

CURRICULUM VITAE

DANIEL C. TOFAN

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EDUCATION

Ph.D., Inorganic Chemistry, **Georgetown University**, December 2001 (advisor: Prof. Joseph E. Earley)

- Thesis: *Reduction of Perchlorate Ion by Titanium(III) in Ethanolic Solutions*

M.S., Inorganic Chemistry, **Georgetown University**, February 2001 (advisor: Prof. Joseph E. Earley)

M.S., Inorganic Chemistry, University of Iasi, Romania, 1997

B.S. *Summa cum Laude*, Chemistry, University of Iasi, Romania, 1995

ACADEMIC POSITIONS

Eastern Kentucky University, Department of Chemistry

- Assistant Professor, Chemistry/Chemical Education (August 2004 – present)

State University of New York, Stony Brook, Department of Chemistry

- Postdoctoral Associate, Chemical Education (October 2001 – July 2004)
 - Java programmer, LUCID project – a computer based assessment software in support of collaborative learning through the POGIL methodology
 - Class instructor using POGIL in general chemistry

Georgetown University, Department of Chemistry

- Teaching Assistant (August 1997 – July 2001)
- Substitute lecturer (2000-2001)

OTHER QUALIFICATIONS

SUN Certified Java programmer (2002)

Expert in Java server-client programming, SQL and XML programming, desktop software (Adobe CS4 Master Collection, MS Office 2007), data collection software (Vernier LoggerPro)

TEACHING EXPERIENCE

Eastern Kentucky University (as Assistant Professor)

<u>Course Number</u>	<u>Title</u>	<u>Times Taught</u>
CHE 101	Chemistry in Everyday Life	2 times in 1 year
CHE 107	Introductory Chemistry Lab	5 times (1 online) in 5 years
CHE 111	General Chemistry I	12 times (1 online) in 6 years
CHE 112	General Chemistry II	14 times in 6 years
CHE 115	General Chemistry Lab I	6 times in 3 years
CHE 116	General Chemistry Lab II	6 times in 3 years
CHE 495	Independent Student Research	3 times, 6 students total
CHE 501/701/805	Computers in Chemical Education	3 times (1 online) in 2 years
CHE 845	Chemical Demonstrations	1 time (new in Spring 2010)

Illinois State University (as part-time online instructor)

CHE 433	Developing Professional Practice in Chemical Education: Modern Technology in the Chemistry Classroom	New course for Spring 2010
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SUNY Stony Brook (as Postdoctoral Associate)

CHE 131/132	General Chemistry I/II	1 year (Instructor in process-oriented workshops using collaborative learning methods)
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Georgetown University (as Ph.D. graduate student)

- Teaching assistant (recitation and laboratory) in the General Chemistry courses for majors and Continuing Education (11 semesters between 1997-2001)
- Substitute lecturer in the General Chemistry course for Continuing Education (2000-2001)

ADMINISTRATIVE EXPERIENCE

Coordinator of Introductory Chemistry laboratories (CHE 101/105/107) for non majors (2004 -2006); responsibilities

- Coordinating with faculty teaching the lecture component of the courses
- Creating the schedule of experiments and coordinating with the lab manager
- Writing grading rubrics and distributing grading assignments between TA's
- Managing the TA's, as well as student attendance to the open lab
- Providing final lab grades to course instructors
- Implemented a computer-based management system for the open lab using a hand-held device and wireless communication with a server
- Built a database back-end to keep track of student attendance, unknown assignments, and other lab events

Coordinator of General Chemistry Laboratories (CHE 115/116/116H) for majors (2006 – 2009); responsibilities as above, plus:

- Modernized the laboratory by obtaining a \$50K grant and buying 20 computer stations and 20 complete sets of Vernier probes and software for data collection
- Implemented automated grading of certain laboratory reports on a server-client system, using Java programming
- Authored a 25-experiment laboratory manual
- Introduced UV-VIS spectrophotometers in the lab through a \$9K grant
- Introduced lab topics such as conductivity and oxidation-reduction potentials in the lab curriculum

Coordinator of the Chemistry Learning Center (2006 –2009)

- Scheduling and training of tutors
- Maintaining collection of textbooks and other resources
- Tracking student attendance through a custom-developed Java database program

Manager of the Chemistry computer laboratories (2007 –2009)

- Installation of 40 computer stations and associated software
- Installation of Vernier probes and USB interfaces for data collection in labs
- Maintenance of the lab operations in conjunction with IT personnel

PUBLISHED SCHOLARLY WORKS

Refereed journal articles:

- Cristina Tofan, Daniel C. Tofan: "A low cost, low memory-footprint, SQL and servlet-based solution for searching archived images and documents in digital collections.", *D-Lib Magazine*, **2009**, in print (November/December issue)
- Daniel C. Tofan: "Teaching chemistry with a tablet PC and OneNote 2007", *Journal of Chemical Education*, **2009**, accepted
- Daniel C. Tofan: "Software Development for Open-Lab Management", *Journal of Chemical Education*, **2009**, *86*, 1270
- Daniel C. Tofan: "Improving Chemistry Education by Offering Salient Technology Training to Pre-service Teachers. A Graduate-Level Course on Using Software To Teach Chemistry", *Journal of Chemical Education*, **2009**, *86*, 1060-1062
- Daniel C. Tofan: "Periodic Table PDF Generator", *Chemistry International*, **2009**, *31*, 5 (September-October), 25
- Daniel C. Tofan: "Saving energy in the chemistry teaching process and improving student learning", *Journal of College Science Teaching*, **2009**, *76* (6), 12-13
- Daniel C. Tofan: "Drawing chemical equipment with Adobe Illustrator. Part III: Gradients, retouching, and more objects", *Computing in Science and Engineering*, **2009**, *11*, 2 (March/April), 60-61
- Daniel C. Tofan: "Drawing chemical equipment with Adobe Illustrator. Part II: Creating and modifying shapes", *Computing in Science and Engineering*, **2009**, *11*, 1 (January/February), 59-61
- Daniel C. Tofan: "Drawing chemical equipment with Adobe Illustrator. Part I: Basic drawing and selection tools", *Computing in Science and Engineering*, **2008**, *10*, 6 (November/December), 100-102
- Daniel C. Tofan: "The Periodic Table: Database or XML?", *Chemistry International*, **2008**, *30*, 3 (May-June), 24-26

- Daniel C. Tofan: "The need for XML in Chemical Education", *Chemistry International*, **2004**, 26, 4 (July-August), 16-18
- Daniel C. Tofan and Joseph E. Earley: "Molecular Structure of the Seven-Coordinate Aqua-N-hydroxyethyl-ethylenediamine-triacetatotitanium (III) and Aqua-(N-ethoxy)-ethylenediamine-triacetatotitanium(IV).", *Inorganica Chimica Acta*, **2001**, 319, 63-66

Journal articles under review (as of September 2009)

- Daniel C. Tofan and Jennifer R. Imel: "Two alternate methods for the determination of hydroxide ion in rouaite, using conductivity and pH probes.", *Journal of Chemical Education* (submitted 2009)
- Daniel C. Tofan: "Determination of extinction coefficients using Beer's law: A freshman experiment appropriate for grading based on accuracy and precision.", *Journal of Chemical Education* (submitted 2009)
- Daniel C. Tofan and Jennifer R. Imel: "Ionic conductivity as a semi-quantitative technique for the exploration of aqueous dissociation of acids, bases and salts in the freshman lab.", *Journal of Chemical Education* (submitted 2009)
- Daniel C. Tofan and Jennifer R. Imel: "Redox titrations using Vernier ORP probes: A general chemistry experiment.", *Journal of Chemical Education* (submitted 2009)
- Daniel C. Tofan: "Involving students in teaching introductory chemistry with focus on everyday life aspects", *The Chemical Educator* (submitted 2008)

Current undergoing projects and manuscripts (as of September 2009)

- "A demonstration for Ocean Acidification using Vernier probes" (with David Atwood and Jennifer Imel)
- "Correlations between ACT scores, an aptitude test, and performance in General Chemistry" (with Jessica Smith and Jennifer Imel)
- "Using the cobalt(II) chloride system to teach equilibrium and Le Chatelier's principle in the General Chemistry program" (with Andrew Jauquet and Jennifer Imel)
- "How accurate are Vernier drop counters?" (with Jennifer Imel)
- "Conductimetric titrations in the general chemistry laboratory" (with Jennifer Imel)

Online publications:

- Daniel C. Tofan: "An online course on Computers in Chemical Education", *CONFICHEM Newsletter* Fall **2008**: Using Computers in Chemical Education
- Daniel C. Tofan: "The Periodic Table Database project", *CONFICHEM Newsletter* Fall **2008**: Using Computers in Chemical Education
- Daniel C. Tofan, "A New Course on Computers in Chemical Education", *International Conference in Chemical Education*, Virtual Conference paper 006, Mauritius, 1-25 July **2008**
- Jennifer Imel and Daniel C. Tofan, "Attrition Rates in General Chemistry. Correlations with Test Scores and Predictability of Success", *International Conference in Chemical Education*, Virtual Conference paper 007, Mauritius, 1-25 July **2008**
- Jennifer Imel and Daniel C. Tofan, "The Periodic Table of the Elements as a Database. Computer Generation of Multiple Formats", *International Conference in Chemical Education*, Virtual Conference paper 004, Mauritius, 1-25 July **2008**
- Jennifer Imel and Daniel C. Tofan, "Collaborative Learning Through Worksheet-based Problem Solving", *International Conference in Chemical Education*, Virtual Conference paper 003, Mauritius, 1-25 July **2008**
- Daniel C. Tofan, "Towards an automated introductory chemistry open lab", *CONFICHEM Newsletter* Fall **2005**

- Daniel C. Tofan, "XML for Chemical Education", *CONFICHEM Newsletter* Fall **2003**
- Daniel C. Tofan, "Pushing JButtonGroup – Build a better ButtonGroup", *JavaWorld*, <http://www.javaworld.com/javaworld/javatips/jw-javatip142.html> (9/19/**2003**)
- Troy Wolfskill, Daniel Tofan, Amy Fong, and David Hanson, "LUCID: A Web-Based Learning and Assessment System", *CONFICHEM* Spring **2003**

Refereed Chapters in Books:

- Susan E. Godbey; Tom Otieno; Daniel C. Tofan "Open Laboratories in College Science". In *The Handbook of the National Science Teachers' Association*, 1st edition; Joel J. Mintzes and William H. Leonard, Eds.; NSTA Press: Arlington, VA, **2006**, Chapter 9, 87-95
- Joseph E. Earley; Daniel C. Tofan; Giulio A. Amadei "Reduction of Perchlorate Ion by Titanous Ions in Ethanolic Solution." In *Perchlorate in the Environment*, "Environmental Science Research" series, Vol. 57; E.T. Urbansky, Editor; Plenum Press: New York, **2000**, Chapter 9, 89-98

Non-refereed published creative works:

- *General Chemistry Workbook* – a collection of solved problems for General Chemistry, grouped by learning objectives (*Helium* Edition, August **2009**, Lulu publishing, <http://www.lulu.com/content/3549937>); available as full year as well as in two semester volumes
- *General Chemistry Lab Manual* – featuring Vernier probeware and software, for CHE 115 and 116 (*Hydrogen* Edition, August **2008**, Lulu publishing, <http://www.lulu.com/content/3583660>)
- Set of 250 questions for the *Classroom Performance System* software published by McGraw-Hill (July – December **2005**)
- Joseph E. Earley, Daniel C. Tofan, Giulio A. Amadei, "Novel method for rapid reduction of perchlorate ions in ethanolic media" – patent registered with *Georgetown University* (September **2000**)

Other creative works

- *The Periodic Table Generator*, a Java and SQL based program for generating customizable PDF versions of the Periodic Table for instructional purposes (<http://157.89.111.49:8080/ptserver/ptpdf.jnlp>)
- *ChemWhiz*[®], a template based assessment software for General Chemistry written in Java (*work in progress*)
- *LabWhiz*[®], a laboratory management software written in Java (*work in progress*)
- *Stockroom Manager*[®], a database driven software for maintaining records of student breakages in the Chemistry laboratories (*work in progress*)
- LUCID (Learning and Understanding through Computer-based Interactive Discovery). Author of the core components of the system, all the Java computer programming and data encoding in XML related to the chemistry content and response analysis and feedback. Stony Brook, 2001-2004
- A network-based Java program for tracking attendance of students in the tutorial center at EKU, currently being extended to the University of Kentucky

ORAL PAPERS PRESENTED/ INVITED LECTURES

- “The Periodic Table Database. Conversion to multiple formats” – presented by Jennifer Imel (co-author) at the 2008 meeting of the Kentucky Academy of Science, University of Kentucky, November 1, **2008**; *won 2nd place in the Computer Science section undergraduate competition*
- “Collaborative learning through worksheet based problem solving” – presented by Jennifer Imel (co-author) at the 2008 meeting of the Kentucky Academy of Science, University of Kentucky, November 1, **2008**
- “Attrition rates in chemistry at EKU” – presented by Jessica B. Smith (co-author) at the 2008 meeting of the Kentucky Academy of Science, University of Kentucky, November 1, **2008**
- “Automating the management of an introductory chemistry open lab at EKU” – presented by Jessica B. Smith (co-author) at the 2008 meeting of the Kentucky Academy of Science, University of Kentucky, November 1, **2008**
- “Collaborative learning through worksheet based problem solving” – presented by Jennifer Imel (co-author) at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 31 July **2008**
- “Study on attrition rates in general chemistry at EKU” – presented by Jessica Smith (co-author) at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 30 July **2008**
- “The Periodic Table of the Elements in XML and database format” – presented by Jennifer Imel (co-author) at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 28 July **2008**
- “Automating the management of an introductory chemistry open lab” – presented by Jessica Smith (co-author) at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 28 July **2008**
- “New course on Computers in Chemical Education” – presented at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 28 July **2008**
- “Java mastery learning tool for chemical formulas and nomenclature” – presented at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 27 July **2008**
- “Website for learning nomenclature in general chemistry” – presented by Terry Price (co-author) at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 27 July **2008**
- “Using Adobe Captivate to create LoggerPro tutorials for General Chemistry labs” – presented by Santosh Datta (co-author) at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 27 July **2008**
- “Towards a computer-managed introductory chemistry open lab” – presented at the 19th Biennial Conference in Chemical Education, Purdue University, West Lafayette, IN (July **2006**)
- “Towards an automated introductory chemistry open lab”, Daniel C. Tofan – presented at ChemEd 2005, Vancouver, British Columbia (1-3 August **2005**)
- “ChemWhiz – an intelligent chemistry teaching and assessment tool”, Daniel C. Tofan – presented at ChemEd 2005, Vancouver, British Columbia (1-3 August **2005**)
- “A markup language for chemical education”, Daniel C. Tofan – presented at ChemEd 2005, Vancouver, British Columbia (1-3 August **2005**)
- “ChemWhiz – an intelligent chemistry teaching and assessment tool”, Daniel C. Tofan – presented at the 18th Biennial Conference in Chemical Education, Ames, Iowa (18-22 July **2004**)
- “Chemical Education Markup Language (ChEdML[®]) – An XML namespace for educational chemistry software”, Daniel C. Tofan – presented at the 227th ACS meeting in Anaheim, California (March **2004**)
- “ChemWhiz – an intelligent chemistry teaching tool”, Daniel C. Tofan – presented at the 227th ACS meeting in Anaheim, California (March **2004**)
- “LUCID: Web-based team learning and real-time multilevel assessment for introductory chemistry”, Daniel C. Tofan – presented at the 227th ACS meeting in Anaheim, California (March **2004**)
- “XML for Chemical Information: Educational needs and examples from a student response analysis

system”, Daniel C. Tofan – Sci-Mix poster and oral paper delivered at the 226th American Chemical Society National Meeting, New York (September **2003**)

POSTERS PRESENTED

- “Comprehensive study on attrition rates in chemistry” – presented by Jennifer Imel (co-author) at *Posters at the Capitol*, Frankfort, Kentucky, 5 February **2009**
- “Learn about the elements: A new look at the periodic table” – presented by Jennifer Imel (co-author) at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 30 July **2008**
- “Using the Virtual Lab to learn solubility rules” – presented by Jeffrey Struss (co-author) at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 29 July **2008**
- “Chemical thermometer: Illustrating Le Chatelier’s principle” – presented by Jennifer Imel (co-author) at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 28 July **2008**
- “Laboratory practicum in general chemistry” – presented by Jennifer Imel (co-author) at the 20th Biennial Conference in Chemical Education, Indiana University, Bloomington IN, 28 July **2008**
- “A visual Periodic Table of the Elements”, Daniel C. Tofan and Jennifer Imel – University of Kentucky Undergraduate Research Poster Session, April 18, **2008**
- “Attrition rates in General Chemistry at ECU. Effectiveness of various tests as placement tools and correlation with student grades”, Jennifer Imel, Jessica Smith and Daniel Tofan – University of Kentucky Undergraduate Research Poster Session, April 18, **2008** (*won Honorable Mention*)
- “A visual Periodic Table of the Elements”, Daniel C. Tofan and Jennifer Imel – ECU Undergraduate poster showcase, April 11, **2008**
- “Attrition rates in General Chemistry at ECU. Effectiveness of various tests as placement tools and correlation with student grades”, Jennifer Imel, Jessica Smith and Daniel Tofan – ECU Undergraduate poster showcase, April 11, **2008**
- “Chemical Education Markup Language (ChEdML[®]) – An XML namespace for educational chemistry software”, Daniel C. Tofan – presented the 18th Biennial Conference in Chemical Education, Ames, Iowa (18-22 July **2004**)
- “XML for Chemical Information: Educational needs and examples from a student response analysis system”, Daniel C. Tofan – Sci-Mix poster at the 226th American Chemical Society National Meeting, New York, September 7-11, **2003**
- “Rapid reduction of Perchlorate Ion by Titanium (III) in Ethanol” , Daniel C. Tofan – presented at the ACS National meetings in New Orleans (August 1999) and Washington DC (August **2000**)

PROFESSIONAL MEETINGS/WORKSHOPS

- Posters at the Capitol 2009, Frankfort, Kentucky, 5 February 2009
- Kentucky Academy of Science 2008 meeting, University of Kentucky, Lexington (principal author, 6 papers total)
- Biennial Conference in Chemical Education, July 2008, Indiana University, Bloomington, IN (presenter, 12 papers total)
- International Conference in Chemical Education – Virtual Conference (July 2008; presenter, 4 papers)

- Biennial Conference in Chemical Education, July 2006, Purdue University, West Lafayette, IN (Presider, General Papers symposium; presenter, 1 paper)
- ChemEd, July-August 2005, University of British Columbia, Vancouver BC, Canada (presenter, 3 papers)
- Biennial Conference in Chemical Education, July 2004, Iowa State University, Ames, IA (presenter, 3 papers)

GRANTS & CONTRACTS

- Spectrophotometric equipment for general chemistry, Daniel C. Tofan, EKU Student Government Association (\$8,618), March 2008
- Tablet computers and Adobe software for collaborative learning in general chemistry, Daniel C. Tofan, EKU Student Government Association (\$4,500), March 2008
- Acquisition of lab probes and computers, Daniel C. Tofan, EKU Student Government Association (\$26,832), April 2005

EXTERNAL COLLABORATIONS

- Prof. David Atwood, University of Kentucky – collaboration with his group on a research project looking to create a demonstration of the ocean acidification process and its effects on certain shell-based marine organisms; draft manuscript in preparation for JCE, as well as a Vernier Technology grant being prepared for November 2009 submission by UK graduate student Jennifer Imel
- Dr. Connie Ray, Vice President for Institutional Effectiveness, University of Kentucky – study on attrition rates in lower level chemistry courses
- *Computers in Chemical Education* course to be offered to other institutions via distance education
 - Prof. William Hunter, Illinois State University, Director of the Center for Mathematics, Science, and Technology
 - Prof. Diana Mason, University of North Texas, General Chair of BCCE 2010
- Prof. Larry Kolopajlo, Eastern Michigan University – collaboration on proposed NSF grant for the development of a discovery based open laboratory
- Dr. Allison Soult, General Chemistry Laboratory coordinator, University of Kentucky – computer-based system for tracking student attendance to Chemistry Tutoring Center

STUDENT SUPERVISION (Scholarly/Creative Activities)

Graduate students supervised

- Jessica B. Smith, August 2007 – present; project: Study on attrition rates in General Chemistry and development of a placement test
- Terry L. Price Jr., May – July 2008; project: A website for learning nomenclature of inorganic compounds
- Santosh K. Datta, January – July 2008; project: Using Adobe Captivate to create animated tutorials for Vernier LoggerPro
- Jeffrey Struss, May – July 2008; project: Using the Virtual Lab to learn solubility rules

Undergraduate students supervised

- Andrew Jauquet, May 2008 – May 2009; projects:
 - A chemical thermometer: the Cobalt (II) chloride aqueous equilibrium as an application of Le Chatelier's principle
 - Determination of the efficiency of consumer batteries by electrolysis
- Sasha Howard-Porter, August – December 2008; projects:
 - The Periodic Table Database
 - Demo of the Week – General Chemistry I
- Victoria Diersen, August – December 2008; project:
 - The Periodic Table Database
- Jennifer Imel, September 2007 – July 2008; projects:
 - Using an Access database to correlate student performance on standardized tests to grades obtained in General Chemistry courses
 - Development of worksheets for collaborative learning in general chemistry
 - The Periodic Table as a relational database; conversion to XML, HTML and PDF using Java and SQL programming
- Dwayne K. Merrill, January – August 2007; project: Development of computer-based laboratories for General Chemistry
- Mary Terry, January – August 2006; project: Drawing chemical equipment with Adobe Illustrator
- Vitaly Shter, January – June 2003; project: Development of an equation editor in Java

INSTITUTIONAL SERVICE (Eastern Kentucky University)

Department service

- Coordinator of CHE 115/116 General Chemistry Labs (2006 – 2009)
- Coordinator of the General Chemistry program (2006 – 2009)
- Coordinator of the Chemistry Learning Resource Center and computing lab (2006 – 2009)
- Coordinator of the Chemistry Department Stockroom (2007 – 2008)
- Advisor for Chemistry Majors and Minors (2004 – 2008, 70-120 students per semester)
- Curriculum Committee, Chair (2006 – 2008)
- Curriculum Committee, Member (2004 – 2006)
- Graduate Committee, Member (2008 – 2009)
- Merit Pay and Appeals Committee, Chair (2006 – 2007)
- Merit Pay and Appeals Committee, Member (2005 – 2006)
- Technology Committee, Chair (2005 – 2009)
- Executive Committee, Member (2006 – 2008)
- Lab Probes Committee, Chair (2004 – 2005)
- Coordinator of CHE 101/105/107 Introductory Chemistry open labs for non majors (2004 – 2006)
- Inorganic Search committee, member (2006)
- Biochemistry Search committee, member (2007 – 2008)
- Lab Manager Search committee, member (2007 – 2008)
- General chemistry textbook adoption committee, Chair (2006 – 2007)

College service

- Alternate departmental representative to the College Curriculum Committee (2006 – 2007)
- Department representative to the Scantron training workshop, 2006

University service

- D-LAB Chemistry department representative to ECU IT (2007 – 2009; consists in the management of two departmental computer laboratories and the associated resources)
- BlackBoard Explorers workgroup (2006 – 2009)
- Contributor to the development of a search engine for the Crabbe Library archive database using Java servlet programming and SQL (2007 – 2008)
- Interviewer/advisor to students applying for the Teacher's Education Program (2004 – 2008)
- Promoted to Full Graduate Faculty (2008)

SERVICE TO THE PROFESSION

Free software offered to academic community

- Periodic Table PDF Generator: <http://157.89.111.49:8080/ptserver/ptpdf.jnlp>
- A Java quadratic equation solver: <http://people.eku.edu/Tofand/tools/quadratic.html>

Manuscript reviews

- Current reviewer for the *Journal of Chemical Education*

Book and software reviews

- Reviewer for one chapter of "Principles of General Chemistry", 1e, by Martin Silberberg (McGraw-Hill), April 2006
- Reviewer for one chapter of "A Conceptual Introduction to Chemistry", 1e, by Mark Bauer (McGraw-Hill), December 2005
- Reviewer of the software program ALEKS, a tutorial for introductory chemistry (October 2007)

Professional memberships

- Member of the *American Chemical Society* since 2000
- Affiliate member of the *International Union for Pure and Applied Chemistry* since 2004
- Member of the Editorial Review Board of *Scientific Journals International* (<http://www.scientificjournals.org/>)

OTHER ACTIVITIES AND ACCOMPLISHMENTS

Certifications

- Sun Java Programmer Certification (2002)
- Sun Certified Java Developer (advanced stage in progress)

Languages spoken/written

- English, Romanian, French