

CURRICULUM VITAE

- Full Name : SEOKMIN SHIN
- Date of Birth : February 21, 1963
- Place of Birth : Seoul, Korea
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Seokmin Shin received a Bachelor's degree with Honors in 1985 and a Master's degree in 1987 from the Seoul National University. He continued his graduate studies at the University of Chicago, where he worked under the supervision of Stuart A. Rice. His Ph.D. thesis concerned the structures and phase transitions of interfaces, especially on Langmuir monolayers. He was a postdoctoral fellow with John C. Light at the University of Chicago and with Horia Methiu at the University of California, Santa Barbara. He joined the Seoul National University as a faculty member in 1995, where he is presently Professor of Chemistry. He was a visiting Professor at the Institute of Molecular Science, Japan in 1998. He worked with Vijay Pande as a visiting Scholar at Stanford University in 2007. The main focus of his research is to study dynamical processes involved in the chemical changes leading to specific functions of molecular systems. His research concerns the development of theories, mathematical frameworks and computational methods for describing dynamics of complex molecular systems. He investigates chemical reactions in condensed matter, self-assembly at surfaces/interfaces, and protein dynamics by computer simulations. He is also interested in bio/chem-informatics studies involving proteins and nucleic acids.

EDUCATION

- 1987 - 1992 : Ph. D. in Physical Chemistry
Department of Chemistry, University of Chicago
- 1985 - 1987 : M. S. in Physical Chemistry
Department of Chemistry, Seoul National University
- 1981 - 1985 : B. Sc. in Chemistry
Department of Chemistry, Seoul National University
Graduated with honors (*summa cum laude*)

PROFESSIONAL EXPERIENCE

- 2007 - 2008 Visiting Scholar, Stanford University, USA
- 2005. 10 - Professor, School of Chemistry, SNU
- 1999 - 2005 Associate Professor, School of Chemistry, SNU
- 1998 - 1999 Visiting Professor, Institute for Molecular Science, Japan
- 1995 - 1999 Assistant Professor, Department of Chemistry, SNU
- 1994 - 1995 Postdoctoral Research Associate, Department of Chemistry, UCSB
- 1992 - 1994 Postdoctoral Research Associate, The James Franck Institute,
University of Chicago
- 1988 - 1992 Research Assistant, Department of Chemistry, University of Chicago
- 1985 - 1987 Research Assistant, Department of Chemistry, SNU

AWARDS AND HONORS

- Ipjae Award in Physical Chemistry, Korean Chemical Society, 2014.
- Young Investigator Award in Physical Chemistry, Korean Chemical Society, 2003.
- Ph. D. Fellowship, The Korea Foundation for Advanced Studies, Korea, 1990-1992.
- McCormic Fellowship, The University of Chicago, 1987-1990.
- Government Fellowship for Studies in Foreign Countries, the Ministry of Education, Korea, 1987-1990.
- Woosan Foundation Graduate Fellowship, Seoul, Korea, Mar. 1985-Feb. 1987.
- Honor Award from the President of Seoul National University for Academic Excellence (Top Graduate from the College of the Natural Sciences), Feb. 1985.
- Seoul National University Honor Student Fellowship, Mar. 1983-Feb. 1985.

PROFESSIONAL AFFILIATIONS

Korean Chemical Society
American Chemical Society
Biophysical Society
Protein Society

SELECTIVE REFERENCES

1. “Conformational Sampling of Metastable States: Tq-REM as a Novel Replica Exchange Method.” MinJun Lee, Jeseong Yoon, Soonmin Jang and Seokmin Shin, *Phys. Chem. Chem. Phys.* 2017, 19, 5454-5464.
2. “A molecular dynamics study on controlling self-assembly of β -sheet peptides with designer nanorings.” SeongByeong Park, Myungsoo Lee and Seokmin Shin, *Chem. Asian J.*, 2015, 10, 1684-1689.
3. “Ultrafast Population Inversion without the Strong Field Catch: The Parallel Transfer”, Bo Y. Chang, Seokmin Shin and Ignacio R. Sola, *J. Phys. Chem. Lett.*, 2015, 6, 1724-1728.
4. “Computational Study on Removal of Epoxide from Narrow Zigzag Graphene Nanoribbons”, H. Park, J. Y. Lee and S. Shin, *J. Phys. Chem. C*, 2014, 118, 27123-27130.
5. “Relativistic potential energy surfaces of initial oxidations of Si(100) by atomic oxygen : The importance of surface dimer triplet state”, T.-R. Kim, S. Shin and C. H. Choi, *J. Chem. Phys.*, 2012, 136, 214704.
6. “Multiscale modeling of macromolecular biosystems”, Samuel C. Flores, Julie Bernauer, Seokmin Shin, Ruhong Zhou, and Xuhui Huang, *Brief. Bioinform.*, 2012, 13, 395-405.
7. “Simulated Q-annealing: conformational search with an effective potential”, Won-joon Son, Soonmin Jang and Seokmin Shin, *J. Mol. Model.*, 2012, 18, 213-220.