

## **Richard S. Kelly**

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Department of Chemistry  
East Stroudsburg University  
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East Stroudsburg, PA 18301

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### **EDUCATION:**

Ph.D. in Analytical Chemistry; October, 1984; University of Vermont,  
Burlington, Vermont (*with Dr. William E. Geiger*)  
Dissertation: *Electrochemical Investigations of Cobalt-Containing Metallacycles  
and Polyolefin Complexes.*  
B.S. in Chemistry; May, 1979; Davidson College, Davidson, North Carolina,  
*ACS Certified Degree; Analytical Chemistry Undergraduate Award*

### **I. ACADEMIC EMPLOYMENT**

#### **East Stroudsburg University**

East Stroudsburg, PA 18301

Rank: Associate Professor of Chemistry (with tenure)  
Assistant Professor of Chemistry

Dates: May, 2004 to present

Dates: September, 2000 to May, 2004

Courses Taught: Analytical I (Quantitative Analysis), lecture and laboratory; Analytical II (Instrumental Analysis), lecture and laboratory; Environmental Quality Chemistry (junior/senior level) lecture and laboratory; Environmental Chemistry (non-majors), lecture; Modern Chemical Science (non-majors), lecture; Research in Chemistry

#### **Merrimack College**

North Andover, MA 01845

Rank: Associate Professor of Chemistry

Dates: September, 1995 to May, 2000

Courses taught: Analytical I & II, lecture and laboratory; Advanced Analytical (NMR and MS), lecture only; Environmental Chemistry, lecture; General Chemistry laboratory; Special Topics (Forensic chemistry, Archeological chemistry) lecture; Research in Chemistry

#### **Lake Forest College**

Lake Forest, IL 60045

Rank: Assistant Professor of Chemistry

Dates: September, 1989 to May, 1995

Courses taught: Analytical I & II, lecture and laboratory; General Chemistry I & II, lecture and laboratory; Environmental Chemistry, lecture; Advanced Topics, lecture; Special Topics (Forensic chemistry, Chemistry and Art) lecture and lab; Research in Chemistry

#### **Denison University**

Granville, OH 43023

Rank: Assistant Professor of Chemistry  
(Sabbatical Replacement)

Dates: September, 1988 to May, 1989

Courses taught: Analytical I & II, lecture and laboratory; General Chemistry I & II, laboratory

## II. RELATED PROFESSIONAL EXPERIENCE

|   |                          |
|---|--------------------------|
| NSF Macro-ROA Fellow, University of Kansas              | May to August, 1991      |
| Dreyfus Faculty Research Fellow, Hope College           | June to August, 1989     |
| Senior Research Chemist, Merrell Dow Research Institute | July, 1986 to May, 1988  |
| Postdoctoral Research Fellow, Indiana University        | July, 1984 to June, 1986 |

## III. WORKSHOPS AND TRAINING COURSES ATTENDED, 2000 - 2007

|      |   |   |
|------|---|---|
| 2007 | Restek Corporation<br>Shelton, CT                         | <i>Gas Chromatography-Mass Spectrometry</i> – 1 day   |
| 2005 | Agilent Technologies<br>Chicago, IL                       | <i>Model 5890 GC Maintenance</i> – 4 days   |
| 2003 | Proctor & Gamble Co.<br>Somerset, NJ                      | <i>Professional Analytical Chemists in Industry-A Short Course in Problem Solving</i> – 1 day |
| 2003 | Perkin-Elmer Instruments<br>New Brunswick, NJ             | Workshop in <i>Gas Chromatography</i> –1 day  |
| 2003 | National Instruments<br>Allentown, PA                     | Seminar in <i>Computer-based Measurement and Automation</i> – 1 day                           |
| 2002 | Wavefunction, Inc.<br>Herbert Lehman College<br>Bronx, NY | Workshop in <i>Molecular Modeling for the Undergraduate Curriculum</i> – 1 day                |
| 2002 | Perkin-Elmer Instruments<br>Shelton, CT                   | Flame Atomic Absorption Spectroscopy Training Course – 2 days                                 |
| 2002 | Perkin-Elmer Instruments<br>Shelton, CT                   | Graphite Furnace Atomic Spectroscopy Training Course – 3 days                                 |
| 2001 | Christian Brothers University<br>Memphis, TN              | NSF Chatauqua Short Course #C76<br><i>“Using Science to Solve Crimes”</i> – 2 days            |
| 2001 | Christian Brothers University<br>Memphis, TN              | NSF Chatauqua Short Course #D77<br><i>“Advanced Forensic Science”</i> – 3 days                |

## IV. PAPERS AND POSTERS PRESENTED AT PROFESSIONAL MEETINGS 2000 - 2007

(\*denotes undergraduate student co-author)

Heather A. Bullen, R. S. Kelly, and Alexander Scheeline “Online Articles in the Analytical Sciences Digital Library: Open Access Teaching, Learning, and Publishing”, PittCon 2007, Chicago, IL, February, 2007.

R. S. Kelly “The Analytical Sciences Digital Library: Electronic Publishing of Undergraduate Research”, 2006 Eastern Analytical Symposium, Somerset, NJ, November, 2006.

PAPERS AND POSTERS PRESENTED AT PROFESSIONAL MEETINGS, continued

R. S. Kelly “The Analytical Sciences Digital Library: A Useful Resource for Educators”, 38<sup>th</sup> Middle Atlantic Regional Meeting, Hershey, PA, June, 2006.

Camille A. Law\* and R. S. Kelly “Electrochemical Activation of Pitch-based Carbon Fibers”, 231<sup>st</sup> American Chemical Society National Meeting, Atlanta, GA, March, 2006.

Vesna Vodlan\* and R. S. Kelly “Ion Partitioning at Activated Carbon Fiber Electrodes”, 227<sup>th</sup> American Chemical Society National Meeting, Anaheim, CA, March, 2004.

V. Vodlan\*, D. M. Johnson\*, J. G. Smith\*, J. S. Gold, and R. S. Kelly “Ion Partitioning at High Surface Area Carbon Fiber Electrodes”, 36<sup>th</sup> Middle Atlantic Regional Meeting of the American Chemical Society, Princeton, NJ, June, 2003.

N. N. Little\*, E. T. Donnell\*, C. A. DeVita\*, and R. S. Kelly “A Student Project in Problem-Based Learning: Analysis for Hexavalent and Total Chromium at a Contaminated Industrial Site”, 36<sup>th</sup> Middle Atlantic Regional Meeting of the American Chemical Society, Princeton, NJ, June, 2003.

A. J. Gotch, J. G. Smith\*, R. S. Kelly, and Theodore Kuwana “Polarization Effects on Ion Partitioning at High Surface Area Carbon Fiber Electrodes”, 225<sup>th</sup> American Chemical Society National Meeting, New Orleans, LA, March, 2003.

R. S. Kelly, J. G. Smith\*, V. Vodlan\*, P. Inkaew, and Theodore Kuwana “Characterization of Ion Partitioning at High Surface Area Carbon Fiber Electrodes with Electrochemical Flow Analysis”, Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Orlando, FL, March, 2003.

R. S. Kelly, J. E. Flynn\*, and Theodore Kuwana “Extent-of-fracture effects on charge selective electrochemistry at ultra-high surface area carbon fibers”, 219<sup>th</sup> American Chemical Society National Meeting, San Francisco, March, 2000.

**IV. CONFERENCES, SEMINARS AND SYMPOSIA ATTENDED, 2000 - 2007**

Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy:

Chicago, IL, February, 2007

Orlando, FL, March, 2006

Orlando, FL, March, 2005

Orlando, FL, March, 2003

National Meetings of the American Chemical Society

Atlanta, GA, Fall 2006

Philadelphia, PA, Fall 2004

Anaheim, CA, Spring 2004

New Orleans, LA, Spring 2003

San Francisco, Spring, 2000

Eastern Analytical Symposium – Somerset, NJ

November, 2006

November, 2003

National Meeting of Sigma Xi – Raleigh, NC, November, 2001

Regional Meetings of the American Chemical Society

Hershey, PA, June, 2006

Princeton, NJ, June, 2003

## VII. ARTICLES IN REFEREED JOURNALS

1. A. J. Gotch, R. S. Kelly, Kuwana, T., "Characterization and Modeling of the Nonfaradaic Response of Ultra High Surface Area Carbon Fibers by Electrochemical Flow Injection Analysis", *J. Phys. Chem. B*, **2003**, *107*, 935-941.
2. R. S. Kelly, B. D. Coleman, T. Huang, P. Inkaew, T. Kuwana, "EC-FIA Study of Ion Partitioning at High Surface Area Carbon Fiber Electrodes", *Analytical Chemistry* **2002**, *74*, 6364-6369.
3. D. J. Weiss, R. S. Kelly, M. Cumaranatunge, T. Kuwana, "Computer Simulation of Charge Selective Electrochemistry of Catechols at High-Surface-Area Carbon Fibers", *Analytical Chemistry* **1999**, *71*, 3712-3720.
4. M. R. Malachowski, M. E. Adams, N. Elia, A. L. Rheingold, and R. S. Kelly, "Enforcing Geometrical Constraints on Metal Complexes Using Biphenyl-Based Ligands: Spontaneous Reduction of Copper (II) by Sulfur-Containing Ligands" *J. Chem. Soc. Dalton Trans.* **1999**, 2177-2182.
5. R. S. Kelly, D. J. Weiss, S. H. Chong, and T. Kuwana, "Charge Selective Electrochemistry at High-Surface-Area Carbon Fibers", *Analytical Chemistry* **1999**, *71*, 413-418.
6. M. R. Malachowski, B. T. Dorsey, M. J. Parker, M. E. Adams, and R. S. Kelly, "Probing the Catalytic Properties of Copper(II) Complexes of Appended Cyclams: Correlations Between Catalysis and Stability Constants or Electrochemical Properties", *Polyhedron*, **1998**, *17*, 1289-1294.
7. M. R. Malachowski, B. Dorsey, J. Sackett, R. S. Kelly, A. L. Ferko, R. N. Hardin, "Effect of Ligand Donors on the Catalytic Properties of Metal Complexes: Copper(II) Complexes as Catalysts for the Oxidation of 3,5-di-tert-butylcatechol", *Inorganica Chimica Acta* **1996**, *249*, 85-92.
8. M. R. Malachowski, H. B. Huynh, L. J. Tomlinson, J. W. Furbee, Jr., and R. S. Kelly, "A Comparative Study of the Catalytic Oxidation of Catechols by Cu(II) Complexes of Tripodal Ligands", *J. Chem. Soc. Dalton Trans* **1995**, 31-36.
9. J. W. Furbee, Jr., T. Kuwana, and R. S. Kelly, "Fractured Carbon Fiber-Based Biosensor for Glucose", *Analytical Chemistry* **1994**, *66*, 1575-1577.
10. J. W. Furbee, Jr., C. R. Thomas, R. S. Kelly, and M. R. Malachowski, "Mediated Electrochemical Reduction of Cytochrome *c* and Tyrosinase at Perfluorosulfonated Ionomer Coated Electrodes", *Analytical Chemistry* **1993**, *65*, 1654-1657.
11. P. F. Vance, T. F. Prins, B. E. Hauger, M. E. Wemple, L. M. Pederson, D. A. Kort, M. R. Kannisto, S. J. Geerligs, R. S. Kelly, M. J. Silver, J. C. Huffman, and D. G. Peters, "The Effects of Allyl Methyl Substituents on the Preparation, Dynamics, and Reactivity of (C<sub>5</sub>Me<sub>5</sub>) (allyl) ZrX<sub>2</sub> Complexes", *Organometallics* **1991**, *10*, 917-924.
12. R. S. Kelly and W. E. Geiger, Jr., "Cobaltacycles in Three Oxidation States: Redox Properties and Reaction Routes", *Organometallics* **1987**, *6*, 1432-1439.

ARTICLES IN REFEREED JOURNALS, continued

13. R. T. Carl, S. J. Doig, W. E. Geiger, Jr., R. C. Hemond, R. P. Hughes, R. S. Kelly, and D. E. Samkoff, "Pentamethylcyclopentadienyl Cobalt and Rhodium Complexes of Octafluorocyclooctatetraene: Synthesis and Electrochemical Characterization", *Organometallics* **1987**, 6, 611-616.
14. R. S. Kelly and R. M. Wightman, "Detection of Dopamine Overflow and Diffusion with Voltammetry in Slices of Rat Brain", *Brain Research* **1987**, 423, 79-89.
15. C. Amatore, R. S. Kelly, E. W. Kristensen, W. G. Kuhr, and R. M. Wightman, "Effects of Restricted Diffusion at Ultramicroelectrodes in Brain Tissue: Theory and Experiment for Chronoamperometry", *J. Electroanal. Chem.* **1986**, 213, 31-42.
16. R. S. Kelly and R. M. Wightman, "Bevelled Carbon-Fiber Ultramicroelectrodes", *Analytica Chimica Acta* **1986**, 187, 79-87.

**VII. PROFESSIONAL ASSOCIATIONS**

American Chemical Society (ACS), since 1979  
Analytical Sciences Digital Library (ASDL), Associate Editor  
Council on Undergraduate Research (CUR)  
Sigma Xi  
Society for Electroanalytical Chemistry (SEAC)