Alexei V. Novikov

University of North Dakota
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Department of Chemistry
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Education

08/1995 - 09/2001 ***Emory University**, Atlanta, GA*
Ph. D., Organic Chemistry
Advisor: Professor David J. Goldsmith
GPA: 3.87/4.00

09/1990 - 06/1995 ***Higher Chemical College**, Moscow, Russia*
M. S., Chemistry
Advisor: Dr. Vladimir S. Borodkin
GPA: 3.32/4.00

Awards

04/2007 - 08/2009	American Chemical Society PRF G grant
02/2005 - 08/2007	University of North Dakota SSAC seed grant
08/2004 - 04/2006	University of North Dakota New Faculty Startup
08/1995 - 09/2001	Emory University Scholarship/Fellowship
10/1994 - 10/1995	International Soros Foundation Scholarship
09/1992 - 08/1993	Fellowship of Mendeleev's Chemical society

Research Experience

Assistant Professor, University of North Dakota, Grand Forks, ND (08/16/2004 –present)

- Synthesis. Efforts towards the synthesis of Plakortethers
- C-H insertion on sulfonyl substrates
- Synthetic studies towards Pseudomonic acid

Research Associate, University of Utah, Salt Lake City, UT (07/2002 –06/15/2004)

- Development of synthetic methods. Chemistry of indole derivatives and diazocompounds. Radical cyclizations

Research Associate, University of Arizona, Tucson, AZ (10/2001 – 06/2002)

- Development of synthetic methods. Chemistry of indole derivatives and diazocompounds.

Graduate Research Assistant, Emory University, Atlanta, GA (09/1995 – 09/2001)

- Total synthesis of natural compounds with complex structure. Successful total synthesis of several natural clerodanes. Development of synthetic methods based on organosulfur chemistry. Cationic cyclizations

Research Assistant, summer program, Trinity University, San Antonio, Texas (06/1993-08/1993)

- Synthesis and photolytic transformations of polycyclic aromatic compounds.

Research Assistant, N. D. Zelinsky Institute of Organic Chemistry, Moscow, Russia (03/1989-06/1995)

- Synthesis of long chain insect pheromones. Synthesis and chemistry of small carbocycles. Synthesis of chiral synthetic intermediates from carbohydrates. Development of synthetic methods based on Pd-catalyzed cyclizations.

Teaching Experience

Assistant Professor, University of North Dakota, Grand Forks, ND (08/2004-present)

- Chem341 - Organic Chemistry I, 2 semesters
- Chem341L - Organic Chemistry Laboratory, 4 semesters
- Chem240 - Survey of Organic Chemistry, 3 semesters
- Chem 240L – Survey of Organic Chemistry Laboratory, 1 semester

Lecturer, University of Utah, Salt Lake City, UT (09/2003 –12/2003)

- Chem2320 - Organic Chemistry part 2, 1 semester

Lecturer, University of Utah, Salt Lake City, UT (06/2003 –09/2003)

- Chem2320 - Organic Chemistry part 2, 1 semester

Teaching Assistant, Emory University, Atlanta, GA (09/1995 – 08/2001)

- Instructor for undergraduate organic and general chemistry labs. Responsibilities included teaching, organizing, supervision and grading.

Research Interests

- Total synthesis. Development of synthetic methods. Chemistry of natural compounds and other complex molecules. Biochemistry. Molecular interactions.

Publications

1) John, J. P.; Novikov, A. V. "Selective Formation of Six Membered Cyclic Sulfones and Sulfonates by C-H Insertion." *Org. Lett.* **2007**, *9*, 61-63

2) Sabahi, A.; Novikov, A.; Rainier, J. D. "2-Thioindoles as Precursors to Spiro-Fused Indolines: Synthesis of(+/-)-Dehaloperophoramidine." *Angew. Chem. Int. Ed.* **2006**, *45*, 4317-4320

3) Novikov, A.V.; Kennedy, A.R.; Rainier, J.D. "Sulfur Ylide-Initiated Thio-Claisen Rearrangements. The Synthesis of Highly Substituted Indolines," *J. Org. Chem.* **2003**, *68*, 993.

4) Novikov, A.V.; Sabahi, A.; Nyong, A.; Rainier, J.D. "Diastereoselective synthesis of quaternary substituted thioindolines from sulfur ylide intermediates.," *Tetrahedron: Asymm.* **2003**, *14*, 911.

5) Rainier, Jon D.; Novikov, Alexei V.; Kennedy, Abigail R. " Sulfur ylide initiated thio-Claisen rearrangements: Synthesis of highly substituted indolines," *Abstracts of Papers*, 225th ACS National Meeting, New Orleans, LA, United States, March 23-27, **2003**.

6) Rainier, Jon D.; Novikov, Alexei V.; Kennedy, Abigail R. " Sulfur ylide initiated thio-Claisen rearrangements: Synthesis of highly substituted indolines," National Organic Symposium, Bloomington, IN, United States, **2003**..

7) Novikov, Alexei; Goldsmith, David. "Functionalization of double bonds via cationic sulfenyl-X additions," *Proceedings of ECSOC-3*, [and] *Proceedings of ECSOC-4*, Sept. 1-30, 1999 and 2000 (**2000**), Meeting Date 1999-2000, 885-893

8) Cheskis, B.A.; Isakov Ya. I.; Novikov A.V.; Moiseenkov, A.M.; Minachev Kh.M., "Zeolites as catalysts for condensation of acetals with vinyl ethers", *Izv. Akad. Nauk SSSR ser. Khim*, **1990**, *4*, 902-5 (Russ). CA: 113: 77653z

Other skills

- Languages: English (fluent), Russian (native), Spanish (basic), German (basic)
- Programming: C, C++, Delphi, Visual Basic, JavaScript, Perl

Appendix A

References

Professor Jon D. Rainier
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Professor David J. Goldsmith
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