Multiple Postdoctoral Positions
Renewable Energy and Nanotechnology Research at the University of Manitoba

The Departments of Chemistry and Electrical and Computer Engineering are seeking applicants for two postdoctoral fellow positions to participate in a multi-investigator, interdisciplinary research program focusing on solar energy conversion in collaboration with Caltech’s Powering the Planet Center for Chemical Innovation (CCI Solar). The program involves the development of nanostructures and membranes for the direct conversion of solar energy to chemical fuels. Successful postdoctoral candidates will have a strong background in areas of macromolecular self-assembly, liquid crystals or liquid crystal composites, polymer science, electrochemistry, surface science and/or materials characterization. Operating experience with field emission SEM and/or TEM will be considered a significant strength, and a combined experience involving materials synthesis and characterization (e.g. SAXS/WAXS) would be ideal. The positions are contingent on funding approval and the positions are expected to be filled by April 1, 2009. Note: applicants must be within 3 years of receiving their Ph.D. degrees at the time of appointment to be eligible.

The research program involves the research groups of Dr. Freund and Dr. Hegmann in the Department of Chemistry and Dr. Douglas Thomson in the Department of Electrical and Computer Engineering, and builds upon the significant growth in research activity and infrastructure at the University of Manitoba including the establishment of the Manitoba Regional Materials and Surface Characterization Facility (home.cc.umanitoba.ca/~mfreund/materials), the Nano Systems Fabrication Laboratory (www.ece.umanitoba.ca/research/nsfl) and the Manitoba Chemical Analysis Laboratory (www.umanitoba.ca/chemistry/MCAL). These facilities represent over $15M investment in state-of-the-art infrastructure including field emission TEM and SEM/Auger as well as XPS, SPM and SAXS/WAXS, providing an outstanding research environment.

The University of Manitoba (www.umanitoba.ca) is the provinces largest and the only research-intensive post-secondary educational institution with approximately thirty thousand students. The University is situated in the city of Winnipeg (www.destinationwinnipeg.ca), the largest city in the province with a population of over half a million and is at the eastern edge of the prairie region of western Canada and adjacent to the Canadian Shield and the province of Ontario. The city is a cultural centre and is the home of the Royal Winnipeg Ballet and the Winnipeg Symphony Orchestra, and excellent dining and entertainment.

Interested candidates should send a CV and a cover letter, including contact information for three references, to Professor Michael Freund at michael.freund@umanitoba.ca. Evaluation of applications will begin February 1 and will continue until the positions are filled.