

Michael J. Bedzyk

Professor

Northwestern University
2220 Campus Drive, Evanston, IL 60208 USA
<http://bedzyk.mccormick.northwestern.edu/>

August 30, 2014

phone: 847-491-3570
fax: 847-491-7820
bedzyk@northwestern.edu

Education:

Ph.D., Physics, State University of New York at Albany. 1982
M.S., Physics, State University of New York at Albany. 1975
B.S., Physics and Mathematics, State University of New York at Brockport, 1973

Professional Appointments:

Chair, Materials Science and Engineering, Northwestern University (NU), 2011-
Professor, Materials Science and Engineering, Northwestern University (NU), 2000-
Co-Director, Applied Physics Program, Northwestern University, 2010-2011
Professor, Physics and Astronomy, Northwestern University, 2000-
Senior Fellow, Northwestern Argonne Institute of Science and Engineering 2013-
Resident Visitor, Materials Science Division, Argonne National Laboratory (ANL), 1991-
Co-Director, Synchrotron Research Center, Northwestern University, 2005-
Director, X-ray Diffraction Facility, Northwestern University, 1999-
Assoc. Professor, Materials Science and Engineering, Northwestern University, 1991-2000
Assoc. Professor, Physics and Astronomy, Northwestern University, 1999-2000
Adjunct Assoc. Prof., Materials Science and Engineering, Cornell University, 1990-1991
Staff Scientist, Cornell High Energy Synchrotron Source, Cornell University, 1984-1991
Research Associate, Hamburg Synchrotron Laboratory, DESY, Hamburg, Germany, 1982-1984

Professional Societies:

American Physical Society
American Crystallographic Association
American Association for the Advancement of Science
Materials Research Society
American Chemical Society
American Vacuum Society

Honors and Awards:

Bertram Eugene Warren Diffraction Physics Award from the American Crystallographic Assoc., 1994
Fellow of the American Physical Society, 1998
Fellow of the American Association for the Advancement of Science, 2013

Research Areas and Interests:

Surface, interface, thin-film, and nanoscale structures
Semiconductor and Oxide surface structures and heteroepitaxial strained-layer systems
Metal / oxide supported monolayer and nanoparticle catalysts
Liquid / solid interface, diffuse double-layer structure, Li ion battery solid-electrolyte interphase
Atomic-scale structure of fluid / mineral interface
Biomolecular adsorption at charged surfaces
Ultrathin organic films, Self-Assembled Monolayers and Multilayers
Molecular Self-Assembly, membrane and vesicle formation, DNA coated nanoparticle assembly
Utilization of high brightness x-ray synchrotron sources as *in-situ* structural probes
X-ray interference phenomena, X-ray Spectroscopy, X-ray optics, Crystallography

Northwestern University Committees:

NUANCE Advisory Committee
Materials Research Center, Shared Facilities Committee
Center for Catalysis and Surface Science, Executive Committee
Instrument Shop Advisory Committee
Simpson Query Institute for BioNanotechnology Medicine (IBNAM) Advisory Board

Main Current External Committees:

DuPont Northwestern Dow Collaborative Access Team at the APS, Chair

Argonne National Lab (ANL) X-ray Interfacial Science Collaborative Development Team, co-chair

ANL X-ray Interfacial Science Scientific and Technical Advisory Committee (chair)

Surface X-ray Neutron Scattering (SXNS-11) International Conference, Chair

Surface X-ray Neutron Scattering Conference, International Advisory Committee

Materials Science Division (ANL), Scientific Advisory Committee

International Conf on Advanced Nanomaterials and Nanotechnology (ICANN-2013), Int. Advis Comm

American Crystallographic Association, Warren Award Committee

"Advances in Nanomaterials using Synchrotron Techniques (ASTM - 2014)" Int. Advis Comm