

Tasneem Hossain-Kumar, Ph.D.

Education

Ph.D., 2007 (Chemistry), University of Wisconsin – Milwaukee, Milwaukee, Wisconsin
MS, 1993 (Organic Chemistry), Jahangirnagar University, Dhaka, Bangladesh
BS, 1990 (Chemistry), Jahangirnagar University, Dhaka, Bangladesh

Academic Position

- Ad-Interim Instructor, Texas A and M University-Commerce (Fall 2016)
- Adjunct Instructor, Texas A and M University-Commerce (2012- Spring 2016)
- Adjunct Faculty, Eastfield College (DCCCD), Mesquite, TX (2016 Summer)
- Adjunct Faculty, Richland College (DCCCD), Richardson, TX (2016 Spring)
- Ad-Interim Instructor, Texas A and M University-Commerce (2013- 2014; Spring 2015)
- Adjunct Faculty, College of Dupage, Glen Ellyn, IL (2010-2012)
- Lecturer, Agrani School and College, Dhaka, Bangladesh (1995–1998)
- Lecturer, College of Development Alternative, Dhaka, Bangladesh (1994–1995)
- Instructor, Communica, Dhaka, Bangladesh (1991–1992)

Professional Activities

- Lab Coordinator for the undergraduate and organic labs - coordinated graduate assistants for chemical preparation, and ordered chemicals for all labs
- Coordinate and Assist in the development of adjunct faculty through communication, sharing of resources, coaching and mentoring.
- Prepared sample Syllabi for lab courses as part of the student learning objectives and assessment methods to meet the core curriculum changes for the curriculum committee.
- Served in a committee for departmental various needs.
- Responsible for other departmental related duties as assigned by the department chair
- Advise students in academic matters.
- Give support in ACS club members in performing their scientific demonstration in campus.

Teaching Experiences

- General and Quantitative Chemistry I and II (Chem1411 and Chem1412)
- General and Quantitative Chemistry Lab I and II
- Survey of General Chemistry Lecture and Lab (Chem1405)
- Survey of Organic and Biochemistry Lecture and Lab (Chem1407)
- General Chemistry Tutorial I and II
- Organic Chemistry Lab I

- Proficient in delivering lectures in MS PowerPoint. Blackboard/eCollege is used as a communication tools in the classroom for syllabus, lecture slides, extra assignments, and grades.
- Use online homework (OWL) for keeping students engaged outside the classroom. Use pop quiz in class to keep them engaged and motivated. Frequently give them feedback to maximize student success.
- Provide immediate, routine, and consistent feedback to students to assist them in improving performance

- Uses knowledge of diverse communities and learning styles and has the ability to incorporate diversity of delivery of such learning styles in instruction. Gained experience to work effectively with persons from diverse backgrounds.

Special Skills

- Inert atmosphere techniques, handling of unstable compounds and reagents.
- Carried out synthesis and isolation at milligram to decagram scale.
- Experience in Analytical methods such as IR, UV, NMR (multi probe), GC, and reverse phase HPLC.
- Proficient in Microsoft Word, Excel, PowerPoint, Chemdraw, Beilstein Crossfire, Scifinder

Research Experience

Research Assistant, Department of Chemistry, University of Wisconsin – Milwaukee, Milwaukee, 1999 - 2000

Research Fellow, BCSIR, Dhaka, Bangladesh, 1992 – 1994

- Designed a novel, highly functional rigid structure for molecular recognition and catalysis.
- Synthesized and studied unstable menthyl phosphinate and *t*-butyl phosphinate.
- Studied the controlled additions of these PH₂ compounds to aldehydes to make mono and diadducts
- Developed a mechanism-based cyclization procedure.
- Isolated novel target phosphadiazabicyclononane derivative by flash chromatography, optically resolved it by crystallized a single diastereomer.
- Characterized target structure by CD, assigned absolute stereochemistry by the exciton chirality method.
- Directed undergraduate research projects to follow and modify my synthetic sequence.
- Synthesized dihydropyran derivatives by the reaction of α , β -unsaturated acyl cyanides with vinyl ethers.
- Studied the reaction rate and stereoselectivity of the product.

Publication

- Schwabacher, Alan W; Hossain-Kumar, T.; a highly functional chiral scaffold related to Troeger's base. submitted for publication.
- Hashem, MA.; Hossain-Kumar, T.; Synthesis of dihydropyran derivatives by the reaction of α , β -unsaturated acyl cyanides with vinyl ethers in an inverse- type hetero-Diels-Alder reaction. *Indian Journal of Chemistry*, 1998, 34B, 768-772.

Presentation

- Hossain-Kumar, T.; Schwabacher, AW.; A new C₂-symmetric chiral ring system for enantioselection. University of Wisconsin, Milwaukee, Chemistry Department Poster Session, Milwaukee, WI, 2004
- Hossain-Kumar, T.; Schwabacher, AW.; A new ring system in host-guest chemistry. Poster Session, ACS, Chicago, IL, 2001

Society Memberships

- American Chemical Society since 2007