



Solutions for a nanoscale world.™



Veeco is pleased to collaborate with NUS – NNI on bringing you closer to the Life Science Nanotechnology world.

Do join us for this 1 hour talk by Veeco scientist from United States of America to share her experience in Life Science research

Speaker: Dr. Andrea-Lyn Slade, Veeco Instruments Inc, USA
Date: 14 March 2007
Venue: NUS, Physics Conference Room S13-M-12, 2 Science Drive 3
Time: 3pm – 4pm

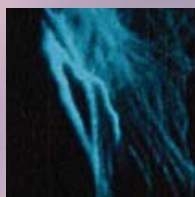
An Integrated Approach to Life Science: Seamless Integration of Optical and Scanning Probe Microscope"

Optical microscopy with a variety of fluorescence techniques has been extensively used in life science research. Nevertheless, the lack of spatial resolution and mechanical property measurement has put some limitation in its capabilities. Atomic force microscopy is vastly gaining popularity to address on this limitation and is capable of providing insights into the structural and kinetic aspects of the molecular self-assemblies with nanometric spatial resolution. However, the imaging principle of AFM limits itself to surface or sub-surface characterization. Integration of these two techniques will substantially increase the investigative power. The complementary information on molecular structure/chemical state of a sample and topographical features can be correlated.

In this seminar, several 'multimodal' imaging platforms developed by the integration of various optical techniques with AFM and their impact on the study of biological systems will be discussed.

Kindly email eseetoh@veecoasia.com or contact Ms Enez See Toh at **6773 9675** to reserve your seats today! Details of the events can also be found on <http://www.nusnni.nus.edu.sg/activities.htm> and <http://www.veeco.com/news/events.php>
There will be some refreshment served after the seminar.

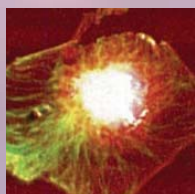
*Registration is Free and the talk will be from 3pm – 4pm.



About the Speaker:

Dr. Andrea-Lynn Slade

Dr. Slade obtained her PhD in Biochemistry from University of Toronto.



She had years of research experience in the life science research using scanning probe microscopy and optical microscopy, including dynamic structural reorganization in multicomponent supported lipid bilayer systems, influence of substrate nanostructures on lipid bilayer structure and dynamics, interaction of clostridial neurotoxins with lipid membranes containing ganglioside receptor molecules. In addition, she has done a variety of instrumentation works, e.g. integration of AFM-confocal laser scanning microscopy (CLSM)-total internal reflection fluorescence microscopy (TIRFM). She developed several operational in scanning probe microscopy and also has vast knowledge in molecular dynamics simulation techniques.



She has authored and co-authored many scientific papers in reputable journals, including Nature Cell Biology, Biophysical Journal and Journal of Structural Biology.

Dr. Slade was granted many scholarship and awards from both research and government boards during her student time.