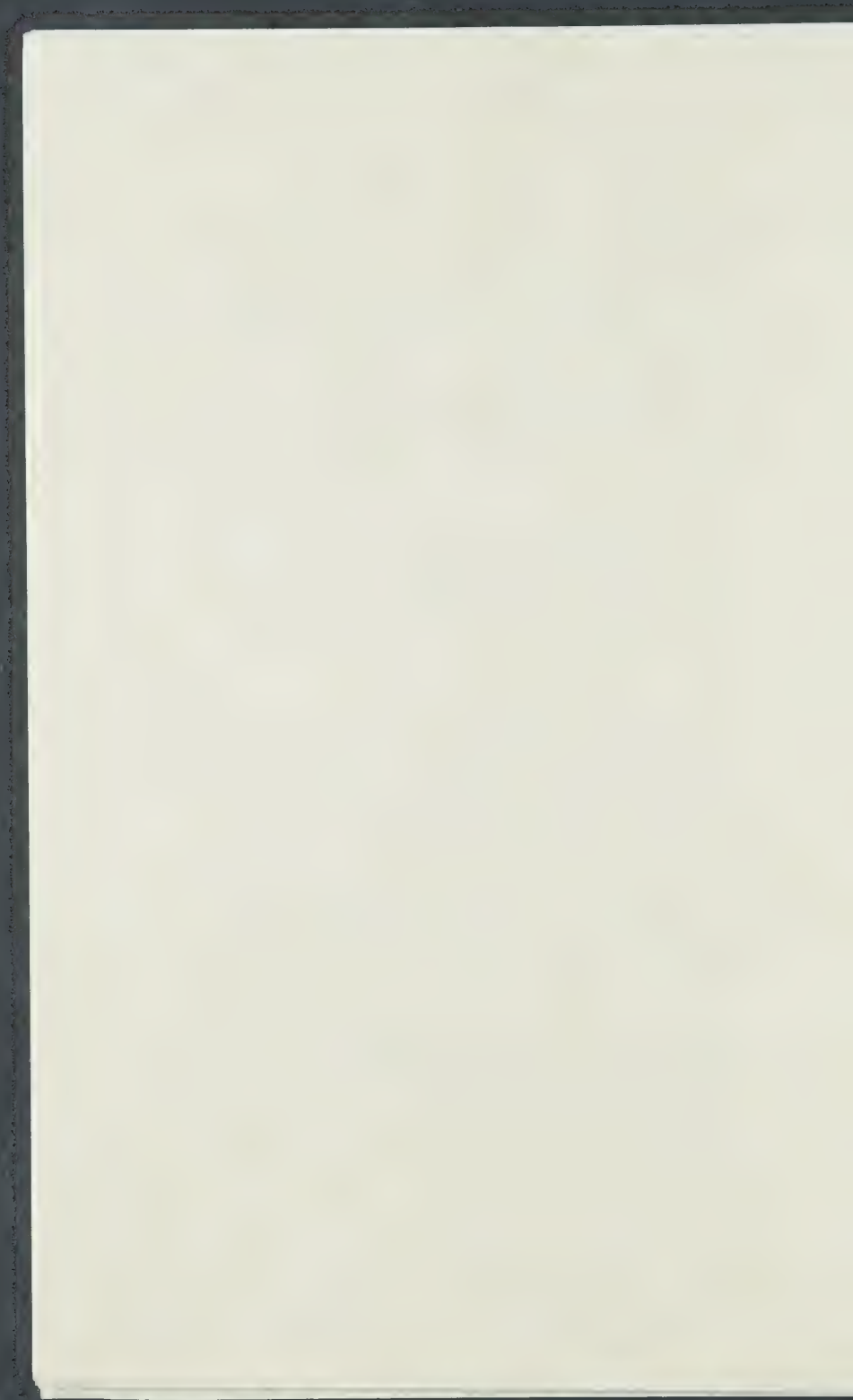
Directed Metalation Route to Ferroelectric Liquid Crystals with a Chiral Fluorenol Core: The Effect of Restricted Rotation on Polar Order. McCubbin, J.A.; Tong, X.; Wang, R.; Zhao, Y.; Snieckus, V.; Lemieux, R.P. *J. Am. Chem. Soc.*, 2004, *126*, 1161-1167.

Beyond Thermodynamic Acidity: A Perspective on the Complex Induced Proximity Effect (CIPE) in Deprotonation Reactions. Whisler, M.C.; MacNeil, S.; Snieckus, V.; Beak, P. *Angew. Chem. Int. Ed.* 2004, *43*, 2206-2225.

Regiospecific Synthesis of Alkylphenanthrenes Using a Combined Directed *ortho* and remote Metalation – Suzuki-Miyaura Cross Coupling Strategy. Cai, X.; Brown, S. Hodson, P. Snieckus, V. *Can. J. Chem.* 2004, *82*, 195-205.

Combined Directed *Ortho* and Remote Metalation-Cross-Coupling Strategies. General Method for Benzo[a]carbazoles. Cai, X.; Snieckus, V. *Org. Lett.* 2004, *6*, 2293-2295.

Anionic O \rightarrow α - and β -Vinyl Carbamoyl Translocation of 2-(O-Carbamoyl) Stilbenes. Chang, M.T.; Reed, M.A.; Snieckus, V. *Org. Lett.* 2004, *6*, 2297-2300.



Publications (con't):

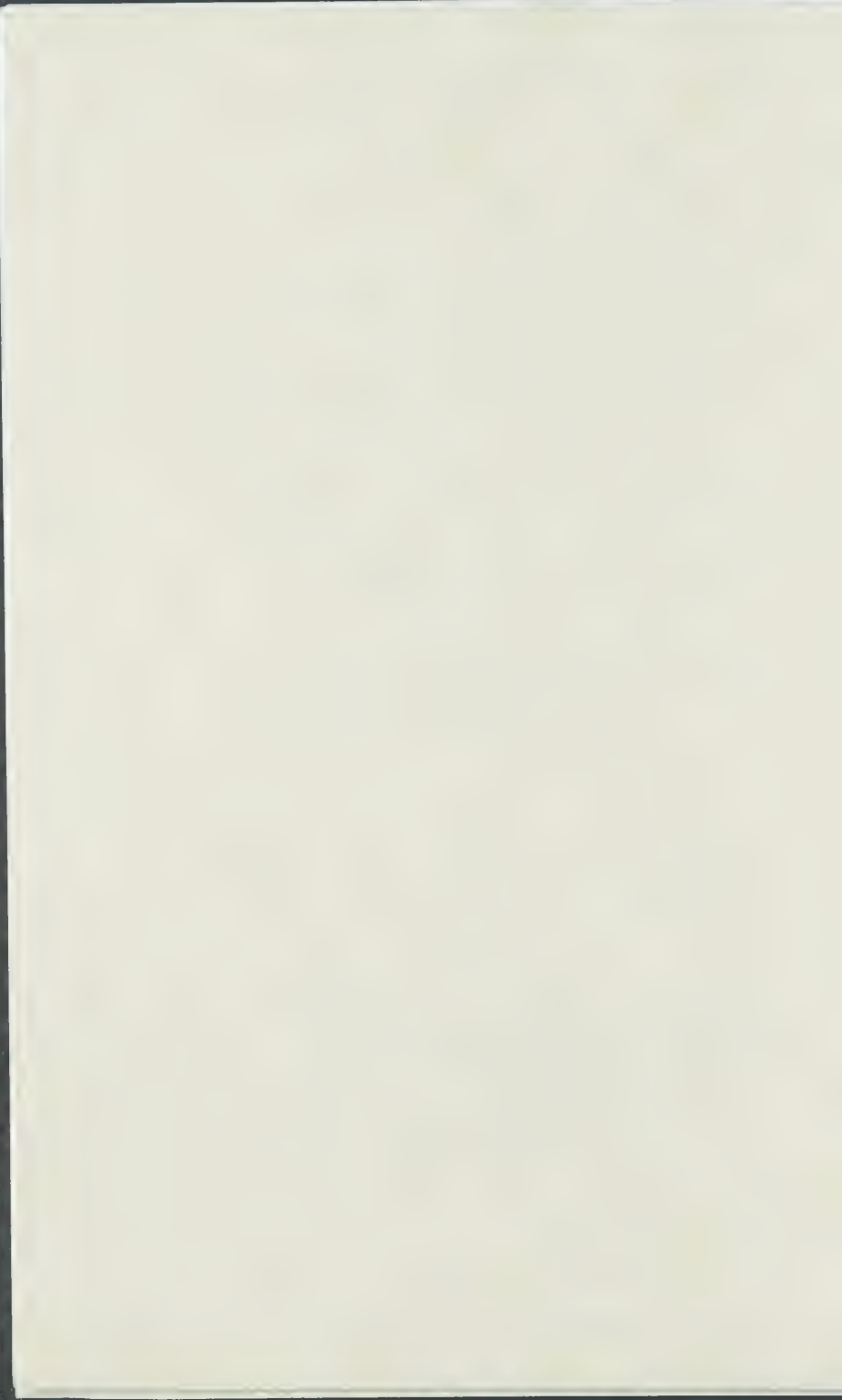
Directed *ortho* Metalation – Cross Coupling Strategies. Synthesis of the Tetracyclic A/B/C/D Ring Core of the Antitumor Alkaloid Camptothecin. Ngyuen, T.; Wicki, M.A.; Snieckus, V. *J. Org. Chem.* 2004, 69, 7816-7821.

3,3'-Dipyridyl BINOL Ligands. Synthesis by Combined Directed *ortho* Metalation – Cross Coupling and Application in the Addition of Diethylzinc to Aldehydes. Milburn, R.R.; Snieckus, V. *Org. Lett.* 2005, in preparation.

First Directed *ortho* Metalation Reaction of Aryl O-Carbamates Trityl-linked to Polystyrene-Divinylbenzene (PS-DVB) Resin. Milburn, C.; Milburn, R.R.; Snieckus, V. *Org. Lett.* 2005, 7, 629-631.

Ferroelectric Liquid Crystals with Fluoro- and Azafluorenone Cores: The Effect of Stereo-Polar Coupling. McCubbin, A., Snieckus, V., Lemieux, R. *Liquid Crystals*, 2005, ASAP.

Directed Metalation-Cross Coupling Route to Ferroelectric Liquid Crystals with a Chiral Fluorene Core: The Effect of Intermolecular Hydrogen Bonding on Polar Order. McCubbin, A., Tong, X., Wang, R., Snieckus, V., Lemieux, R. *Chem. Materials*, 2005, 17, 2574-2581.



Publications (con't):

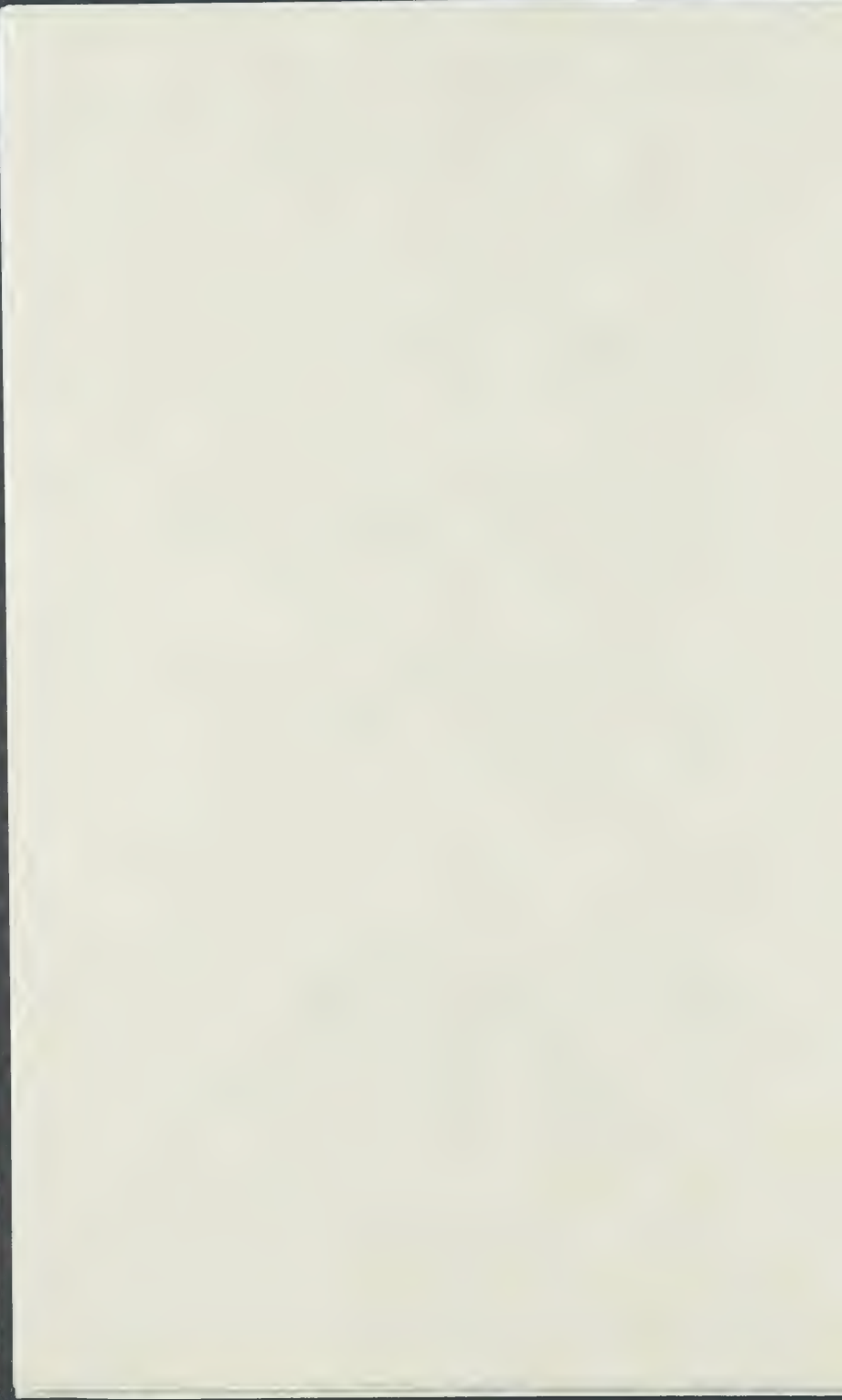
Directed *ortho* Metalation Methodology. The N,N-Dialkyl Aryl O-sulfamate as a New Directed Metalation Group and Cross Coupling Partner for Grignard Reagents. Macklin, T.; Snieckus, V. *Org. Lett.* 2005, 7, 2519-2522.

The Directed *ortho* Metalation - based Methodology. Halo-, Nitroso-, and Boro-induced ipso Desilylation. Link to an in situ Suzuki Reaction. Zhao, Z., Snieckus, V. *Org. Lett.* 2005, 7, 2523-2526.

Synthesis of Substituted Hydroxybiaryls via Directed *ortho*-Lithiation of O-Aryl N-Silylated, N-Isopropylcarbamates. Matthias Kauch,[†] Victor Snieckus,[‡] and Dieter Hoppe, *J. Org. Chem.*, 2005, accepted June 2005.

Publications in Progress:

Directed *ortho* Metalation and Suzuki-Miyaura Cross-Coupling Connections: Regiospecific Synthesis of Chlorodihydroxy-biphenyls and Polychlorinated Biphenyls. S. Nerding, C. Kendall, R. Marchart, P. Riebel, M. R. Johnson, C.-F. Yin, N. Haenaff, L. D. Eltis and V. Snieckus, *J. Org. Chem.* 2005, in preparation.



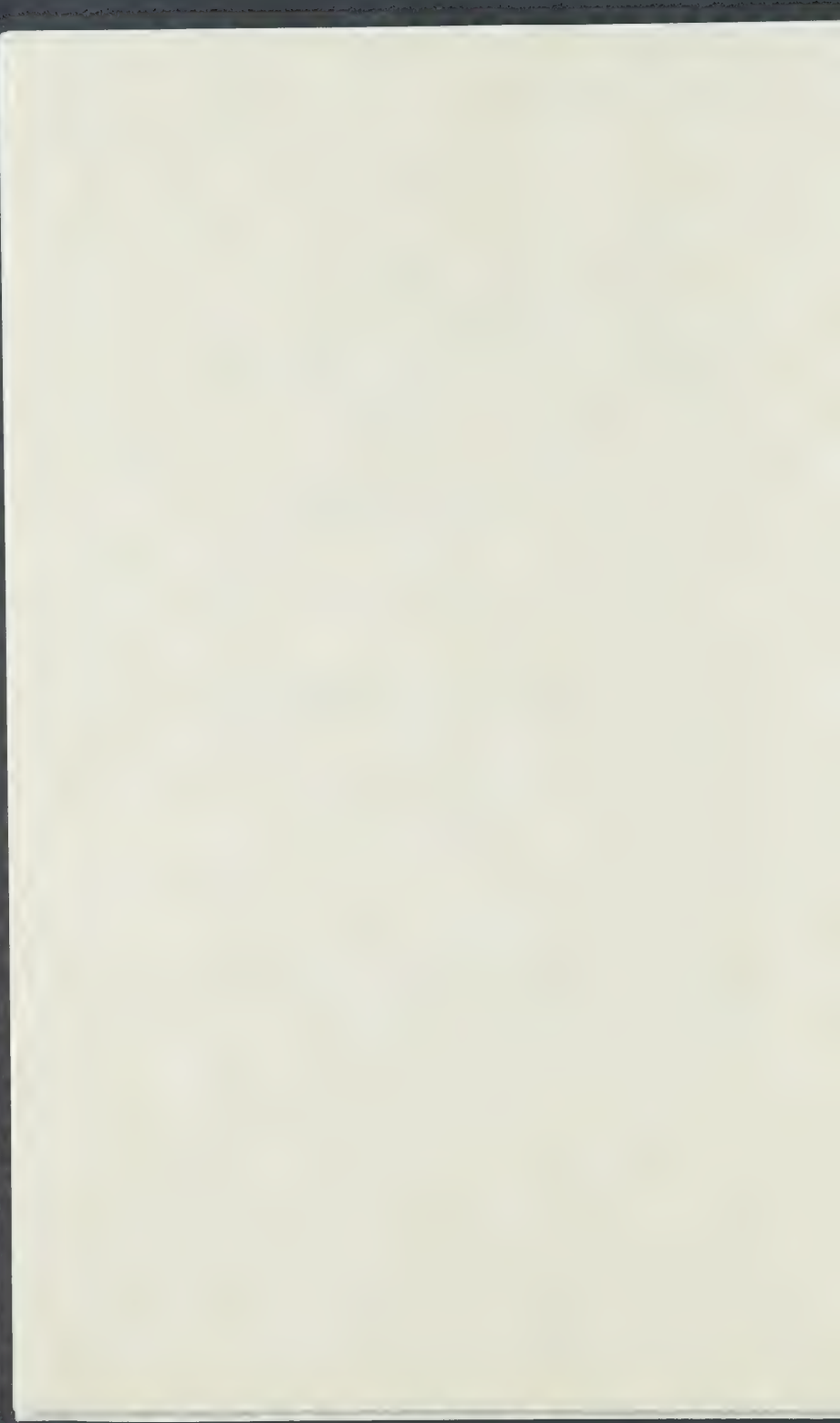
Publications in Progress (con't):

Anionic Fries Rearrangement of N-Boc-Diarylamines to Anthranilates. A Regioselectivity Study. MacNeil, S.; Gray, M.; Wilson, B.; Snieckus, V. *J. Org. Chem.* 2005, in preparation.

Sparteine-mediated Enantioselective Lateral Metalation of *ortho*-Ethyl Aryl *O*-Carbamates. High Enantioenrichment Driven by Remote Silyl Substitution. Tinkl, M.; Roglans, A.; Campbell, M.; Kimachi, T.; Snieckus, V. *J. Am. Chem. Soc.* 2005, in preparation.

Aryl Triflate - α -Zinc Vinyl Ether Negishi Cross Coupling. An Anionic Friedel-Crafts Equivalent for Regiospecific Acylation Linked to the Directed *ortho* Metalation Reaction. A General and Regiospecific Route to Chromones. Da Silva, A.; Kimachi, T.; Jin, L.; Snieckus, V. *J. Org. Chem.*, 2005, in preparation.

Directed *ortho* Metalation - Cross Coupling Connections. Nickel(0)-Catalyzed Cross Coupling of Aryl S-Thiocarbamates with Grignard Reagents. Beaulieu, F.; Puumala, K.; Snieckus, V. *Tetrahedron Lett.* 2005, in preparation.



Publications in Progress (con't):

Combined Directed Metalation - Cross Coupling Strategies. Synthesis of Heteroarylbenzopyranones. James, C., Coelho, A., Gevaert, M., Forgione, P., Snieckus, V. *J. Org. Chem.*, 2005, in preparation.

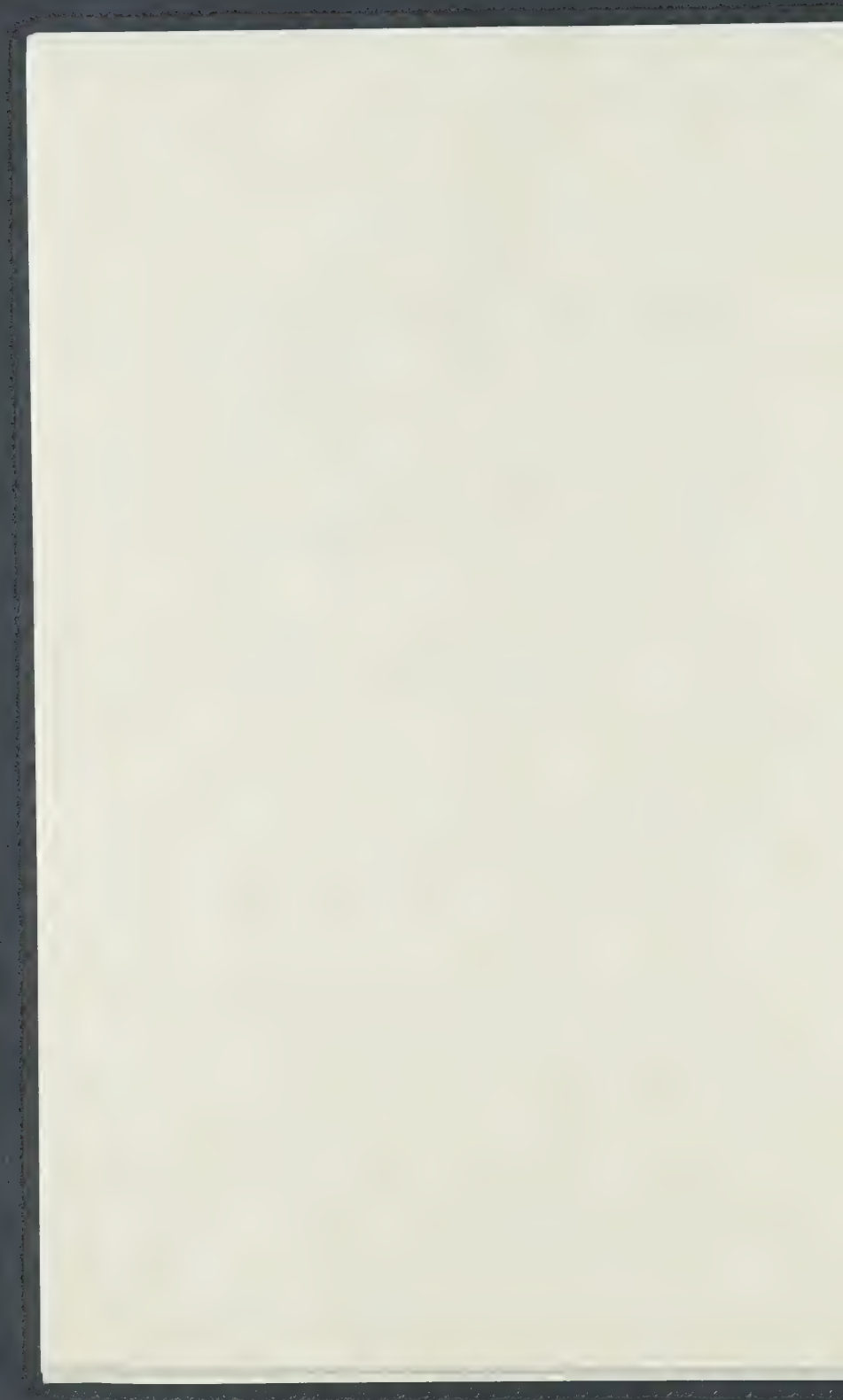
Combined Directed Metalation - Transition Metal Catalyzed Cross Coupling Strategies. The Total Synthesis of the Aglycones of the Gilvocarcins and Arnottin I. James, C., Snieckus, V. *J. Org. Chem.* 2005, in preparation.

Total Syntheses of the Alleged and the Authentic Phenanthrene Natural Product Gymnopusin. Wang, X., Fu, J-m., Snieckus, V., *J. Org. Chem.*, 2005, in preparation.

Book Reviews:

V. Snieckus, Book Review: *Oxazoles: Synthesis, Reactions, and Spectroscopy, Part A*, Palmer, D.C. Ed. Wiley-Interscience, Hoboken, NJ, in *Nat. Prod. Rev.* 2004, 21, 9-10.

V. Snieckus, Book Review: *Synthesis of Biaryls*. Ivica Cepanec. Elsevier: Oxford. 2004. xiv + 350 pp. *J. Am. Chem. Soc.*, 2005, 7654-7654.



Publications in Progress (con't):

V. Snieckus, Book Review: *Synthetic Applications of 1,3-Dipolar Cycloaddition Chemistry Toward Heterocycles and Natural Products*, Padwa, A.; Pearson, W.H., Eds. Wiley-Interscience, Hoboken, NJ, 2005, In *Natural Product Reports*, in preparation.

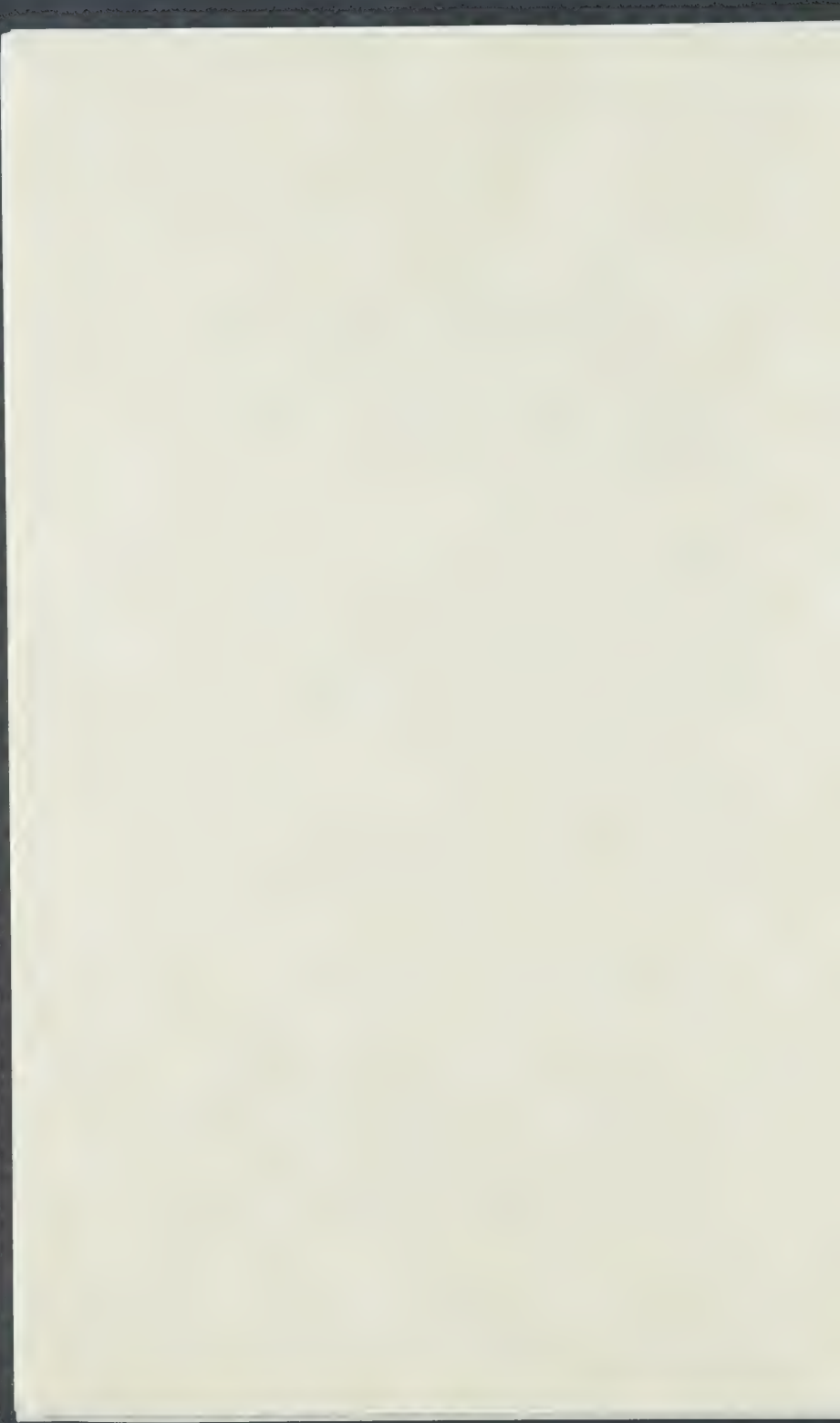
Invited:

Anttil, E.; Snieckus, V. *The Directed ortho Metalation – Cross Coupling Nexus. Synthetic Methodology for the Aryl-Aryl and Aryl-Heteroatom-Aryl Bonds*. In Diederich, F.; de Meijere, A. Ed. *Metal-Catalyzed Cross-Coupling Reactions*, 2nd Ed., 2004, 761-813.

Macklin, T.; Snieckus, V. *CH transformation at sp^2 -hybridized carbon atoms*. In Dyker. Ed. *Handbook of C-H Transformations*, 2005, submitted.

Research/Creative Work in Progress:

Science of Synthesis (ThiemeVerlag) - Volume Editor: A multi-authored, new quality reference work that provides a comprehensive and wide-range of reliable organic and organometallic synthetic methods. The completed volumes will allow scientists to find solutions to the synthetic problems.



Courses Taught:

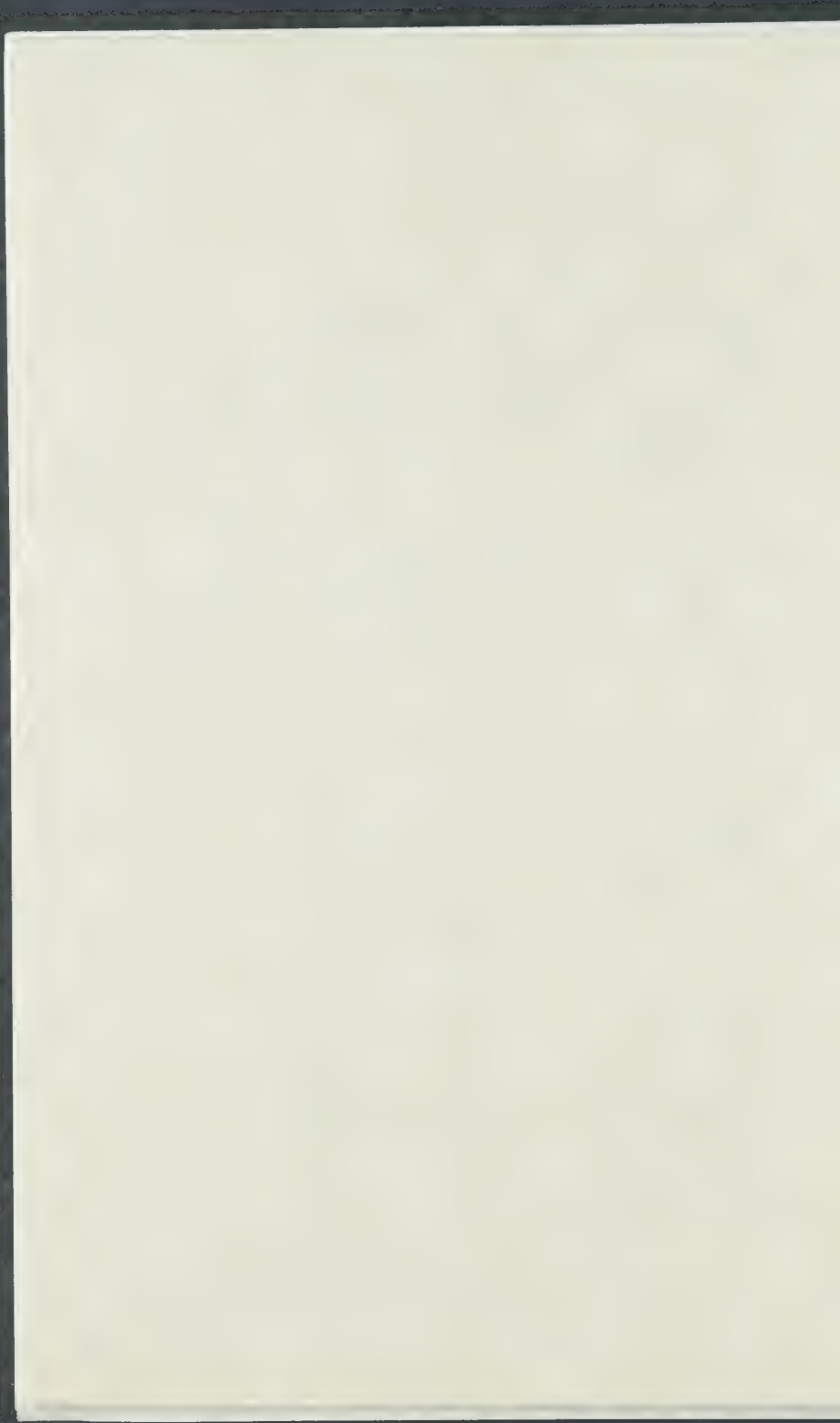
CHEM 422: Synthetic Organic Chemistry

This course encompasses all aspects of chemistry - biochemical, inorganic, organo metallic, and organic - bringing together structure, reactivity, and experimental practice as well as art and imagination.

One of the many aims of this course is to develop an understanding of modern strategies used in the construction of organic molecules by application of retrosynthetic (retrosyn) analysis (stepwise “looking back”).

Graduate Student Supervision:

<u>Name</u>	<u>Degree</u>	<u>Status</u>
Manlio Alessi	Ph.D.	In progress
Eric Anctil	Ph.D.	In progress
Xiongwei Cai	Ph.D.	In progress
Wei Gan	Ph.D.	In progress
Chris Jones	M.Sc.	In progress
Sunny Lai	M.Sc.	In progress
Todd Macklin	M.Sc.	In progress
Justin Morin	M.Sc.	In progress
Farhad Nowrouzi	Ph.D.	In progress
Kevin Ogilvie	M.Sc.	In progress
Yigang Zhao	Ph.D.	In progress
Zhongdong Zhao	Ph.D.	In progress



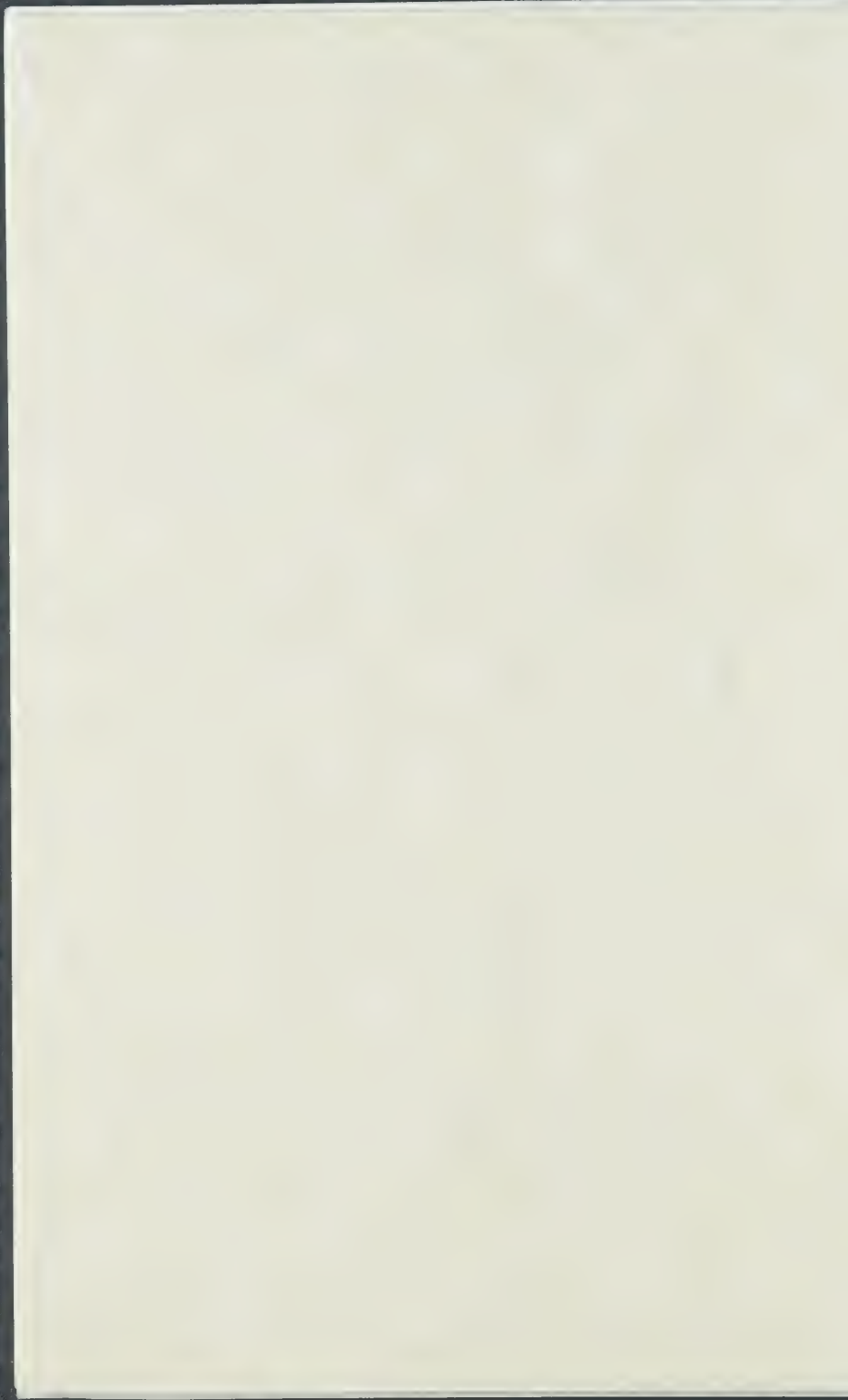
Awards and Leadership Recognition:

- 2004 Pattison Lectureship, University of Western Ontario, London, Ontario
- 2005 Bernard Belleau Award of the Canadian Society for Chemistry
- 2005 Novartis Chemistry Lectureship
- 2005 Aventis Vision Lecturer

Committee Work at Queen's:

The Distinguished Lectureship Series – Established to bring internationally recognized scientists at the leading edge of organic and bioorganic research to Queen's University to present lectures on their recent research and to interact and exchange ideas with faculty and students. These lectures are made possible by the generous donations of pharmaceutical companies. This year's series included:

- Boehringer-Ingelheim Ltd.: Rheza Ghadiri, Scripps Research Institute, September 29, 2004.
- Pfizer: Professor David Gin, University of Illinois, Urbana Campaign, Invited.
- Brantford Chemicals Inc: Professor Sam Gellman, University of Wisconsin, April 6, 2005.
- Merck Frosst: Professor Martin Newcomb
- Aventis Pharmaceuticals Lectureship: Professor Paul Knochel, Ludwig-Maximilians-Universität, February 16, 2005.



Committee Work Outside Queen's:

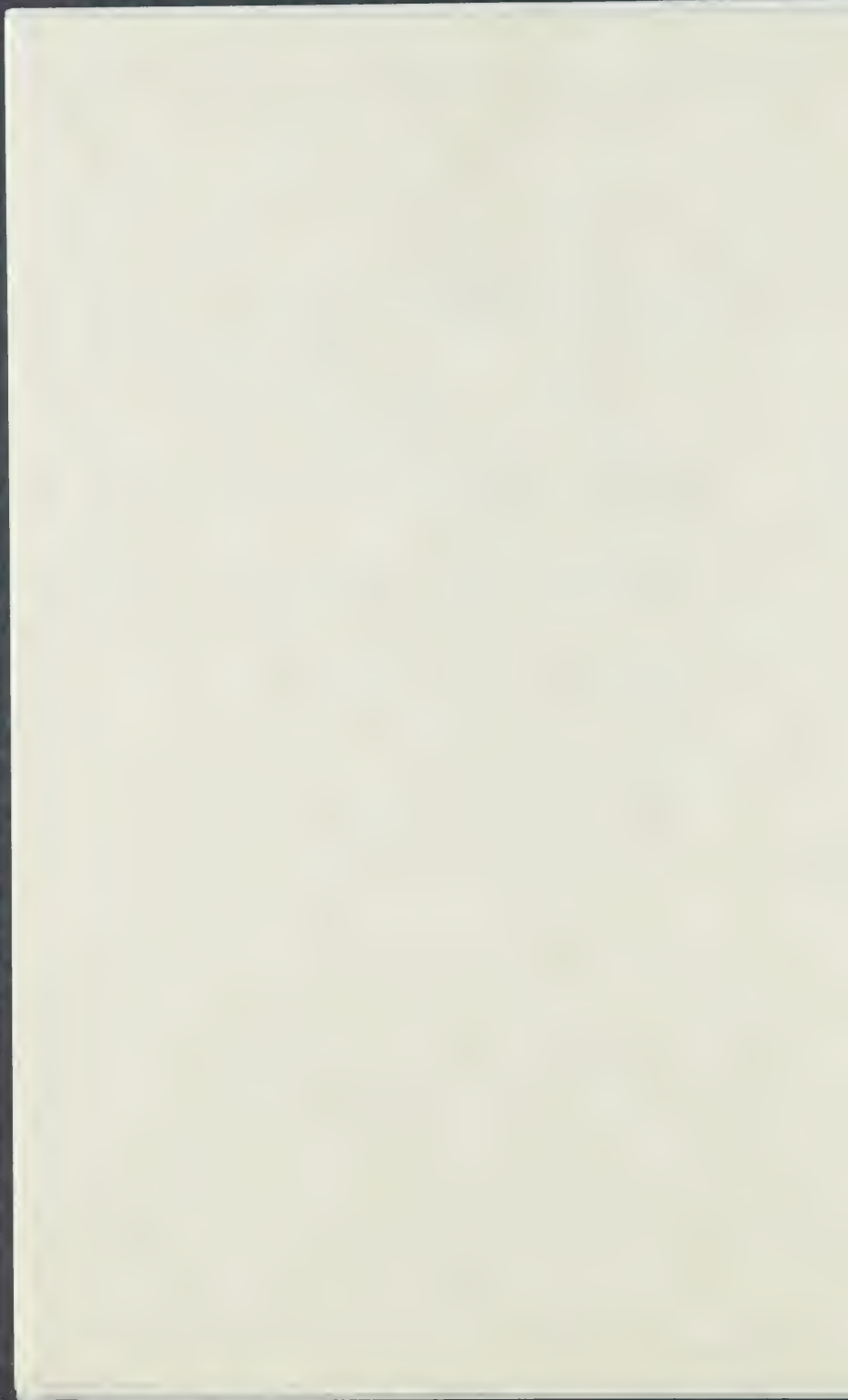
Editorships; Journal & Manuscript Refereeing

- Organic Editor, *Canadian Journal of Chemistry* 1988-now
- Editor, American Continents, *Synlett* 1990-
- Topical Editor, *Polycyclic Aromatic Compounds* 1988-now
- Editor, Science of Synthesis (Editor, B. Trost) Thieme Verlag, 1999-now
- Board of Consulting Editors, *Tetrahedron/Tetrahedron Letters* 2003-now
- Advisory Editorial Board, *Chemistry & Biodiversity*, 2003-now
- Editorial Board, Organic Process Research & Development, 2000-now
- Editorial Board, Advanced Synthesis and Catalysis, 2000-now
- Consultant, Lithuanian Educational and Encyclopedia Institute (Mokslo ir enciklopediju leidybos institutas) 2003-now

Continuing Professional Education:

Conference Organizer

Balticum Organicum Syntheticum: International Conference on Organic Synthesis, June 23-27, 2004. (Symposium, 250 participants).



Continuing Professional Education (con't):

Canadian Society for Chemistry Conference, May 29 – June 2, London, Ontario, 2004. (Symposium, 1000 participants).

Winter Conference on Medicinal and Bio-organic Chemistry, January 24-January 31, 2005. (Symposium, 300 participants).

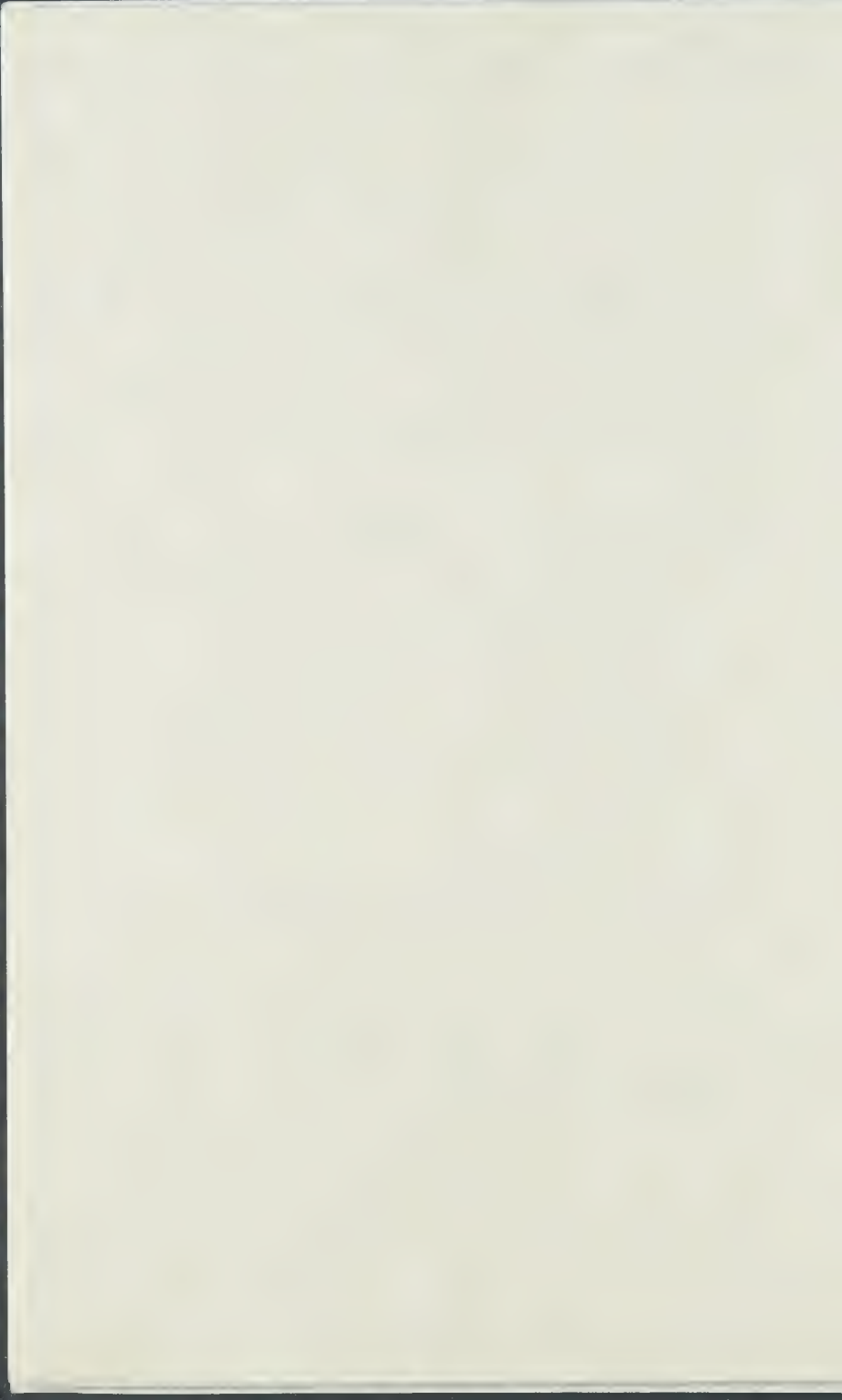
Administration Outside University:

- American Chemical Society, Division of Organic Chemistry (DOC) Executive Committee
- Canadian Society of Chemistry Representative to ACS/DOC
- ACS/International Activities Committee Member

Industrial Short Courses:

(Delivery of 2-3 day courses for chemists and technicians in the pharmaceutical industry).

Modern Methodologies in Aromatic and Heteroaromatic Anionic and Transition Metal Catalyzed Chemistry, Albany Molecular Research, Inc., September 29-30, 2004.



Industrial Short Courses (con't):

Cross Coupling Reactions in Aromatic and Heteroaromatic Synthesis, Scientific Update, Surrey, UK, October 7-8, 2004.

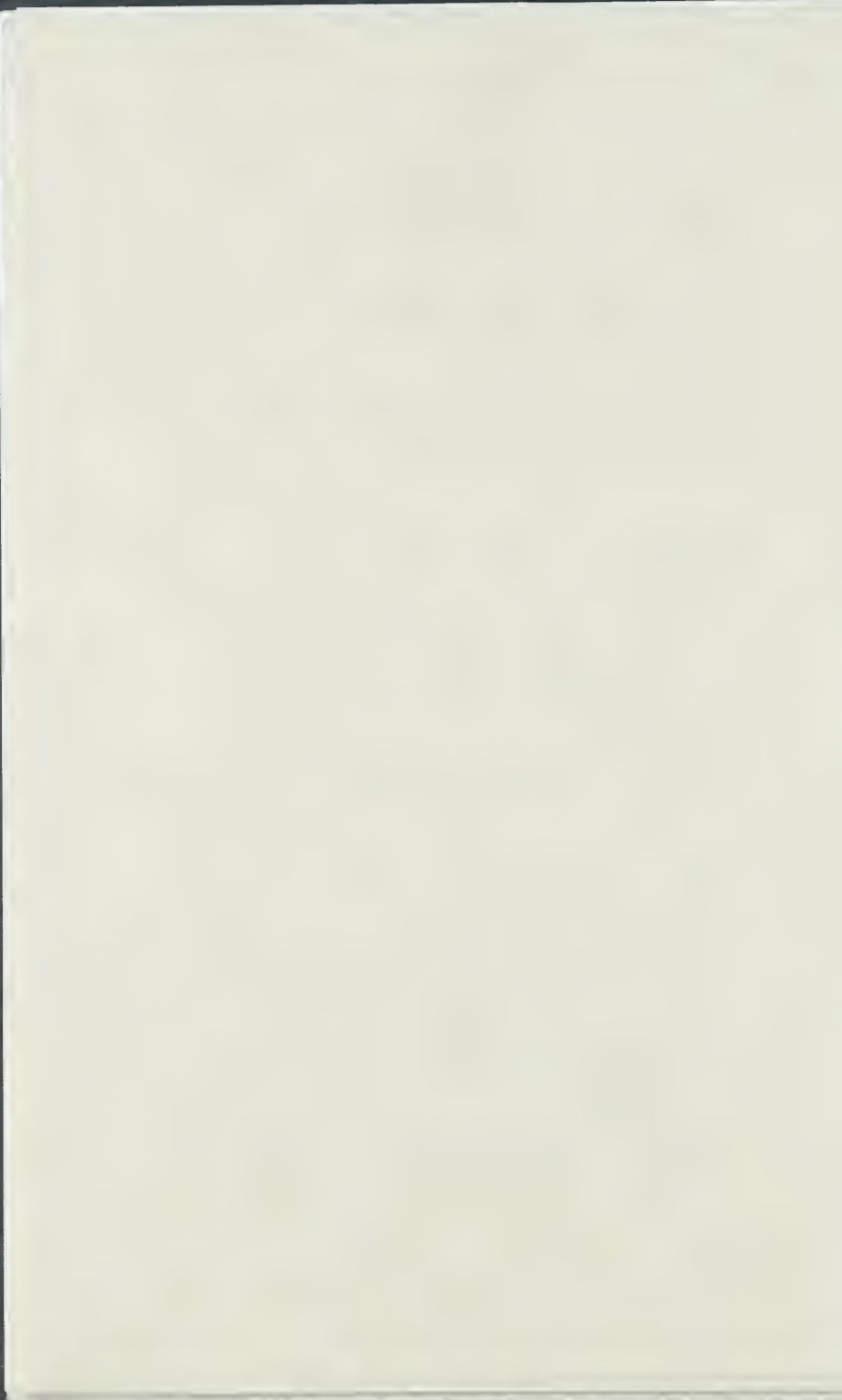
2005 *Cross Coupling Reactions in Aromatic and Heteroaromatic Synthesis*, Scientific Update, Surrey, UK, October 5-7, 2005.

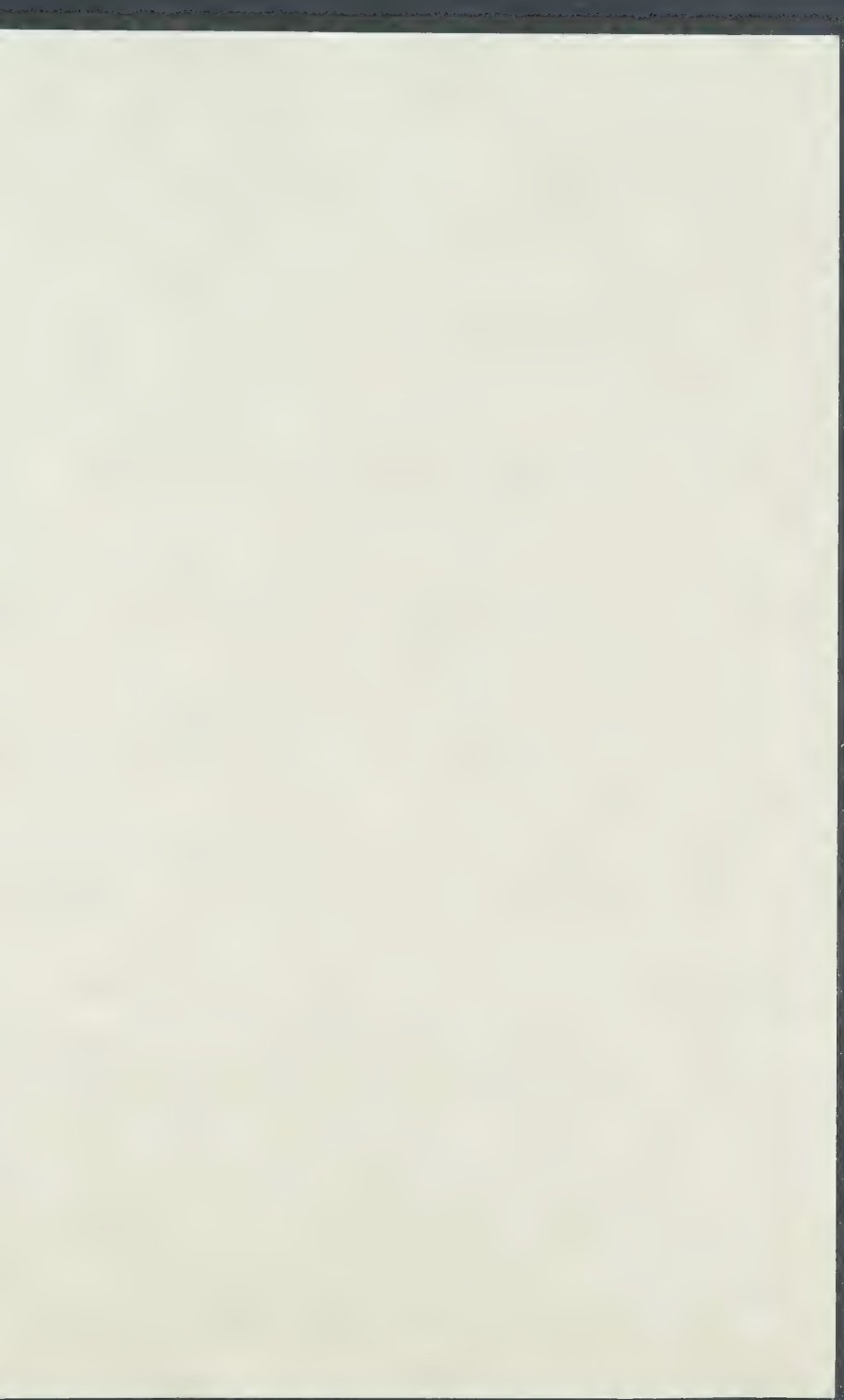
Membership in Professional Organizations:

- American Association for the Advancement of Science
- American Chemical Society
- Canadian Society of Chemistry
- International Society for Heterocyclic Chemistry
- Gesellschaft Deutscher Chemiker (GDCh)

Grant Proposal Reviews:

- Canadian Society of Chemistry Combinatorial Grant, Committee Member
- NSERC AGENO Grant Committee Member
- American Chemical Society, H.C. Brown Award for Creative Research Committee, Member (2002-2004)
- Thieme/IUPAC Prize in Synthetic Chemistry, Chair (2000-)
- Member, R.U. Lemieux Award Selection Committee, 2003-

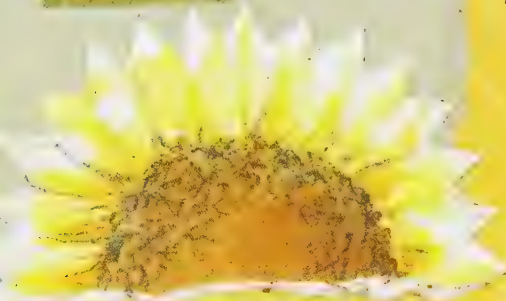






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Fax 613 533-2593

treasure



Because of
You and
the kindness
You've shared,

I'm a little better in a
way that can only
be measured by
my heart...



forever

Dear Dr. Alfred + Isabel Bader.

It was a great opportunity to meet you and Mrs. Bader in San Diego, California. I really feel happy that I had a chance to at least see and talk to individuals who have made a difference in my life. Your scholarship has been a blessing for me; it has helped me enormously to get through my first year of school. Not all students get this opportunity, and I am really lucky to experience Project SEED and its benefits. I would like to thank you from the bottom of my heart for your generosity.

#7

Thank you

Lots of Thanks

-Megha Kandhari



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April 12, 2005

Dear Alfred and Isabel,

Enclosed you will find a card from one of
The Bader Scholars, Megha Kandhari. It is
ACS policy not to give ⁱⁿ member addresses, so I
told Megha that I would forward this note to you

Regards, Mary Bet Johnson

