## Sharmistha Basu-Dutt, Ph.D.

Chair and Professor of Chemistry

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**A. Professional Preparation**

**INSTITUTION DISCIPLINE DEGREE YEAR**

Jadavpur University, Calcutta, India Chemical Engineering B.S. 1987

Wayne State University Chemical Engineering M.S. 1991

Wayne State University Chemical Engineering Ph.D. 1995

### B. Appointments

**PERIOD POSITION INSTITUTION**

2015 Chair of Chemistry University of West Georgia

2011-present Professor of Chemistry University of West Georgia

2003-2011 Associate Professor of Chemistry University of West Georgia

2003-present Director of Engineering Studies University of West Georgia

1997-2003 Assistant Professor of Chemistry University of West Georgia

1996-1997 Instructor of Chemistry University of West Georgia

**C. Publications**

(i) Relevant to the proposed work:

1. S. Basu-Dutt, M. Minus, D. Nepal, R. Jain, S. Kumar “Chemistry of Carbon Nanotubes for Everyone,” *Journal of Chemical Education*, **2012**, 89, 221-229.
2. S. Basu-Dutt, J. Bartley, C. Slappey, “Making Chemistry Relevant to the Engineering Major,” *Journal of Chemical Education*, **2010**, 87, 1206-1212.
3. J. Bartley, S. Basu-Dutt, V. J. Geisler, F. A. Khan, S. Swamy-Mruthinti, “Making Chemistry Relevant to Science and Engineering Majors,” in S. Basu-Dutt (ed.) *Making Chemistry Relevant: Strategies for Including All Students in Learner-Sensitive Classroom Environment*, John Wiley and Sons, **April 2010**.
4. K. Gardner, E. Croker, S. Basu-Dutt, “Temperature Dependence Studies of Energy and Entropy,” *The Chemical Educator*, **2003,** 8, 1-6.
5. E. Croker, S. Basu-Dutt, “A Classical and Quantum Chemical Analysis of Gaseous Heat Capacity,” *The Chemical Educator,* **2002**, 7, 1-6.

(ii) Other significant publications:

1. S. Basu-Dutt (ed.), Making Chemistry Relevant: Strategies for Including All Students in Learner-Sensitive Classroom Environment, John Wiley and Sons, April **2010**.
2. P. H. Reggio, S. Basu-Dutt, D. P. Hurst, et al. “What is the Bioactive Conformation of Aminoalkylindoles at the Cannabinoid CB1 and CB2 Receptors? Insights Gained from E and Z Naphthylidene Indenes,” *Journal of Medicinal Chemistry*, **1998**, 41(26), 5177-5187.
3. S. Basu-Dutt, M. R. Fandino, I. M. Thompson, S. O. Salley, G. C. Whittlesey, M. D. Klein, "Feasibility Studies for a Photosynthetic Artificial Lung-Interfacing the Bioreactor with Aqueous Medium,” *American Society for Artificial Internal Organs Journal*, **1997**, 43(4), 279-283.
4. S.Basu-Dutt, S. O. Salley, G. C. Whittlesey, M. D. Klein, “Feasibility Studies for a Photosynthetic Artificial Lung - Optimization of Parameters Affecting Photosynthesis,” *American Society for Artificial Internal Organs Journal*, **1994**, M743-46.

###### D. Synergistic Activities

1. Co-PI and Executive Committee member on NSF-STEP grant # 336571 “Generating Enthusiasm in Mathematics and Sciences,” 2004 – 2009.
2. PI on Camille and Henry Dreyfus Foundation funded outreach program “Research via Active Collaboration with High Schools,” 2011 – 2012.
3. PI on Community Foundation of West Georgia funded “Improving Motivation, Performance and Attitudes of Children and Teachers,” 2008 – 2012.
4. PI on twelve Department of Education’s Teacher Quality grants, 2006 – 2014.
5. PI on NSF-CCLI grant # 9952566 “Visualization and Computation in the Undergraduate Chemistry Curriculum”, 2000 – 2002.
6. Leadership team member of the Georgia program of the National Girls STEM Collaborative Project.
7. Editor of book published by John Wiley entitled “Making Chemistry Relevant – Strategies for Including All Students in a Learner-Sensitive Classroom Environment,” 2010.
8. Recipient of University System of Georgia’s Regents’ Award for Excellence in Teaching, 2008.
9. Recipient of University of West Georgia Faculty First Year Advocate Award (2006-07), College of Arts and Sciences Excellence in Teaching Award (2004-05), Honors Professor of the Year (2002-03).
10. Director of Engineering Studies, University of West Georgia, 1997 - present.
11. Instructor of Freshman Seminars, University of West Georgia, 2000 – present.
12. Panel reviewer of Teacher Quality Grants (2007 – present), NSF Course Curriculum and Laboratory Improvement Grants (2001, 2003), National Institute of Health Small Business Initiative Research Grants (2004).
13. Reviewer for *Journal of Chemical Education,* *Chemical Educator* and a variety of General Chemistry textbooks.
14. Member of the American Chemical Society’s Examination Institute, 2007 – present.
15. Consultant, Georgia Department of Education, 2007. State reviewer in Chemistry for Governor’s Honors Program, 2006 – present. Member of the Bias Review Committee, Georgia Assessments for the Certification of Educators, 2005 – 2006.

**E. Collaborators and Other Affiliations**

Professors Victoria Geisler, Megumi Fujita, Douglas Stuart, Farooq Khan, S. Swamy Mruthinti, Javier Hasbun, Scott Sykes (College of Science and Mathematics, University of West Georgia).

Professors Gail Marshall and Judith Cox (College of Education, University of West Georgia).

Professor Steven O. Salley (Wayne State University), Thesis advisor.