

- **Conference Presentations**

1. **B. I. Kim**, J.O. Holmes, K.A. Cornell, P. Deschatelets, “**Single Molecule Force Spectroscopy on 5’-Methyl thioadenosine/S-Adenosylhomocysteine Nucleosidase (MTAN) from Escherichia coli by Atomic Force Microscopy,**” AVS 53th International Symposium & Exhibition, Nov 12-17,2006, Moscone West, San Francisco, CA.
2. J. L. Rice and **B. I. Kim**, **Probing the single molecular unbinding force between MTAN and HIA using atomic force microscopy**, 5th Annual INBRE Research Conference, August 6- 8, 2006, Coeur d’Alene, ID.
3. **B.I. Kim**, “**Humidity Dependent Ordering of Water and its Effect on Adhesion and Friction between Silica Surfaces**” Gordon Research Conference on TRIBOLOGY, 06/18/2006 - 06/23/2006, Colby College, Waterville, ME
4. J.J. Durrant, R. Nuxoll, and **B. I. Kim**, “**Development of Novel Atomic Force Microscopy for Biological Studies,**” Undergraduate Research and Scholarship Conference, April 17th, 2006, Jordan Ballroom of the Student Union Building, Boise State University, Boise, ID.
5. J. Holmes, K. Cornell, and **B. I. Kim**, “**Single Molecular Antibody-Antigen Interactions Studied by Atomic Force Microscopy,**” Undergraduate Research and Scholarship Conference, April 17th, 2006, Jordan Ballroom of the Student Union Building, Boise State University, Boise, ID.
6. J.J. Durrant, R. Nuxoll, and **B. I. Kim**, “**Development of Novel Atomic Force Microscopy for Biological Studies**” Annual Boise State Day at the Legislature Date, January 18, 2006 4th floor Rotunda, Idaho State Capitol Building, Boise Idaho.
7. J. Holmes, K. Cornell, and **B. I. Kim**, **Single Molecular Antibody-Antigen Interactions Studied by Atomic Force Microscopy**, Annual Boise State Day at the Legislature Date, January 18, 2006 4th floor Rotunda, Idaho State Capitol Building, Boise Idaho.
8. **B.I. Kim**, J.O. Holmes, M.R. Kongara, and A. Punnoose **A Comparative Study of the Magnetic Domain Structure of Mn Doped ITO Thin Films by Magnetic Force Microscopy,**” AVS 52nd Annual International Symposium, October 30-November 4, 2005, Hynes Convention Center Boston, MA.
9. **Byung Kim**, **Atomic Force Microscopy in Bio-Physics Research**, 4th Annual INBRE Research Conference, August 7- 9, 2005, Nampa, ID. (*invited*)
10. B.-I. Kim, “**Tuning of Orientation and Chiral Recognition of a Single Chiral Molecule in Self-Assembly through Modulation of Anchoring Sites,**” AVS 51th Annual International Symposium, November 14- November 19, 2004, Anaheim Convention Center Anaheim, CA.
11. J. Taraci, R. Rosario, A. A. Garcia, D. Gust, M. Hayes, S. T. Picraux, B. C. Bunker, **Byung-Il Kim**, and J. E. Houston, “**Direct Observation of Nanostructured Monolayer Photoswitching for Control of Surface Energies.**”2003 MRS Fall Meeting Boston, MA, December 1-5, 2003.

12. Byung-Il Kim, Thomas M. Mayer, Matthew G. Hankins, Maarten P. DeBoer, Bruce C. Bunker, " **Degradation of Self-Assembled Monolayer in Humid Environments**", AVS 50th International Symposium, Baltimore, MD, Nov 2-7, 2003.
13. Byung-Il Kim, B. C. Bunker, D. L. Huber, J. E. Houston, S. T. Picraux, R. Rosario, A. A. Garcia, M. Hayes, And D. Gust, **Surface Forces on Switchable Bioactive Surfaces Studied by Interfacial Force Microscope**, 39th Symposium of the AVS New Mexico Chapter, Albuquerque, NM, April 29-30, 2003
14. L. C. Fernandez-Torres, X. Zhao, B.-I. Kim, and S. S. Perry, **Chemical modification influence on the frictional properties of small model lubricant molecules adsorbed on VC(100)** The 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003.
15. Byung-Il Kim, Thomas M. Mayer, Matthew G. Hankins, Maarten P. DeBoer, Bruce C. Bunker, **Self-Assembled Monolayer Aging in Humid Environments**. APS March 2003 Meeting, Austin, TX, March 3-7, 2003.
16. H. Yim, M. S. Kent, J. Hall and B. -I. Kim, **Probing the structure of GPS films using X-ray and neutron reflection and IFM: Hygrothermal degradation** 26th Annual Meeting of The Adhesion Society, Myrtle Beach, South Carolina, February 23-26,2003.
17. B. -I. Kim, M. A. Samara, D. L. Huber, J. E. Houston and B. C. Bunker **Hydration Forces on a Switchable Bioactive Surface** AVS 49th International Symposium, Denver, CO, Nov 3-8, 2002.
18. L. C. Fernandez-Torres, S. S. Perry, B. -I. Kim, **Frictional Properties of Small Model Lubricant Molecules Adsorbed on VC(100)**, AVS 49th International Symposium, Denver, CO, Nov 3-8, 2002.
19. S. S. Perry, B-I. Kim, R. Guenard, L. Fernandez, S. V. Didziulis, P. Frantz, "**Chemical Modification of the Interfacial Frictional Properties of Vanadium Carbide Through Ethanol Adsorption**" ACS April 2001 Meeting, San Diego, California, April 1-5, 2001.
20. B.-I. Kim, X. Deng, C. Cai, S. S. Perry, "**Organic Molecular Beam Epitaxy of Self-assembling Structures on PD(111)**",APS March 2001 Meeting, Seattle, Washington, March 12-16, 2001.
21. B. I. Kim, X. Deng, C. Cai, and S. S. Perry, "**Organic Molecular Beam Epitaxy of Self-Assembling Structures on Pd(111) observed by UHV STM**", 52nd Southeast/56th Southwest Combined Regional Meeting of the American Chemical Society, New Orleans, LA, Dec. 6-8, 2000.
22. S. S. Perry, T. R. Lee, S. H. Lee, B. I. Kim, R. Colorado, P. Cao, Y. S. Shon, M. Graupe, "**Atomic and Molecular Level Insight into Discreet Frictional Events**", AVS 47th International Symposium, Boston, Massachusetts, Oct. 2-6, 2000.
23. B - I. Kim, R. L. Guenard, L.C. Fernandez-Torres, and S. S. Perry, "**Chemical Modification of the Interfacial Frictional Properties of Vanadium Carbide Through Ethanol Adsorption**", Texas Surface Science Round-Up, Round Top, TX, May 26, 2000.
24. B. I. Kim and Z. G. Khim, "**Magnetic Force Microscopy utilizing the Electrostatic Force Modulation Method**", Korean Physical Society Spring Meeting, Seoul, Korea, Apr. 24-25, 1998.

25. **B. I. Kim**, U. H. Pi and Z. G. Khim, "**Construction of Scanning Force Microscope with Electrostatic Modulation for SPM-based Nanoelectronics**", Korean Physical Society Fall Meeting, Seoul, Korea, Oct. 17-18, 1997.
26. U. H. Pi, **B. I. Kim** and Z. G. Khim, "**Nanolithography and Surface Potential Measurement by Atomic Force Microscope**", Korean Physical Society Fall Meeting, Seoul, Korea, Oct. 17-18, 1997.
27. **B. I. Kim**, U. H. Pi, Z. G. Khim and Seokwon Yoon, "**Lithography by Tapping Mode Atomic Force Microscope With Electrostatic Force Modulation**", International Conference on Scanning Tunneling Microscopy/Spectroscopy and Related Techniques **STM'97**, Hamburg, Germany, Aug. 1997.
28. **B. I. Kim**, J. W. Hong, J. I. Kye, S. M. Shin, and Z. G. Khim, "**Separation of topographic effect in magnetic force microscopy using modulated electrostatic force**", Korean Physical Society Fall Meeting, Kwangju, Korea, Oct. 25-26, 1996.
29. S. M. Shin, J. W. Hong, **B. I. Kim**, J. I. Kye, and Z. G. Khim, "**Calibration of Piezoelectric Actuators of Scanning Probe Microscopes by Optical Interferometry**", Korean Physical Society Fall Meeting, Kwangju, Korea, Oct. 25-26, 1996.
30. **B. I. Kim**, J. W. Hong, J. I. Kye, Z. G. Khim and Seokwon Yoon, "**Construction of Magnetic Force Microscope and its Application to Magnetic Multilayer Films**", **The Second Asian Scanning Tunneling Microscopy Conference**, Seoul, Korea, Aug. 16-17, 1996.
31. J. W. Hong, **B. I. Kim**, and Z. G. Khim, "Effect of Electrostatic and Tapping Mode Operation of Atomic Force Microscope", **The Second Asian Scanning Tunneling Microscopy Conference**, Seoul, Korea, Aug. 16-17, 1996.
32. **B. I. Kim**, "**Construction of Magnetic Force Microscope and its Application**", The 13th Shinchon Condensed Matter Workshop, Sogang University, Korea, May 1996.
33. **B. I. Kim**, J. W. Hong, J. I. Kye, Z. G. Khim, "**Construction of Magnetic Force Microscope(MFM)**", Korean Physical Society Spring Meeting, Suwon, Korea, Apr. 26-27, 1996.
34. S. M. Shin, **B. I. Kim** and Z. G. Khim, "**Probing Lateral Dopant Distribution over Semiconductor Surface by Electrostatic Force Microscope**" Korean Physical Society Spring Meeting, Ulsan, Korea, Apr. 25-26, 1996.
35. **B. I. Kim**, J. W. Hong, G. T. Jeong, S. H. Moon, D. H. Lee, T. U. Shim and Z. G. Khim "**Effect of Mg(OH)₂ On YBa₂Cu₃O₇ thin film on MgO substrate studied by Atomic Force Microscope**" International Conference on Scanning Tunneling Microscopy **STM'93**, Beijing, China, Aug. 9-13, 1993.
36. J. W. Hong, **B. I. Kim**, G. T. Jeong, and Z. G. Khim "**Construction of Atomic Force Microscope**", Korean Physical Society Fall Meeting, Seoul, Korea, Oct. 18-19, 1992.