

Olga Michels, Ph.D.

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Professional Preparation

National Research Council of Canada, Ottawa, On, Canada

Postdoctoral Research Associate, 2002-2003

Adviser: Dr. Linda Johnston

University of Victoria, Victoria, BC, Canada

Ph.D. in physical organic chemistry, April 2002

Adviser: Dr. Cornelia Bohne

Thesis: "Complexation of probe molecules to the different binding sites of bile salt aggregates"

McMaster University, Hamilton, ON, Canada

B.Sc. in Chemistry and Mathematics, May 1997

Adviser: Dr. Ron Childs

Thesis: "Studies on a membrane based pH valve"

Employment

August 2010 – Present

Associate Professor of Chemistry

Luther College, Decorah, IA

Teaching responsibilities:

- ❖ Organic Chemistry I and II (with laboratory component)
- ❖ Advanced Chemical Principles
- ❖ General Chemistry I
- ❖ Essentials of Chemistry (with laboratory component)
- ❖ Paid 450: War, Peace and Reconciliation in Cambodia
- ❖ Advanced topics: Physical Organic (Photochemistry)
- ❖ Senior Projects: Papers and seminar
- ❖ Honors 130: Scholars colloquium
- ❖ Luther College's Malta Semester: Faculty leader Spring 2012
- ❖ Women in Science
- ❖ Intersections 350: Civic Engagement

August 2004 – July 2010

Assistant Professor of Chemistry

Luther College, Decorah, IA

Teaching responsibilities:

- ❖ Organic Chemistry I and II (with laboratory component)
- ❖ General Chemistry I (lecture)
- ❖ Essentials of Chemistry (with laboratory component)
- ❖ Women in Science
- ❖ General Chemistry I and II (laboratory)
- ❖ Laboratory Safety
- ❖ Senior Projects: laboratory component
- ❖ Senior Projects: Papers and seminar
- ❖ Chemistry, the environment and society

August 2003 to May 2004

Visiting Assistant Professor of Chemistry

Luther College, Decorah, IA

Teaching responsibilities

- ❖ Organic Chemistry I and II (with laboratory component)
- ❖ Laboratory Safety

- ❖ General Chemistry I and II (laboratory)
- ❖ Chemical Kinetics (laboratory)

Honors and Recognition

- Invited to serve on the national ACS committee to co-write the next year long exam in organic chemistry (OR 18, from 2016 – 2017)
- Doris and Ragnvald Ylvisaker Endowment Award, Luther College (2007)
- Outstanding teaching assistant, fellowship, University of Victoria (2000 – 2001)
- Academic Research fellowship (Ph.D.), University of Victoria (1999 – 2001)
- Dr. E. and Mrs. M von Rudloff Award in Chemistry, University of Victoria (1998)
- SWOUSC-CSC, Best presentation, physical organic, undergraduate (1997)
- CIC Monseroff Medal, Hamilton, Ontario, Canada (1997)
- Alumni Merit Award, University of New Brunswick (1993 –1995)

Fellowships and Grants Received

External

Faculty/Student Summer Research in Chemistry: Environmental pollutants and DNA

Monticello College Foundation

Submitted February 2013; funding period: May 2013 – May 2014

\$6,700

Investigating the fluorescence of furans, dioxanes, and polychlorinated biphenyls (PCBs) in water: Developing a new technique to investigate the presence and levels of environmental pollutants.

Grow Iowa Values Fund

Submitted October 2009; funding period: May 2010 – April 2012

\$40,000

Faculty/Student Summer Research in Chemistry Host-Guest Complexes

Monticello College Foundation

Submitted February 2009; funding period: May 2009 – August 2009

\$4,000

Faculty/Student Summer Research Project

Monticello College Foundation

Submitted February 2007; funding period: May 2007 – August 2007

\$7,000

Faculty/Student Summer Research and Laboratory Development in Chemistry

The Monticello College Foundation

Submitted: February, 2006; Funding period: Summer 2006

\$7,000

Effect of Porphyrin Structure on the Binding in Human Serum Albumin (HSA)

Iowa College Foundation – R.J. McElroy Trust

Submitted April 2005; funding period May 2005 – May 2006

\$ 1,930

Internal

Studying the relationship between drug structures and model host biological systems.

Luther College: Summer Faculty/Student Collaborative Research Grant

Submitted February 2016; funding period: May 2016 – August 2016

\$4,000

Investigating the fluorescence of furans and polychlorinated biphenyls (PCBs) in micelles, cyclodextrins and DNA.

Luther College: Summer Faculty/Student Collaborative Research Grant
Submitted February 2013; funding period: May 2013 – August 2013
\$4,000

*Investigation the fluorescence of furans and polychlorinated biphenyls (PCBs) in water:
Developing a new technique to investigate the presence and levels of environmental pollutants.*
Luther College: Summer Faculty/Student Collaborative Research Grant
Submitted February 2011; funding period: May 2011 – August 2011
\$4,000

Studying the relationship between porphyrin structure (“guest”, drug molecules) and human serum albumin (“host”, model biological system)
Luther College: Summer Faculty/Student Collaborative Research Grant
Submitted February 2009; funding period: May 2009 – August 2009
\$4,000

Studying the relationship between porphyrin structure (drug molecules) and inclusion in model biological systems (proteins and vesicles (cell mimics))
Luther College (Summer Student/Faculty Collaborative Research Projects)
Submitted February 2006; funding period June 2006 – August 2006
\$3,500

Studies of the inclusion and reactivity of porphyrin probes (photodynamic drug therapy targets) with model biological systems
Luther College (Summer Student/Faculty Collaborative Research Projects)
Submitted March 2005; funding period June 2005 – August 2005
\$3,500

Articles (all peer reviewed)

(1) Rinco, O., Brenton, J., Douglas, A., Hannemann, A., Henderson, M., Indrelie, K., Wessels, J., Widin, J. A fluorescence study: looking at the effect of porphyrin structure on binding to human serum albumin. *Journal of Photochemistry and Photobiology A: Chemistry*, **2009**, 208, 91-96.

(2) O'Connell, R.J., Yuan, C., Johnston, L.J., Rinco, O., Probohd, I, Treistman, S.N. Gating and Conductance Changes in BK_{Ca} Channels in Bilayers Are Reciprocal. *J. Membrane Biol.*, **2006**, 213, 143-153.

(3) Chen, L., Rinco, O., Popov, J., Vuong, N., Johnston, L.J. Psoralen and Coumarin Photochemistry in HSA Complexes and DMPC Vesicles. *Photochemistry and Photobiology*, **2006**, 82, 31-37.

(4) Mladenova, G., Singh, G., Acton, A., Chen, L., Rinco, O., Johnston, L.J., Lee-Ruff, E. Photochemical Pinacol Rearrangements of Unsymmetrical Diols. *Journal of Organic Chemistry*. **2004**, 69, 2017-2023.

(5) Rinco, O., Nolet, M.-C., Ovans, R., Bohne, C. Probing the Binding Dynamics to Sodium Cholate Aggregates Using Naphthalene Derivatives as Guests. *Photochemical and Photobiological Sciences*. **2003**, 2, 1140-1151.

(6) Rinco, O., Kleinman, M.K., Bohne, C. Reactivity of Benzophenones in the Different Binding Sites of Sodium Cholate Aggregates. *Langmuir*. **2001**, 17, 5781-5790.