

Janet L. Hunting

357 Center for Natural Sciences • 953 Danby Road
Ithaca College • Ithaca, NY 14850 • (607) 274-1475 • jhunting@ithaca.edu

EDUCATION:

Cornell University, Ithaca, New York

Ph.D.: January 2006

M.S.: January 2003

Major: Inorganic chemistry; minor: materials science and engineering

Advisor: Frank DiSalvo

Thesis: The Uses of Zinc and Lithium Nitride Fluxes in the Synthesis of New Nitride Compounds and the Characterization of New Calcium Transition Metal Nitrides

California State University, Long Beach

B.S. Chemistry (with honors), May 1999

TEACHING:

Ithaca College

Assistant Professor

August 2007 – present

Courses taught:

Principles of Chemistry, Quantitative Chemistry, Inorganic Chemistry,
Advanced Inorganic Chemistry, Experimental Inorganic Chem. Lab (E4),
Fundamentals of Chemistry Lab, Topics in Chemistry and Biochemistry,
Intro to Polymer and Materials Chemistry.

Franklin & Marshall College

Visiting Assistant Professor

August 2005 – June 2007

Courses taught:

General Chemistry I and II, General Chemistry I and II lab,
Advanced Inorganic Chemistry

SCHOLARSHIP:

Ithaca College

Fall 2007 – present

Synthesis and characterization of potential energy-saving materials: (1) doped transition metal oxides for use as cathode supports in fuel cells; (2) synthesis of inorganic nitride compounds using lithium nitride and mixed metal fluxes for use as superconductors and as phosphors for efficient solid-state lighting.

Mentored 14 undergraduate research students:

Fall 2007 – present

Mentored honors research student, Semeret Munie ('08):

Spring 2008

Presentation at Western NY ACS meeting:

“The Synthesis of Transition Metal Doped Titanium Dioxide ($Ti_{1-x}M_xO_2$) Using Chemical Vapor Transport”

Cornell University, Ithaca, New York

Summer 2007

Visiting Scientist

- Supervised 2 Ithaca College students with summer fellowships

Franklin & Marshall College

Fall 2005 – Spring 2007

Synthesis of inorganic nitride compounds using zinc, tin and mixed metal fluxes. Determination of heats of formation of nitride compounds using solution calorimetry.

- Received F&M Committee on Grants funding for research from October 2006 through June 2007
- Received funding for supplies and Hackman summer scholar May – August 2006

Cornell University, Ithaca, New York

September 1999 – August 2005

Synthesis, structure determination and characterization of new ternary and higher nitrides using lithium nitride, zinc and other metals as fluxes. Exploration of rare-earth doping of gallium nitride.

Techniques used:

- Glove box (argon-filled for air-sensitive materials)
- Electron microprobe analysis (EDX, WDX)
- Powder X-ray diffraction
- Single crystal X-ray diffractometer
- Cornell High Energy Synchrotron X-rays (CHESS)
- NMR, IR, UV-vis

Research advisor: Professor Frank DiSalvo

California State University, Long Beach

June 1997 – June 1999

Synthesis, UV-spectroscopy and electrochemistry of silver(II) complexes of porphyrin and tetraaza compounds and reaction kinetics of the oxidation of 4-methyl-2-mercapto-pyrimidine and other substrates using the stopped-flow method.

Research advisor: Dr. Henry Po

PUBLICATIONS:

Hunting, Janet L., Szymanski, Marta M.,* Johnson, Philip E.,* Kellar, C. Brenhin,* DiSalvo, Francis J.

“The Synthesis and Structural Characterization of the New Ternary Nitrides: Ca_4TiN_4 and Ca_5NbN_5 ” *Journal of Solid State Chemistry* (2007), 180(1), 31-40.

Yesinowski, James P., Purdy, Andrew P., Wu, Huaqiang, Spencer, Michael G., Hunting, Janet, DiSalvo, Francis J. “Distributions of Conduction Electrons as Manifested in MAS NMR of Gallium Nitride” *Journal of the American Chemical Society* (2006), 128(15), 4952-4953.

Wu, Huaqiang, Poitras, Carl B., Lipson, Michal, Spencer, Michael G., Hunting, Janet, DiSalvo, Francis J. “Photoluminescence and cathodoluminescence analyses of GaN powder doped with Eu” *Applied Physics Letters* (2006), 88(1), 011921/1-011921/3.

Wu, Huaqiang, Poitras, Carl B., Lipson, Michal, Spencer, Michael G., Hunting, Janet; DiSalvo, Francis J. "Green emission from Er-doped GaN powder" *Applied Physics Letters* (2005), 86(19), 191918/1-191918/3.

Wu, Huaqiang, Hunting, Janet, Uheda, Kyota, Lepak, Lori, Konkapaka, Phanikumar, DiSalvo, Francis J., Spencer, Michael G. "Rapid synthesis of gallium nitride powder" *Journal of Crystal Growth* (2005), 279(3-4), 303-310.

Wu, Huaqiang, Hunting, Janet, DiSalvo, Francis J., Spencer, Michael G. "Rapid synthesis of high purity GaN powder" *Physica Status Solidi C: Conferences and Critical Reviews* (2005), 2(7), 2074-2078.

Po, Henry N., Hunting, Janet L., Mahmud, Roziathanim, Radzian, Rosidah, Shen, Shu-Chin. "Kinetics and mechanism of the oxidation of 4-methyl-2-mercaptopyrimidine by silver(II)-cyclam and the thermodynamics of its acid-base reaction" *Journal of Coordination Chemistry* (2000), 51(4), 399-416.

*undergraduate researchers

ACADEMIC SERVICE:

Ithaca College

- Leadership Scholarship Reviewing Committee
- Experiential Learning Committee
- C.P. Snow Committee
- Ithaca Today
- Person-to-Person

PROFESSIONAL EXPERIENCE:

Andresen Graphic Services, Santa Monica, CA 1977 - 1994

Vice President/General Manager January 1992 - February 1994

- Full responsibility and accountability for all aspects of the Santa Monica division
- Managed staff of forty-five
- Developed business and marketing plans
- Created and expanded a highly successful Macintosh/PC department

Vice President, Systems Operations June 1985 - January 1992

- Researched, coordinated and oversaw the purchase and installation of PC-based typesetting systems and Novell local area networks at seven Andresen divisions.
- Taught classes on typesetting and theory of color separations to staff members
- Created standards, procedures and training to streamline production and assure profitability at all locations
- Organized and managed a large-scale multi-year typebook project

HONORS and AWARDS:

- Bayer Teaching Excellence Award (Cornell University, 2005)
- Outstanding Graduate of the College of Natural Sciences and Mathematics (California State University, Long Beach, 1999)
- Phi Beta Kappa
- Inorganic Chemistry Award
- Toni Horalek Award for Leadership
- President of the Student Affiliates of the American Chemical Society
CSU Long Beach chapter
- Merck Award for Outstanding Student in Organic Chemistry
- President's Honor List
- Golden Key Honor Society

FELLOWSHIPS and SCHOLARSHIPS:

- Cornell Graduate Fellowship (Cornell University, 1999-2000)
- Robert B. Henderson Scholarship (CSU Long Beach, 1999)
- Michael Monahan Summer Research Fellowship (CSULB, Summers 1997 and 1998)

AFFILIATIONS:

- American Chemical Society
- Council on Undergraduate Research
- Middle Atlantic Association of Liberal Arts Chemistry Teachers