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## Arjan P. Quist, PhD.

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Detailed CV at <http://www.arjanquist.com/cv/cv.html>

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### CAREER HIGHLIGHTS

#### Research:

- Performed 14 years of post-PhD Academic and Industrial nanotechnology Research and Development, in interdisciplinary fields of Biology and Biophysics, Neuroscience, Materials Science, Physics, Engineering and Pharmaceuticals.
- Purchased, managed and maintained Capital Equipment.
- Published 37 Scientific articles, which have been cited >1000 times in work of others.
- Co-wrote 9 provisional patent applications.
- Managed a variety of short and long term projects, including process strategy, data acquisition and analysis, client communication and reporting, in academic and corporate environments.
- Developed technical proficiency in many surface analytical techniques, clean room processing, and Bio-lab practices.
- Designed and engineered (CAD) add-on modules for combined TIRF/AFM microscopy.

#### Teaching/Lecturing:

- Presented 8 Invited lectures plus 17 contributed lectures at international conferences.
- Developed and taught undergraduate and graduate courses in chemical engineering.
- Supervised several graduate students in academic research lab environment.

#### Honors:

- Reviewed articles for several scientific journals: Scanning Microscopy, Journal of Colloid and Interface Sciences, Nuclear Instruments and Methods in Physics, Langmuir (ACS).
- Performed as faculty opponent for a licentiate thesis defense at Uppsala University.
- Participated on an organizing committee for an international conference on electron spectroscopy.

### PROFESSIONAL EXPERIENCE

#### Director of Nanotechnology

*Richmond Chemical Corp., Oak Brook IL*

03/2006–04/2011

- Started nanotechnology division in bio-pharma small business environment.
- Set up and managed atomic force microscopy (AFM) lab with integrated fluorescence microscopy.
- Developed total internal reflection fluorescence LED device to be used as an add-on to atomic force microscopy from concept CAD design to prototype building.
- Managed and executed probe microscopy projects for pharmaceutical client, including data acquisition, analysis, and reporting.
- Evaluated grants and patent applications to decide which avenues to pursue in product development.
- Synthesized and compiled information from different disciplines to present potential applications and commercial opportunities to upper management.
- Adapted quickly to turn from academic to industrial environment with a focus towards product commercialization.

**Post Graduate Researcher/Project Scientist**

*Neuroscience Research Institute, University of California Santa Barbara.* 07/2003–02/2006

- Used AFM to show that connexin channels play a role in cell volume regulation.
- Used AFM to show that several amyloid peptides form ion channels in reconstituted lipid bilayers.
- Used electron beam and photo lithography to create nano patterned surfaces for bilayer conductance measurements with AFM probes.
- Built microchannel viscosity and biosensor using AFM cantilevers.
- Adapted from physics/engineering applications to biological applications in nanoscience.

**Lecturer/Researcher: Materials Science, Biophysics, Chemical Engineering**

*Dept. Surface Biotechnology, Uppsala University, Uppsala, Sweden* 07/1999–06/2003  
*Dept. Chemical Engineering, Mälardalen University, Eskilstuna, Sweden.*

- Performed collaborative research in the departments of chemical engineering, surface biotechnology, physics and materials sciences.
- Investigated surface properties using Electron Spectroscopy, Electron beam lithography, photolithography, and scanning probe microscopy resulting in an electrochemical surface activation method for biosensing.
- Appointed as assistant supervisor for three graduate student theses.
- Created and taught undergraduate Scanning Probe Microscopy/Ellipsometry course in chemical engineering, plus an advanced version for graduate students in Biotechnology.
- Taught undergraduate Surface Biotechnology course in chemical engineering curriculum.

**EDUCATION AND TRAINING**

2008 **SBIR/STTR Grant Writing Workshop**, *Biotechnology Business Consultants.* Rush University Medical Center, Chicago.

1999 **Postdoctoral Research Fellow (Biophysics)**, *Neuroscience Research Institute,* University of California at Santa Barbara (UCSB).

1997 **PhD, “Probing biomolecular structure with scanning force microscopy”**, *Division of Ion Physics, Dept. of Radiations Sciences,* Uppsala University, Uppsala, Sweden.

1992 **MSc (Experimental Physics)**, 'Vrije' University, Amsterdam, The Netherlands.