

## ACADEMIC VITA LEE R. MAREK

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[Lee Marek's Home Page](#)

### EDUCATION

- M.S. 1975, Roosevelt University, Chicago, Chemistry, Graduated with Honors
- M.S. 1973, Roosevelt University, Chicago, Physics
- B.S. 1968, University of Illinois, Chemical Engineering, Edmund J. James Scholar, Graduated High Honors & Distinction, Member Tau Beta Pi (Engineering Honorary), Member Phi Lambda Upsilon (Chemistry Honorary)
- Completed additional course work at the following institutions: Argonne National Lab, Univ. of Cal. Berkeley, Aurora Univ., Eastern Michigan Univ., Univ. of Texas, Univ. of Arizona, DePaul Univ., Governors State, San Diego State, Penn State, IIT, Univ. of Wisconsin La Crosse & Madison, Princeton Univ., Elgin Comm. College & D.O.E., National College of Ed., Southern Illinois Univ., Fermi National Accelerator Lab, Chicago State Univ., Harper Comm. College, SUNY, and Loyola Univ. Spent 9 weeks in 1979 & 4 weeks in 1981 in Europe studying the History of Chem. (Southern IL. Univ. course). Dreyfus Master Teacher at Princeton, Sabbatical Northwestern 1998-99, and Univ. of IL-Chicago 1999.

### EMPLOYMENT HISTORY

- 2002-present Teaching Chem 101 at the University of IL Chicago and demonstration program.  
2008 Worked on the [E-learning initiative](#) for Flinn Scientific - flash videos of on line teaching demos, materials, teacher training, and ancillary materials. This project captured Pedagogical Content Knowledge [PCK] of some of the [best high school teachers](#) in the country. Over 500 demos were video taped.
- 1974-2002: Teaching Chem. & AP Chem. at Naperville North H. S. This was a new school when I started teaching here and I developed and set up both Chemistry Programs. I was on sabbatical during the 1998-99 school year.
- 1999-2007: Team leader for [Flinn Foundation programs](#), CHEM TEAM 2. I run weeklong workshops at different colleges around the country in the summers.
- 1997-99: Taught a course for [chemistry teachers in Sweden](#).
- 1997-Present: Taught and ran two-week trip/courses in Europe for 12 years on [the history of science](#). The graduate program is through Aurora University, Aurora, IL and FermiLab.
- 1997-2006: Developed and taught [Chemistry 572](#), Teaching Methods in Chemistry, with 3 semester-hours of graduate credit in chemistry at U. of IL at Chicago.
- 1989-98: Team leader for Woodrow Wilson National Fellowship Foundation programs, CHEM TEAM 8. I ran weeklong workshops at four different colleges around the country in summer.
- 1983-90: Chem. Instructor, FermiLab (NSF) Summer Institute for Science Teachers, [Fermi National Accelerator Lab](#)  
1986-90: Director of Chemistry Program, [FermiLab \(NSF\) Summer Institute for Science Teachers](#), Fermi National Accelerator Lab.
- 1986: Instructor, "Quest for Excellence In Chemistry Instruction", Aurora Univ., weeklong course on electrochemistry.
- 1985-89: Instructor of 12 SERAPHIM interfacing workshops at various locations around the country.
- 1984-summer: Did research in fuel oils at BP-AMOCO
- 1976-82: Taught chemistry in the College of DuPage extension program 16 quarters.
- 1969-74: Taught physical science in School District 59
- 1968-69: Research chemical engineer, Catalyst Evaluation Research Group, Universal Oil Products. Contributed to the design and construction of micropilot units and wrote detailed descriptions of new tests and processes as we developed them.

### CONSULTING WORK

- Consultant/Reviewer American Chemical Society Demonstration Video
- Consultant for Optical Data's Cosmic Chemistry video discs.
- Consultant for Education Designs Science Toy kits - designed several kits & advised on others to start a new line of products.
- Consultant/reviewer for Heath Chemistry Text
- Consultant for Lucerne Media line of teaching videos
- Consultant for [Addison Wesley](#) video disc and computer software [Chemistry Alive](#)
- Consultant for [Somerville House Publishers](#) consultant & author of kids books
- Consultant for GAMA Gas Appliance Manufactures Assoc.
- Consultant for [National Beef Board](#) wrote labs and did video work for them
- Consultant for PR agency for soap commercials
- Consultant for Learning Curve Science Kits
- Consultant for a number of school districts- worked with their staffs
- Consultant for FOX TV magic special
- Consultant for [WEBCT](#) [now Blackboard] for their chemistry site.
- Consultant for [Flinn Scientific for lab materials](#)
- Consultant for Thomson Learning and ChemCon group
- Consultant for Dr. Leon Lederman's [ARISE](#) Program

- Consultant for Adler Planetarium Science program

**PROFESSIONAL AND CIVIC ORGANIZATIONS** Member of the following organizations and [committees](#):

American Chemical Society (ACS) [local](#) and national: Involved with the following: Member of History Div.; Member of Ed. Div.; Served on Chicago Ed H. S. Comm. setting up exams, Olympiad, & teachers' conferences for 10 yrs.; ACS SPEAKER TOUR 1999; National H. S. Comm. 1987 & 88; Regional Chem. Day Comm. 89-97; NSTA/ACS Test Writing Comm.; Long Range Planning Comm.- Chicago Section 1988, 89; Project SERAPHIM Workshop Leader; Hosted "Doing Chemistry" workshop for teachers; Div. Chem. Ed. National long-range Planning Comm. 1990; Helped plan and worked/demonstrated at ACS program "Molecules and Society"; "The Chemical Sciences in the Modern World" conference for Div. History of Chemistry; National Planning Committee Meeting for Local Section Activity Development- Belmont Center, MD 91; 1 week Workshop in the History of Chemistry at the Beckman Center Univ. of Penn., Philadelphia 91; National Task Force on High School Curriculum; Presentations/invited speaker at the following meetings: St. Joseph Valley Section Culver, IN 5/89; Regional Winston-Salem N.C., 10/89; Regional in St. Louis, 11/89; Regional Raleigh, NC, 4/91; Regional in Cincinnati, OH 5/92; National San Francisco presentation 4/92; National Denver National, 3/93; ran High school Program for Chicago National Meeting, 8/93; presentation for Allentown, PA section 3/95. I gave presentations at the following Biennial (National) Con. on Chem. Ed.: 9th Biennial Bozeman, Montana 1986; 10th Biennial Purdue 1988 five presentations; 11th Biennial Atlanta, GA at Georgia Tech Univ. 1990 three presentations; 12th Biennial Davis, CA 1992 two presentations; 13th Biennial Bucknell 1994 PA presentation; 14th Biennial Clemson Univ. S.C. 1996 four presentations; 15th Biennial Univ. Waterloo 1998 four presentations, ACS National meeting Boston 9/98 presentation. On Speaker Tour for ACS at 5 sites in 1999, Richmond VA section Christmas Program; 15th Biennial Univ. of MI. two presentations 2000; Written and/or reviewed articles/reviews for J. Chem. Ed., CHEMUNITY, ACS Media; on-line conference "Lecture Demonstrations in Chemistry on the World Wide Web" Spring 2001, Keynote Speaker high school/college programs Orlando, FL 4/02, New Orleans 3/03, Swarm TX 2004, ACS Speaker Service Lake Erie Circuit 9/02, ran [High school Program for Chicago National Meeting, 3/07](#), Invited speaker for High School Day Program at the American Chemical Society's National Philadelphia 8/08, Keynote Speaker for [ACS Southwest Regional \(SWRM\)](#) Little Rock 10/08,

Lecture/demo Science Week Program for Pittcon 3/09, ACS meeting in San Francisco invited speaker for symposium Professor Shakhshiri's "Communicating Chemistry: Demonstrations" 3/10, American Chemical Society, ACS, Speakers Tour- Talks at 4 different colleges in WI 2/10, Teacher Program and Demo Program at Florida Southern College 2010:Chemistry Odyssey Innovative Program Grant from the ACS. 1/10, 22<sup>nd</sup> Faraday Lecture(s) keynote speaker at Soldiers & Sailor's Memorial Hall Spectroscopy for the Society of Pittsburgh about 5,000 over 2 days 11/09, ACS Chicago Section for National Chemistry Week Keynote Presentation at DePaul University 10/10, ACS National Meeting Salt Lake Building a Professional Development Using JCE Activities 3/09, ACS National Meeting Salt Lake invited speaker for Helen Free Award Symposium 3/09

- National Science Teachers Assoc. (NSTA): Involved with the following: International Referral Group 1982/84; Leader, demonstration workshop 1984; Task Force for High School Science 1986/87; Task Force for Computer Networking 1986/87; Association of Presidential Awardees in Science Teaching; NSTA/ACS Test Writing Committee; Have done major presentations at national NSTA meeting most years since 1987. Evening of Chemistry for 2000 people at National meeting 4/02 in Orlando, FL, Keynote Albuquerque Regional 12/03
- Additional Activities: Illinois Assoc. of Chem. Teachers (IACT) President 1989-90; Illinois Science Teachers Assoc. (ISTA)-- Program Coor. for 1988; convention Illinois Education Association-- Building rep. District 54, Regional Board, District 203; Tau Beta Pi & Phi Lambda Upsilon; Friends of FermiLab on Board of Directors 1990-present; Illinois Solar Energy Association; Engineers' Week Program Planning Committee; Exhibits Committee SciTech; Naperville Area Recycling Center(NARC), was on board of directors & was purchasing agent for 2 years; Member of REACTIVITY NETWORK; Steering Comm. for the Univ., of Illinois Allerton Workshop for H.S.- College Interfacing 1985; Steering Comm. for Saturday Morning Scholars Program, a lecture series for gifted H.S. students co-sponsored by Illinois Bell and the Corp. Partnership 1986-88, 21<sup>st</sup> Century Initiative Essential Science Task Force and Education and Outreach Task Force for the Museum of Science and Industry 2003/04
- [Chem West](#): Co-developed and ran this monthly meeting of chem. teachers for 14 years [until 2000] in the Chicago area. Wrote a monthly newsletter for 400 chem. teachers in the Chicago area until 2000.

**AWARDS AND RECOGNITION**

Dreyfus Master Teacher 83, Governors Master Teacher 84, Sigma Xi Outstanding Teacher Award 85, Recognized for outstanding science program by the Chicago Sun Times when Naperville North High School was voted one of the "Ten Best Illinois High Schools" 85, Distinguished Science Educator 86 ISTA, Awarded Citation for Excellence to INTECH (Young Engineers and Scientists Competition) by The Corridor Group, Presidential Award for Excellence in Science Teaching 86, Davison Award for Excellence In Teaching High School Chemistry 87 by Chemical Industries Council, Regional Catalyst Award Midwest--Chem. Manuf. Assoc. 88, ACS Great Lakes Regional Award for High School Chemistry 90, IMPACT Awardee 90, Christa McAuliffe Fellow 92-93, Tandy Technology Scholar Award for Outstanding Teachers 91, Those Who Excel Award of Excellence for Outstanding Contributions To Illinois Education from the State Board of Education, Sigma Xi Special Award from Chicago Section for Contributions to Education in the Chicago Area 92, Voted The Outstanding Teacher of the Year by students and faculty Naperville North High School 92, ASTC [Assoc. of Sci. & Tech. Centers] Honor Roll of Teachers 1992 did demos in Congress in Washington DC, National Catalyst Award for Excellence in Chemistry Teaching from the Chemical Manufacturers Association 6/93; [National James Bryant Conant Award](#) in High School Chemistry Teaching from the ACS [American Chemical Society] 3/94; ACS Phoenix Award for National Chemistry Week work I had done for last 8 years 8/93, Won Science Photo Contest NSTA made the cover of The Science Teacher 2/94, [Golden Apple Award 1998](#) sabbatical in 98 full tuition to Northwestern, Fulbright to Japan Fall

of 99. [Honorary Member of South Carolina Chemistry Teachers](#), [Helen Free Award for Public Outreach ACS 03](#), [Chicago Section ACS Public Affairs Award 07](#)

In the following publications for teaching/education- Education Week, U. S. A. Today, C & E News, Time, People, Chicago Mag., Today, Illinois Quarterly Mag, The Kansas City Star. Chicago Tribune, Daily Herald and Associated Press. Wrote and appeared in a series of half-hour kids science shows for ABC TV in Chicago. Finalist for National Emmy Awards for demos done in 1991 on TV. Science book published in 1999 by Penguin Publishing. Helped Bozo show select science demonstrations/demonstrators 1997-00. I was featured:

- On the "[David Letterman Show](#)" over 30 times in last 20 years
- On the CBS News Special "Education Our Nation's Toughest Assignment"
- On two segments on CBS "Schools In"
- On the Houston ABC News, ABC TV in Buffalo NY, Kalamazoo MI NBC News, CBS News Richmond VA, Nashville, TN.
- On FOX, CBS, NBC, WGN, ABC, WTTW here in Chicago numerous times
- Appeared as "commercials" in an [hour-long web cast to celebrate](#) "Einstein's Year" that Leon Lederman, Nobel Laureate, broadcast on 12/1/05 a webcast with Fermilab and CERN
- on National TV show INSIDE EDITION for examples of better ways of teaching

### **With Students**

1. The various industries in the DuPage County area have sponsored the "INTECH" science fair for students in the area. I helped the student who won the engineering design competition. I had a number of students who were Semifinalist.
2. JETS (Junior Engineering & Technological Society), first or second in the state in chemistry numerous times
3. Illinois Benedictine College Chemistry Exam, my students achieved first or second place on the exam a number of times.
4. Had students work on summer projects at Argonne, FermiLab, University of Illinois, and other colleges around the country.
5. Honorable mentions on ACS exams, 2nd place several times & have had students finish in the top 5 on numerous occasions.
6. National Science Exam - Chem., I had a student place 2nd in 1986 and our school was 12th overall in chemistry out of 158 schools.
7. Many of my students have attended Saturday Morning Physics and joined Explorer Clubs. The industry participants in this program meet with students once a month in the evening to enable the students to learn more about what one does in industry.
8. Several of my students were finalists in the Museum of Science and Industry's Outstanding Young Scientist Award.
9. I have judged a number of science fairs and have organized several science fairs.
10. I helped to set up the lab assistant program at North High whereby students get credit for helping make solutions, setting up labs, trying out labs, etc.
11. I was one of the originators of the independent study program at North High - a program that enables students to work on their own projects.
12. I have former students now in college and the work world return to give presentations on careers in chemistry and engineering.
13. Over two dozen of my students have worked in co-op programs at BP Amoco, Nalco, AT&T, Argonne, FermiLab, and Bell Labs. This is one of the best work related experiences the student can have. He or she attends school in the morning but leaves at 1:00 P.M. to work until about 4:30 in a laboratory or industrial settings.
14. One of my students won the National Finalist Westinghouse Science Talent Search
15. Helped to introduce legislation to free up kids from taking mandated courses. Also worked with State Legislator Mary Lou Cowlshaw on passage of the new law allowing consumer education to be passed by a proficiency exam.
16. Students were selected for International Chemistry Olympiad Camp in CO and another as an alternate 1993.
17. Student work published in 25th Anniversary Issue of CHEM 13 NEWS.
18. Student work published in Mole Day Magazine.
19. Students were selected for International Chemistry Olympiad Camp in CO and another as an alternate 1994
20. Two state first place winners in JETS in chemistry 1994
21. Student/teacher photo contest national winner NSTA cover of The Science Teacher.
22. Students National finalist for Toshiba ExploraVision Award 1995
23. 1996 students took 1st, 2nd, 3rd, 5th, & 6th in state in JETS chemistry.
24. Jets team 3rd in nation 1996
25. Took first, second, fourth, in state in JETS in chemistry 1997
26. Students were selected for International Chemistry Olympiad Camp in CO 1997
27. Highest placing Female Chemistry Student Award on Chicago Area ACS Exam 1997
28. Third time a student selected for MIT full paid summer honors program 1997
29. Kids did Science demos on David Letterman show 1997 & 1998
30. J.V. JETS Team 2nd in the nation 1998, helped with chemistry section
31. Student was selected for International Chemistry Olympiad Camp in CO 1998
32. Student selected by USA Today as one of top 20 in country 1998
33. Student was selected for International Chemistry Olympiad Camp in CO 1999

34. Winning student team of the 2000-2001 Internet Science and Technology Fair (ISTF)  
 35. Nominated [by students] one of the Outstanding Educators School dist 203 for 15 years in a row.

### **ORIGINAL PUBLICATIONS, COMPUTER WORK & VIDEO WORK:**

- 2009 [33th David Letterman](#) Show Science Demonstrations NY 11/09  
 2009 Published Journal of Chemical Education, Vol. 86 No. 10 P 1138 *Illinium: An Impeached Element*  
 2009 Demo for Science of Gases in the series City Science, a WYCC-TV 20 shown 8/09  
 2009 32<sup>nd</sup> time with [David Letterman Show Science Demonstrations](#) NY 5/09  
 2009 Science demonstration program at the [AAAS](#) meeting 3/09  
 2008 31<sup>st</sup> time with [David Letterman Show Science Demonstrations](#) NY 11/08  
 2008 [E-learning initiative](#) taping science demos & PCK for Flinn Scientific - a series of on line [teaching materials](#). 7/08  
 2008 [E-learning initiative](#) taping science demos & PCK for Flinn Scientific - a series of on line [teaching materials](#). 5/08  
 2008 [30<sup>th</sup> time](#) on David Letterman Show Science Demonstrations 2/08  
 1998-07 "Exocharmic Chemistry" for Flinn Scientific CHEM TEAM book of 275 pages of teachers materials.  
 2007 Report on the High School Day program, Chicago ACS Meeting J. of Chem. Ed. • Vol. 84 No. 7 P. 1094 July 2007  
 2007 29<sup>th</sup> time on David Letterman Show Science Demonstrations 5/07  
 1995-06 Book of demos and labs for UIC Summer Teachers Methods Course- we did a new book each year  
 2006 28<sup>th</sup> time on David Letterman Show Science Demonstrations 11/06  
 2006 Chicago [Tribune](#) Science review of Moto 10/06  
 2006 27<sup>th</sup> time on David Letterman Show Science Demonstrations 5/06  
 2005 [Video demos at Adler Planetarium](#) used as "commercials" in an hour-long web cast to celebrate "Einstein's Year" that Leon Lederman, Nobel Laureate, broadcast on 12/1/05 a webcast with Fermilab and CERN  
 2005 [Flinn ChemTopic Lab and Demo manuals](#) 23 volumes 05  
 2005 26<sup>th</sup> time on David Letterman Show Science Demonstrations 11/05  
 2005 25<sup>th</sup> time on David Letterman Show Science Demonstrations 5/05  
 2004 24<sup>th</sup> time on David Letterman Show Science Demonstrations 3/04  
 2003 Univ. of WI Christmas Demonstrations with Bassam Shkhashiri for PBS telecasts 12/03  
 2003 [ARISE Program](#) writing connections between chemistry physics and biology for Leon Lederman.  
 2003 ACS News TV show Nashville did Science Demos 11/03  
 2003 23<sup>th</sup> time on David Letterman Show Science Demonstrations 3/03  
 2002 22<sup>nd</sup> time on David Letterman Show Science Demonstrations 5/02  
 2002 Hour cable-access series from Skokie called "Pushing the Envelope" on education.  
 2002 Book on science demos for general public for Somerville Press/Scholastic Publishers  
 2001 21<sup>st</sup> time on David Letterman Show Science Demonstrations 12/01  
 2001 Fox Sports Science Demos 5/01  
 2001 20<sup>th</sup> time on David Letterman Show Science Demonstrations 5/01  
 2001 Demonstrations for WTTW Public TV on their "Chicago Tomorrow" science shows three times 3/01  
 2001 WGN TV News did demonstrations with my students 2/01  
 2001 On-line conference "[Lecture Demonstrations in Chemistry on the World Wide Web](#)" Spring 2001  
 2000 Chemical Heritage Newsmagazine of the Chemical Heritage Foundation article on Gun Cotton 9/00  
 2000 Kids Stuff Magazine 9/00  
 2000 19<sup>th</sup> time on David Letterman Show Science Demonstrations 11/00  
 2000 WGN Radio Science Fair on the radio! 10/00  
 2000 Bozo Show WGN 9/00  
 2000 CLTV show on Mercury spills 9 /00  
 2000 Fox Sports Science Demonstrations 5/00  
 2000 Demos for [WEBCT streaming](#) video of chemistry demos done with Univ. of GA for WEBCT, can be seen <http://www.webct.com/chemistry/>  
 2000 18<sup>th</sup> time on David Letterman Show Science Demonstrations 3/00  
 2000 "Exocharmic Chemistry" for Flinn Scientific CHEM TEAM 2 a book of 275 pages of teachers materials.  
 2000 WGN TV News did demonstrations with my students 1/00  
 1999 Half a dozen radio interviews for the book published 2/99  
 1999 Bozo Show WGN October 3, 1999  
 1999 17<sup>th</sup> time on David Letterman Show Science Demonstrations 9/99  
 1999 [The Great Sodium Disaster Video](#)" working with Cliff Schrader on production 8/99  
 1999 16<sup>th</sup> time on David Letterman Show Science Demonstrations 5/99  
 1999 Book on science demos for general public for SOMERVILLE PRESS/Penguin Publishers.  
 1999 15<sup>th</sup> time on David Letterman Show Science Demonstrations 2/99  
 1999 "Exocharmic Chemistry" for Flinn Scientific CHEM TEAM 2 a book of 275 pages of teachers materials.

1999 "THE PERIODIC CABLE", a monthly newsletter distributed to 400+ chemistry teachers and chemist in the Chicago area. Have written, edited and published the newsletter and has published this for the past 14 years.

1998 Univ. of WI Christmas Demonstrations with Bassam Shakhshiri for PBS telecasts 12/98

1998 WBIG radio hour talk show and demos 12/98

1998 15th time on David Letterman Show CBS November 16, 1998

1998 Bozo Show WGN October 5, 1998

1998 WGN TV News did demonstrations and interviewed. 10/25/98

1998 Golden Apple Awards Show May WTTW Chicago May 8, 1998

1998 14th time on David Letterman Show CBS March 3, 1998

1998 Beef Board Video [Fueled for Flight](#) wrote and acted in video for junior high classes on energy and food.

1998 WGN TV News as Scientist for Science week did demonstrations and was interviewed. 2/16/98

1998 Spotlighted in a video focusing on teachers who are innovators in Illinois for IEA 1998.

1997 KARE- TV, Garnett TV, Minneapolis, MN Saturday Science Chemistry Day 11/4/97

1997 Articles in The Chicago Tribune and Daily Herald 10/30/97

1997 Kids and science demos CBS News October 29, 1997

1997 Bozo Show WGN October 26, 1997

1997 12th time on David Letterman Show Doing Science Demonstrations 10/30/97

1997 Fox Thing in the Morning FOX TV Chicago Sept. 26, 1997

1997 Web page set up by Tribune at <http://chicago.digitalcity.com/naperville/profile/neighbor/neighbor.htm>

1997 Feature article in The Chicago Tribune 8/8/97

1997 11th time on David Letterman Show Doing Science Demonstrations 7/ 3/97

1997 Science Demonstrations for FOX TV in Chicago 5/7/97

1997 Tenth time on David Letterman Show Doing Science Demonstrations 1/ 3/97

1997 "Teaching Chemistry Exocharmically" for Woodrow Wilson CHEM TEAM 8 a book of 250 pages of teachers materials. 1989-97

1997 "WEIRD SCIENCE" and "SON OF WEIRD SCIENCE" demonstration manuals developed in conjunction with three other high school teachers for a chemical demonstration show which has been given out and presented over 300 times from coast to coast for the last 10 years. WEIRD SCIENCE is listed in CMA "Education Resource Guide" as an Endorsed Program.

1996 Feature article in The Kansas City Star 10/18/96

1996 ABC TV in Buffalo, NY AM Buffalo did science demos for them live, June 27, 1996

1996 ABC TV Peoria, IL News Interview Heart of Illinois Fair on Science Show, July 1996

1996 Feature article in Today [Du Page Newspaper]

1996 Feature article in Illinois Quarterly Magazine.

1996 Working with GAMA [Gas Appliance Manufactures Association] on High School Education Program and video

1996 Addison Wesley Chemistry Video Discs

1996 Kids show did science experiments on the radio for WGN 4/6/96

1996 Student won awards from Yahoo & The Exploratorium for interactive home page on the World Wide Web

1995 Education Designs Science Toy kits. Designed several kits and advised on others. Helped them to start a new line of products.

1995 Editorial [requested by editor] in Chemunity News the ACS publication for the Education Division 1995

1995 Sommerville House Publishers author for a line of science books

1995 Ninth time on David Letterman Show Doing Science Demonstrations 11/22/95

1995 Helped to create Addison Wesley Laser disk [Chemistry Alive](#). Also did 24 demos and ancillary materials on the disc.

1995 FOX thing in the Morning TV program, did science demonstrations on FOX TV 8/95

1995 Letterman New Show @ CBS show 3/95

1995 People Magazine article

1995 Science Demonstrations for FOX TV in Chicago 3/21/95

1995 Letterman New show 3/10/94

1994 Written up in Chicago Magazine

1994 C & E News several times

1994 Korean Chemical Journal of Education

1994 Published experiments in CHEM 13 NEWS

1994 Photo work selected for the cover of the Science Teacher Magazine, won national photo contest 2/94.

1994 Letterman New show on CBS 9/2/94

1994 Co-host NCTV cable Naperville hour science show; done with Bill West May 1994

1994 CLTV in Chicago, science demos September 1994

1994 WGN Radio did a half-hour kids show at Taste of Chicago 7/94

1994 WBEZ- National Public Radio- did a half hour radio show on science education 5/94

1994 "Encyclopedia of Chemistry", wrote material for now encyclopedia coming out in 1995 from Macmillan.

1994 Hour radio show for WBIG on science education 4/23/94

1994 Science Demonstrations for FOX TV in Chicago 2/22/94

- 1994 Science demos on the radio for WLUP the Johnan Brandmeyer Show. 2/94
- 1993 Students work published in CHEM 13 NEWS in their 25th anniversary issue 8/93
- 1993 Feature story on Inside Edition TV show for classroom teaching 7/93.
- 1993 Co-hosted on ABC {Chicago} TV two more 1/2-hour kids' science shows.
- 1993 "DEMOS I DO", A 120 page demonstration packet distributed to chemistry teachers at chemistry conferences, workshops and used at the Summer Institute for Chemistry Teachers (FermiLab). 1982-1993
- 1993 TV show with science demos Clive Anderson Talks Back in England 6/93
- 1993 TV appearances on "Late Night With David Letterman" show 6 times [1990-95] doing science demonstrations. Appeared on TV Emmy Awards Program 8/25/91 as one of "best of..." category for this.
- 1992 ABC {Chicago} TV two 1/2-hour kids science shows.
- 1992 Co-hosted 1 hour NCTV [cable TV] science program for parents and kids in school district 203.
- 1992 Chemistry Day work made cover of C & E News and inside story.
- 1992 Written up in Education Resource Guide from CMA as a Recommended Model Program 6/92
- 1992 Article written up by Associated Press distributed around the country.
- 1992 Feature story on Inside Edition TV show about classroom teaching 12/92.
- 1992 Feature article in USA Today on teaching.
- 1992 Feature article in Education Week on motivating students and teaching.
- 1992 Feature story written on teaching approach in "The Insider Line" the electronic Manufactures Newspaper
- 1992 "LIQUID N2: PROPERTIES OF MATERIALS AT LOW TEMPERATURES", a write-up on a one hour presentation including demonstrations on the properties of materials at low temperatures published by Flinn Scientific.
- 1992 Reviewed CD-ROM disk for Dr. David Brooks for ChemSource. Some of my labs and material are included on the disk.
- 1992 Appeared on National Public Radio [WBEZ] for their New Years program 1/1/92 doing 1/2 hour worth of demonstrations.
- 1992 Appeared in Lab Safety Supply catalog in full page spread on safety.
- 1991 Appeared/Interviewed on CBS News TV in Chicago for teaching demonstrations. Interviewed and filed in classroom during class.
- 1991 NBC TV Chicago, The Bob Sirrot Show, did set of demonstrations & interview over a 45-minute period for morning news show.
- 1991 Two Texas [Houston] stations on nightly news on education 1991 for interview and demonstrations to motivate kids and teachers.
- 1991 Chicago TV News for student science projects and how to get them involved
- 1991 A lab book from the Berkeley Hall of Science "[Laboratory Assessment Builds Success](#)", Univ. of Cal. Berkeley contains some of my lab materials. I worked on this book for two summers at Berkeley.
- 1991 "AN IDEA WHOSE TIME HAS COME", a position paper and rationale supporting the idea of four classes and laboratory technician help for science teachers; includes statistics from 60+ high schools; published in Educational Possibilities.
- 1991 Science Demonstrations on WGN Radio for Taste of Chicago 4th of July.
- 1990 Video work in NJ, demonstrations for Optical Data Corp.'s Laserdisc on chemistry. It is a 6 sided set of discs. Also edited materials for them.
- 1990 Lab selected for the Impact II: Teacher-To-Teacher Network to Enhance Math and Science Education in Illinois. The materials published and distributed to school districts throughout the state.
- 1990 "FACTS ON FILE", has published two labs in their "Experiments, Demonstrations, and Projects for School and Home" in 90.
- 1990 Science demonstration tape for North Shore cable TV station
- 1990 News Special "Education Our Nation's Toughest Assignment" September 6, 1990, two segments on CBS education special "Schools In" November and December 1990
- 1989 Video program on polymers for local cable TV station, it was played once a week for six months. Voted one of the highlights of the year
- 1988 Kalamazoo NBC News
- 1988 Chemistry Day work made cover of C & E News and inside story.
- 1987 NSTA/ACS Test Writing Committee 1987-88, helped to write the ACS/NSTA High School Exam
- 1987 "A USER'S VIEW ON COMPUTERS", ISTA SPECTRUM, SPRING
- 1987 "KEEPING ON TRACK WITH COMPUTERS", an article written for CHEMUNITY, Vol. 8, No.1, 1987. (An ACS publication for teachers).
- 1986 Edited laser videodisk material for the American Chemical Society ("Doing Chemistry") and National Educational Video, 1986-87.
- 1986 "WORKING CONDITIONS FOR SECONDARY SCIENCE TEACHERS", a position statement on the working conditions of high school chemistry teachers by a NSTA Task Force which I helped write.
- 1986 "The Presidential Award for Excellence in Science & Math ", published ISTA SPECTRUM.
- 1985 "A PROPOSITION FOR A RESOLUTION FOR IMPROVEMENT IN SCIENCE EDUCATION", submitted to the Illinois Association of Chemistry Teachers (IACT) at its 1985 Spring Conference, University of Illinois, Urbana, IL.
- 1985 "A TIME TO THINK -- A TIME TO DO", a proposition for a resolution for improvement in science education presented to the membership of the Illinois Science Teachers Association State Convention, Illinois State Univ., Normal, IL.

- 1985 "BUILDING ADAPTER BOXES AND INTERFACING MATERIALS", a set of materials developed for SERAPHIM workshop participants.
- 1985 "MOLE DEMO: PART I & II", teacher - student generated computer software programs developed for the Dreyfus Master Teacher Program and SERAPHIM and distributed to over 2000 high school chemistry teachers nationwide.
- 1985 Obtained one half of a fusion reactor for permanent display in the North High School lower resource center, the other half of the reactor is at the Museum of Science and Industry in Chicago.
- 1985 "SUPERMOLE SHUFFLE", ISTA song published in SPECTRUM, Fall 1985, later made into a video.
- 1985 "BOLTZMANN DISTRIBUTION", ISTA lab published in SPECTRUM
- 1985 Edited science textbooks for Scott Foresman, 1985-87.
- 1984 Worked as a research chemist at Amoco studying polymers to reduce friction in pipeline flow. Developed guide lines for the test. 10 weeks summer 1984.
- 1982 "ISOMERS OF CARBON COMPOUNDS", published in Chem. 13 News.
- 1981 Edited articles Journal of Chemical Education, 1981-1983.

Before I list part of the over 500 workshops and presentations I have done I would like to mention two things that stand out in the way of professional participation:

1. For 14 years I ran CHEM WEST, a teachers alliance group in the Chicago area. We have monthly meetings open to teachers and chemists of all educational levels. The meetings provide a forum for the dissemination of chemistry information, ideas, materials, methodologies, and safety regulations. We are committed to "teachers sharing with teachers." This is not a trickle down theory but a "trickle up," which was a paradigm shift in thinking for teacher training at the time the group was initiated. I published [in 2000 others took over the newsletter] "Periodic Cable", the monthly newsletter of CHEM WEST, which keeps members informed of area and national meetings, new ideas, and materials developed and presented by CHEM WEST participants, etc. The mailing list includes over 500 pre-college and college chemistry teachers, and others interested in chemical education. Attendance at the monthly meetings is between 30-200 teachers. There are no dues. CHEM WEST is a tax-exempt organization that is able, because of funding I helped obtain, to offer mini-grants to science teachers for development of curriculum and demonstration materials, computer software and interfacing devices. CHEM WEST has awarded \$7500 in mini-grants over the years to teachers of all levels. In addition to the monthly meetings there have been free workshops for teachers and CHEM WEST has worked with other groups and with industry for teacher updating. CHEM WEST has worked with Chemical Industries Council of Illinois [CICI] in establishing their first "Classroom Catalysis" program and with American Chemical Society Chemistry Day program for the last 10 years where 12 to 18 teachers from our group did all day presentations at local museums. CHEM WEST together with a downstate alliance group is put together a demonstration book with Dr. Otis Rothenberger from Illinois State University. CHEM WEST has also participated in the Midwest Regional Conference on Local Alliance Building for Science and Technology Education several years ago; helped with start-up of the Engineers' Week Program; and held meetings with BPAmoco Oil, Nalco Chemical Company, Argonne National Lab, Fermi National Lab, and Chicago Drug and Chemical.

CHEM WEST has received support and assistance from the Camille and Henry Dreyfus Foundation for Academic Alliances in Chemistry [Woodrow Wilson National Fellowship Foundation] to improve the teaching of chemistry and from the Chicago Drug and Chemical Association. CHEM WEST has also received encouragement and assistance from the Friends of FermiLab Association, a not-for profit organization associated with Fermi National Accelerator Laboratory, which sponsors many programs for the enhancement of science education.

2. I was part of a demonstration team-- WEIRD SCIENCE- which has done over 500 presentations for more than 300,000 students, teachers, and the general public. WEIRD SCIENCE is a stage show that presents a series of demonstrations and teaching tips that will turn on even the most comatose students and motivate teachers of all levels. Students learn best when they want to learn. It is our job as teachers to awaken a student's desire to learn--to keep them mentally coming back. The teacher is the catalyst in the classroom. If that catalyst is inert not much happens. WEIRD SCIENCE has found that we are able to motivate that teacher to change-- to supply the activation energy or a new mechanism to initiate the move to a new style of teaching.

In a recent survey published in School Science and Mathematics on "Secondary Science Teacher's Needs," teachers ranked methods to motivate students as their number one concern and identification of sources of peer tested instructional materials as a high priority. CHEM WEST and WEIRD SCIENCE presentations provide both. Lesley Stahl of CBS News said of a "WEIRD SCIENCE" presentation at SUNY Purchase [NY], "Teachers are hungry for this type of sharing." "WEIRD SCIENCE is a four-teacher road show that exposes youngsters to seemingly magical wonders more intriguing than video games." ---- Newsweek: April 9, 1990

**Workshops I have run or helped to run in the last 10 years (I have done well over 600):**

- 2010 23<sup>rd</sup> Wonders of [Science program at Fermilab](#) for over 800 kids and parents [for Excellence in Science](#), Technology, and Math Education Week 4/10
- 2010 Chemwest Annual College Demo Night at North Central 3/10
- 2010 ACS meeting in San Francisco invited speaker for symposium Professor Shkhashiri's "Communicating Chemistry: Demonstrations" 3/10

2010 Demo Program at Grundy Country Environmental Fair 3/10

2010 Lab Program for UIC Chemistry Club, Alchemy Club 3/10

2010 Demo Program for Boy Scouts Naperville Blue and Gold Dinner 2/10

2010 Latin School Science Program 2/10

2010 American Chemical Society, ACS, Speakers Tour- Talks at 4 different colleges in WI 2/10

2010 Science demonstration program [School District 204](#) Science Fair 1/10

2010 Teacher Program and Demo Program at Florida Southern College 2010:Chemistry Odyssey Innovative Program Grant from the ACS. 1/10

2010 Science demo program at Oriole Park School for [Oriole Park Community Club](#). 1/10

2010 Keynote talk at Georgia Chemistry Teachers Program in 1/10

2010 Bolch Science Talk at The Westminster Schools Atlanta Georgia 1/10

2009 Science demo program at the Indian Trails Public Library 12/09

2009 2 programs at 2 local Mosques for the event Eid Al Adha 12/09

2009 David Letterman Show Science Demonstrations NY 11/09

2009 Demo Program for UIC Chemistry Club, Alchemy Club 11/09

2009 22<sup>nd</sup> Faraday Lecture(s) keynote speaker at Soldiers & Sailor's Memorial Hall Spectroscopy for the Society of Pittsburgh about 5,000 over 2 days. 11/09

2009 Chemical Industry Council of Illinois, CICI, CAREER CONFERENCE did demo programs for 2 days at Museum of Science and Industry over 2000 kids 10/09

2009 Published Journal of Chemical Education, Vol. 86 No. 10 P 1138 *Illinium: An Impeached Element*

2009 ACS Chicago Section for National Chemistry Week Keynote Presentation at DePaul University 10/24

2009 City Science, a WYCC-TV 20 production for Science of Gases demo shown fall 2009

2009 Whoop Dee Doo a kid-friendly public access TV show Smart Museum at the University of Chicago 10/2

2009 [Argonne Open House](#) 3 science program 8/09

2009 Set up/taught a two-week course "[History of Science in England](#)" in Europe 7/09

2009 David Letterman Show Science Demonstrations Kids Scientist NY 5/09

2009 Boy Scout science program Highland Park 5/09

2009 Science demonstration program for Chicago Drug and Chemical Annual Meeting 4/09

2009 Highlands School science expo Program 4/09

2009 Two Science demonstration program for Plainfield School 500 kids 4/09

2009 22<sup>nd</sup> Wonders of [Science program at Fermilab](#) for over 800 kids and parents [for Excellence in Science](#), Technology, and Math Education Week 3/09

2009 ACS National Meeting Salt Lake Building a Professional Development Using JCE Activities 3/09

2009 ACS National Meeting Salt Lake invited speaker for Helen Free Award Symposium 3/09

2009 Chemwest Annual College Demo Night Wheaton College 3/09

2009 Lecture/demo Science Week Program for Pittcon over 1500 students at Grand Ballroom McCormick Place 3/09

2009 Program for [AAAS Family Science Days](#) 3/09

2009 Science demonstration program NAAS/AJAS at the [AAAS](#) meeting 3/09

2009 UIC talk/Program for Dorm students 2/09

2009 Science demonstration program [School District 204](#) Science Fair 1/09

2009 Science demonstration program for [Joseph Sears School Kenilworth](#) 1/09

2009 Science demonstration program for Kaneland School District 400 kids 1/09

2009 Lisle Library Evening Science Program 1/09

2008 Science demo program [Kids Scientist at Vernon area](#) library program 11/08

2008 [David Letterman Show Science Demonstrations](#) NY 11/08

2008 Second talk for [ACS Southwest Regional \(SWRM\)](#) Little Rock, 10/08

2008 Keynote Speaker for [ACS Southwest Regional \(SWRM\)](#) Little Rock, 10/08

2008 Science demo program on money for the Oxford Bank Westmont 9/08

2008 Program for [Labfest at MSI](#) Museum of Science and Industry 9/08

2008 Science demo program Celebration Center for Lutheran Church Naperville, 9/08

2008 Invited speaker for High School Day Program at the [American Chemical Society's National Philadelphia](#), 8/08

2008 [E-learning initiative](#) taping science demos & PCK for Flinn Scientific - a series of on line [teaching materials](#). 7/08

2008 Set up/taught a two-week course called "[History of Science in France](#)" in Europe 7/08

2008 [E-learning initiative](#) taping science demos & PCK for Flinn Scientific - a series of on line [teaching materials](#). 5/08

2008 Science demo program on money for the Oxford Bank Westmont 5/08

2008 Saturday demonstration program for [Hanover Central Middle School](#) in Cedar Lake, Indiana 4/08

2008 Saturday demonstration program for Jane Ball Elementary 4/08

2008 Science demonstration program for Chicago Drug and Chemical Annual Meeting 4/08

2008 Chemical Industry Council of Illinois [CAREER CONFERENCE](#) did demo programs for 2 days at Museum of Science and Industry 2500 kids 4/08

2008 [Science demonstration program at Fermilab](#) for over 800 kids and parents [for Excellence in Science](#), Technology, and Math Education Week 4/08

2008 Science demonstration program for Plainfield School 400 kids 3/08

2008 [David Letterman Show Science Demonstrations](#) NY 2/08

2008 Saturday demonstration program for [School District 204](#) Science Fair: WEIRD SCIENCE 1/08

2008 Science demonstration program for Kaneland School District 400 kids 1/08

2007 Science demo program on money for the Oxford Bank Naperville 9/07

2007 Helped to run full day Inquiry Chemistry Program at UIC for CPS teachers. 9/07

2007 Taught 2 week-long workshops for Flinn Scientific Summer of 07 U of Cal., Merced & U of Texas, El Paso, 8/07

2007 Set up/taught a two-week course called "[History of Science in Scandinavia](#)" in Europe 7/07

2007 Helped to run full day Inquiry Chemistry Program at UIC for CPS teachers. 6/07

2007 [David Letterman Show Science Demonstrations](#) NY 5/07

2007 Science demos for District 203 Ed. Foundation raised \$2000 5/07

2007 Science demonstration program for national Geographic's kids and parents 5/07

2007 Helped to run full day Inquiry Chemistry Program at UIC for CPS teachers. 4/07

2007 Chemical Industry Council of Illinois [CAREER CONFERENCE](#) did demo programs for 2 days at Museum of Science and Industry 2500 kids 4/07

2007 Chair of [High School Program for the National ACS meeting Chicago 3/07](#)

2007 Science demonstration program for Orenic School Plainfield 800 kids & parents 2/07

2007 Science demonstration program for Longwood School Aurora 300 kids 2/07

2007 Helped to run full day Inquiry Chemistry Program at UIC for CPS teachers. 2/07

2007 Science demonstration program for Battle Creek, Michigan 300 kids 2/07

2007 Two Saturday demonstration programs for [School District 204](#) Science Fair: WEIRD SCIENCE 1/07

2007 Helped to run full day Inquiry Chemistry Program at UIC for CPS teachers. 1/07

2007 Science demonstration program for Kaneland School District 400 kids 1/07

2006 Science demos with kids on WGN and CBS local stations 12/06

2006 David Letterman Show Science Demonstrations NY 12/06

2006 Advanced gastronomy article in Chicago Tribune explaining high-tech restaurants in Chicago

2006 Hallowed Halls Halloween program for the [Chicago Cultural Center](#) 10/06

2006 Boy Scout science program North Barrington 10/06

2006 Museum of Idaho and [Idaho National Lab](#) did 3 days of science programs for the Science & Engineering Expo 2006

2006 Kankakee Community College Invited speaker for 40<sup>th</sup> anniversary program 10/06

2006 Taught week-long methods course in Chemistry for teachers at [Univ. of IL Chicago](#) 8/06

2006 Taught 2 week-long workshops for Flinn Scientific Summer of 06 St. Cloud State Univ Mn & Idaho State Univ, 8/06

2006 Set up/taught a two-week course called "[History of Science in UK](#)" in Europe 7/06

2006 Invited speaker for [37th Great Lakes Regional ACS Meeting Milwaukee, WI](#) 6/1

2006 Helped to run 6 Inquiry Chemistry Programs at UIC for CPS teachers. These were full day programs.

2006 Invited Speaker for [Collegiate School](#) of NYC 5/06

2006 [David Letterman Show Science Demonstrations](#) NY 5/06

2006 Traverse City MI Central High School science program 5/06

2006 Science demonstration program for Chicago Drug and Chemical Annual Meeting 4/06

2006 Chemical Industry Council of Illinois CAREER CONFERENCE did demo programs for 2 days 4/06

2006 Science demonstration program at Fermilab for over 800 kids and parents expected for Excellence in Science, Technology, and Math Education Week 4/06

2006 Danville IL Lutheran School science program 4/06

2006 Kent School Denver CO All School Science program 2/06

2006 [Point Beach Nuclear Energy Center](#) Keynote demo program for reopening of science center Two Rivers, WI 2/06

2006 [Latin School](#) of Chicago keynote for their Science Day 2/06

2006 Two Saturday demonstration programs for School District 204 Science Fair: WEIRD SCIENCE 1/06

2006 Science Night in Elk Grove program 1/06

2005 Lakeshore High School all school science program Stevensville, MI 12/05

2005 Video demos for an hour-long web cast to celebrate "[Einstein's Year](#)" Leon Lederman, Nobel Laureate, webcast on 12/1/05 a with Fermilab and CERN <[http://vmsstreamer1.fnal.gov/VMS\\_Site\\_03/Lectures/ScienceBytes/](http://vmsstreamer1.fnal.gov/VMS_Site_03/Lectures/ScienceBytes/)>

2005 Science Demos on ABC local news program 11/03

2005 [David Letterman Show Science Demonstrations](#) NY 11/05

2005 Hallowed Halls Halloween program for the Chicago Cultural Center 10/05

2005 Boy Scout science program North Barrington 10/05

2005 Navajo reservation at Shiprock NM science program for HS students 10/05

2005 Charlotte Country Day School all school science program NC 9/05

2005 Taught week-long methods course in Chemistry for teachers at Univ. of IL Chicago 8/05

2005 Taught 2 week-long workshops for Flinn Scientific Summer in the of 2005 University of Northern Colorado & Massachusetts Academy, MA 7/05

2005 Set up/taught a two-week course called "History of Science in Germany" in Europe 6/05

2005 Middle Atlantic Regional Meeting (MARM) of ACS Keynote for HS chemistry symposium NJ 5/05

2005 FAME 2005 (Florida's ACS annual meeting Gainesville) banquet speaker 5/05  
 2005 Science demonstration program for Chicago Drug and Chemical Annual Meeting 4/05  
 2005 Montana Academy of Sciences & local ACS demo program at University of Montana 4/05  
 2005 Science demonstration program at Fermilab for over 800 kids and parents expected for Excellence in Science, Technology, and Math Education Week 3/05  
 2005 Chemical Industry Council of Illinois CAREER CONFERENCE did demo programs for 2 days 3/05  
 2005 David Letterman Show Science Demonstrations NY 2/05  
 2005 Boy Scout Science Program, Palatine IL 2/05  
 2005 Science demonstration program for Willows Academy in Des Plaines, IL 2/05  
 2005 Two Saturday demonstration programs for School District 204 Science Fair: WEIRD SCIENCE 1/05  
 2004 Southwest Michigan Science Educators' Symposium Keynote Speaker, MI 10/04  
 2004 Keynote speaker for [ACS Southwest Regional Meeting](#) Ft. Worth, Texas 10/04  
 2004 Science demonstration program for Madison School, Hinsdale, IL 9/04  
 2004 Taught 2 week-long methods course in Chemistry for teachers at Univ. of IL Chicago 8/04  
 2004 Taught 2 week-long workshops for Flinn Scientific Summer in the of 2004 University of Northern Colorado & Grand Valley State, MI  
 2004 Keynote speaker Greece Central School District Rochester, NY annual Pillars of Pedagogy Standards Institute 7/04  
 2004 Set up/taught a two-week course called "History of Science in Germany" in Europe 6/04  
 2004 One of keynote speakers for Flinn at Evening of Chemistry at the NSTA National Meeting [National Sci. Teachers Association] Atlanta, GA 4/04  
 2004 Science demonstration program for Chicago Drug and Chemical Annual Meeting 4/04  
 2004 Western Washington Science Fair (6th largest in the nation) Puyallup, WA 4/04  
 2004 Science demonstration program at Fermilab for over 1000 kids and parents expected for Excellence in Science, Technology, and Math Education Week 3/04  
 2004 Science demo program for the Plainfield School in IL 3/04  
 2004 Keynote speaker for Enhancing Chemistry Program at Univ. of IL Urbana 3/04  
 2004 Science demo program on money for the Oxford Bank Naperville 2/04  
 2004 Science demo program for the Crane High School in Chicago 2/04  
 2004 Science demo program for the Timber Ridge School in Plainfield, IL 2/04  
 2004 Boy Scout Science Program, Palatine IL 2/04  
 2004 Two Saturday demonstration programs for School District 204 Science Fair: WEIRD SCIENCE 1/04  
 2003 Science demo program for the Northpoint Elementary School in MI 12/03  
 2003 University of Wisconsin Christmas Lecture Bassam Shakhshiri videotaped for PBS telecasts 12/03  
 2003 Keynote Speaker for Tennessee Science Teachers Association Conference Nashville, TN 11/03  
 2003 Keynote Speaker for Florida Association of Science Teachers FAST 2003 Conference, Jacksonville, FL 9/03  
 2003 Demonstration Program for Glen Ellyn School System 9/03  
 2003 All Hallow's Eve programs for Naper Settlement in Naperville 10/03  
 2003 Taught 2 week-long methods course in Chemistry for teachers at Univ. of IL Chicago 8/03  
 2003 Taught 3 week-long workshops for Flinn Scientific Summer in the of 2003 University of Missouri-St. Louis, Rollins College FL, University of Northern Colorado  
 2003 Set up/taught a two-week course called "History of Science in Low Countries" in Europe 6/03  
 2003 Demonstration program for Smithsonian traveling exhibition, "Key Ingredients: American Food Traditions" in West Chicago 6/03  
 2003 Demonstration program for Northwestern Univ. ACS/Student group 5/03  
 2003 Keynote Speaker for the British Columbia Science Teachers Convention, Vancouver, B.C. 5/03  
 2003 Science demonstration program at Fermilab for over 1000 kids and parents expected for Excellence in Science, Technology, and Math Education Week 3/03  
 2003 Key Note Speaker for high school/college interface luncheon at New Orleans ACS National meeting 3/03  
 2003 Science demonstration program for Chicago Drug and Chemical Annual Meeting 4/03  
 2003 Science demo program for the Baseline School in MI 3/03  
 2003 Two Saturday demonstration programs for School District 204 Science Fair: WEIRD SCIENCE 1/03 & 2/03  
 2003 Weird Science: A "Phenomenological" Approach to Teaching Science at DuPage Institute Day Science Conf. 2/03  
 2003 23th time doing the David Letterman Show Science Demonstrations 2/03  
 2003 Science demo program for the Kent School in Denver 1/03  
 2002 Featured speaker at 2002 Area Convention in Albuquerque, New Mexico 12/02  
 2002 Science demonstration program at an International Conference at Argonne National Lab 11/02  
 2002 Key Note Speaker for Southwest Michigan Science Educators Symposium 11/02  
 2002 All Hallow's Eve programs for Naper Settlement in Naperville 10/02  
 2002 Help and Did demos for ACS Chicago Chemistry Day at UIC 10/02  
 2002 Key Note Speaker for Iowa Science Teachers Conf. 9/02  
 2002 Science demonstration program for Fierke Education Center Oaklawn, IL 9/02  
 2002 ACS Speaker Service Lake Erie Circuit gave 3 talks in Toledo, OH, Ashland, OH and Erie, PA 9/02

2002 Taught a week-long methods course in Chemistry for teachers at Univ. of IL Chicago 8/02

2002 Taught 3 week-long workshops for Flinn Scientific Summer in the of 2002 Plattsburgh State University NY, SUNY-College at Oneonta NY, California State University, Northridge CA

2002 Set up/taught a two-week course called "[History of Science in France/Switzerland](#)" in Europe 6/02

2002 Science demonstration program for Mesa Public Schools / AZ 5/02

2002 [22nd time doing the David Letterman](#) Show Science Demonstrations 5/02

2002 Science demonstration program for Chicago Drug and Chemical Annual Meeting 4/02

2002 Science demonstration program at Fermilab for over 1000 kids and parents 4/02

2002 Key Note Speaker for high school/college interface luncheon at Orlando, FL ACS National meeting 4/02

2002 Reavis High School in Burbank, IL key note speaker for Technomagic,3/02

2002 Key Note speaker for Irish Science Teachers Convention in Ireland 3/02

2002 Presentation at the NSTA National Meeting [National Sci. Teachers Association] San Diego 3/02

2002 Two Saturday demonstration programs for School District 204: WEIRD SCIENCE 1/02 & 2/02

2002 [Estee Lecturer](#) at the University of South Dakota Chemistry Department 1/02

2001 21st time doing the David Letterman Show Science Demonstrations 12/01

2001 Diane Chiamonte Memorial Speaker Queen Ann School, Maryland 12/01

2001 Help to get site for the ACS Chem Day Program and presented at it. 11/01

2001 Lisle Library Evening Science Program 11/01

2001 Science Demonstration Program at the American School of the Hague, Netherlands 11/01

2001 Keynote Speaker for European Council of International Schools [ECIS] Conference Hague, Netherlands 11/01

2001 Keynote Speaker for Virginia Association of Science Teachers State Meeting, Richmond, VA 10/01

2001 [Palatine School District](#) Evening Science Program for PTA and Students 9/01

2001 5 WEIRD SCIENCE shows for Argonne National Lab's Open House 9/01 [Canceled due to Sept 11!]

2001 Two presentations at CHEM ED 2001 in Toronto, Canada 8/01

2001 AP & WWW + Life After the AP Exam and Chemistry on the Late Show

2001 Taught a week-long methods course in Chemistry for teachers at Univ. of IL Chicago 8/01

2001 Taught 3 week-long workshops for Flinn Scientific Summer in the of 2001 at Pittsburgh Public Schools, Florida Southern College, & Science Museum of Virginia

2001 Ran/set up/taught a two-week course called "IRELAND'S SCIENTIFIC HERITAGE" in Europe 6/01

2001 20<sup>th</sup> time doing the David Letterman Show Science Demonstrations 5/01

2001 Opening Program for DuPage Children's Museum 5/01

2001 Keynote Speaker for Sachs Symposium for Chicago Science teachers 5/01

2001 2 Science demonstration programs at FermiLab for over 1600 kids and parents 4/01

2001 Cub Scout Demonstration Program 4/01

2001 Chicago Drug and Chemical after-dinner speaker for their annual meeting 4/01

2001 Art and Letters Program for Loraine Valley College 4/01

2001 Demonstrations for WTTW Public TV on their "Chicago Tomorrow" science shows 3/01

2001 Demonstration program at Salt Creek School 3/01

2001 Two programs for the Irish Science Teachers Association annual meeting in Ireland 3/01

2001 Science Program for Evanston School District 65 Catholic Schools 3/01

2001 Science Program for Lisle Catholic Schools 2/01

2001 Keynote Speaker for Academically Talented High School Students part of the Saturday Scholars Series. Did full morning program of demonstrations & discrepant events 2/01

2001 Demonstration Program for Glen Ellyn School System 1/01

2001 Two Saturday demonstration programs for School District 204: WEIRD SCIENCE 1/01 & 2/01

2000 Two science presentations at Science Museum of Virginia, Richmond 12/00

2000 ACS Christmas Program in Richmond VA 12/00

2000 Weird Science program at St. Christophers' School in Richmond VA 12/00

2000 19<sup>th</sup> time doing the David Letterman Show Science Demonstrations 11/00

2000 Mother/Son program for School District 203 11/00

2001 [WGN](#) Radio Science Fair on the radio! 10/00

2000 Chicago Cultural Center kids program 10/00

2000 Weird Science program at Get High On Life Rally 10/00

2000 Demonstrations on Bozo's Circus WGN TV 10/00

2000 Helped to plan CHEM WEST meeting 9/00

2000 CLTV show on Mercury spills 9/00

2000 Demo program at Malcolm X college for parents and kids 9/00

2000 Demo program at Bennet for parents and kids 9/00

2000 Taught another weeklong methods course in Chemistry for teachers at Univ. of IL Chicago 8/00

2000 16th Biennial Conference on Chemical Education, July 30 -Aug. 3, at Ann Arbor, Michigan

1. Demo on Large Ball Bearing Thermite Reaction
2. Poster paper on Japanese educational System

2000 Taught a weeklong methods course in Chemistry for teachers at Univ. of IL Chicago 7/00

2000 Ran week-long workshops for Flinn Scientific Summer of 2000

1. Old Dominion 6/26
2. College of St. Elizabeth 7/10
3. College of Wooster 7/17

2000 Fox Sports Science Demonstrations 5/00

2000 Demos for WEBCT streaming video of chemistry demos done with Univ. of GA for WEBCT, can be seen on:  
<http://www.ncusd203.org/north/depts/science/chem/marek/>

2000 Helped plan CHEM WEST meeting 4/00

2000 2 Science demonstration programs at FermiLab for over 1600 kids and parents 4/00

2000 Keynote speaker for Flinn at Evening of Chemistry at the NSTA National Meeting [National Sci. Teachers Association] Orlando 4/00

2000 18th time on David Letterman Show 3/00

2000 Keynote speaker for Chicago Public Schools Student Science Fair 3/00

2000 Speaker for "The Symposium on the Nature of Science" for 830 K-12 teachers at FermiLab Program 3/00

2000 Demonstration program for Jackson School Evening of Science Program 2/00

2000 Demos at SciTech Fundraiser 2/00

2000 Helped plan CHEM WEST meeting 2/00

2000 Two Saturday demonstration programs for School District 204: WEIRD SCIENCE 1/00 & 2/00

2000 Demonstrations with my students on WGN TV News 1/00

1999 Helped plan CHEM WEST meeting 12/99

1999 Keynote speaker for Washington Science Teachers Association Spokane, WA 10/99

1999 KidsTech 2000 program at IIT 9/99

1999 17th time on David Letterman Show. This time I brought kids to do the Science Demonstrations 9/99

1999 Helped plan and presented at the CHEM WEST meeting at Solid Waste Education Center 10/99

1999 Keynote Speaker Corridor Partnership for Excellence in Ed. for Academically Talented High School Students part of the Saturday Scholars Series. Did full morning program of demonstrations & discrepant events 10/99

1999 Demonstrations on Bozo's Circus WGN TV 10/99

1999 Chicago Cultural Center kids program 8/99

1999 Demo program on boat for Eclipse Cruise in Black Sea for Adler Planetarium

1999 Taught a weeklong methods course in Chemistry for teachers at Univ. of IL Chicago 7/99

1999 Ran week-long workshops for Flinn Scientific Summer of 1999

1. Clemson University
2. SUNY Stony Brook, Long Island NY

1999 Ran/set up/taught two-week course called "SCIENCE and the INDUSTRIAL REVOLUTION in England and Scotland" in Europe 99

1999 WEIRD SCIENCE SHOW for general public in Halmstad Sweden 6/ 99

1999 Ran 2-day workshop for teachers in Halmstad Sweden 6/99

1999 16th time on David Letterman Show. This time I brought kids to do the Science Demonstrations 5/99

1999 Helped plan and presented at the CHEM WEST meeting at Hindsdale South High School 2/99

1999 Circleville Ohio Science Demonstration Program 5/3/99

1999 2 Science demonstrations programs at FermiLab for over 1600 kids and parents 4/99

1999 5 WEIRD SCIENCE shows for Argonne National Labs' Open House 4/99 & 5/99

1999 Presentations at the NSTA National Meeting [National Sci. Teachers Association] Boston 1999

1999 Chemistry in Action for Science and Engineering Open House UIC 4/99

1999 [ACS Amer. Chem Soc.](#) speaker for Azalea tour: Gave 5 talks: Northeast Georgia Section, University of Georgia, Athens, GA; Savannah River Section, Fort Discovery Science Center, Augusta, GA; South Carolina Section, University of South Carolina, Columbia, SC; Charlotte Section, Winthrop Univ. Charlotte [Rock Hill]; NC Western Carolina's Section, Lander University, Greenwood, SC

1999 WEIRD SCIENCE Presentation at College of Charleston for students, staff, and ACS section 3/99

1999 WEIRD SCIENCE Presentation at Charlotte Country Day School for students and staff 3/99

1999 15th time on David Letterman Show. This time I brought kids to do the Science Demonstrations 2/99

1999 Helped plan and presented at the CHEM WEST meeting at Hindsdale South High School 2/99

1999 Demonstration program, WEIRD SCIENCE, for Purdue Univ. ACS/Student group for students & faculty 2/99

1999 Indiana Science teachers convention 2 talks 2/99

1999 Two Saturday demonstration programs for School district 204: WEIRD SCIENCE 1/99 & 2/99

1999 Speaker for Northwestern Teachers Training Program 1/99

1999 Two programs for Chicago schools: WEIRD SCIENCE 1/99

1999 Downers Grove school program: WEIRD SCIENCE 1/99

1999 Week-long program for teachers in Georgia 1/99

1998 University of Wisconsin Christmas Lecture Bassam Shakhshiri videotaped for PBS telecasts 12/98

1998 Demos on the radio WBIG 12/98

1998 Museum of Science & Industry Demonstration Program for former student's company 11/98  
 1998 Two school programs for school district 203. These were assembly programs 11/98  
 1998 Helped plan and presented at the CHEM WEST meeting at Wheaton College 11/17/98  
 1998 [14th time on David Letterman Show](#). This time I brought kids to do the Science Demonstrations 11/98  
 1998 Talk on History of Science for Babu George program at Sacred Heart Univ. 11/7/98  
 1998 ICE/Miami of Ohio Weird Science program and Teacher Make & Take 11/6/98  
 1998 Lake Forest College Kappa Delta Pi Teacher Honor Society Program Speaker 10/29/98  
 1998 Chicago Drug and Chemical after-dinner speaker for their annual meeting 10/98  
 1998 Needs Assessment program at FermiLab 10/98  
 1998 Circleville Ohio Science Demonstration Program 10/98  
 1998 CHEM DAY Program 10/98  
 1998 Museum of Science & Industry Demonstration Program for special event 10/98  
 1998 Helped plan and presented at the CHEM WEST meeting at West Lyden High School 10/98  
 1998 Demonstrations on Bozo's Circus WGN TV, aired in January 10/5/98  
 1998 Adler Planetarium Demo show for the opening of their new building 10/4/98  
 1998 Did demonstrations and was interviewed on WGN TV Morning News. 9/24/98  
 1998 Invited speaker at the National ACS meeting in Boston for a Symposium Hubert Alyea. My talk is titled "From the Absent-minded Professor to Weird Science." 8/25/98  
 1998 Ran a three-day workshop at The Ross School East Hampton, NY 8/17-19/98  
 1998 Part of the Symposium titled "The establishment of an exchange network of regional high school chemistry teachers' newsletters" at 15th Biennial (National) Conference on Chem Ed. for ACS at Univ. Waterloo, Waterloo, CA 8/8-12, 98  
 1998 WEIRD SCIENCE day workshop at 15th Biennial (National) Conf. on Chem Ed. for ACS at Univ. Waterloo, Waterloo, CA 8/8-12, 98  
 1998 Contributed paper "DEAD POETS SOCIETY, DEAD CHEMISTS SOCIETY: STANDING ON YOUR DESK, WHAT DO YOU SEE?" at 15th Biennial (National) Conference on Chem Education for the ACS at Univ. Waterloo, Waterloo, CA 8/8--812, 98  
 1998 Key Note presentation at 15th Biennial (National) Conference on Chem Ed. for the ACS at Univ. Waterloo, Waterloo, CA 8/8--812, 98  
 1998 New England Science Teachers meeting Key Note Speaker week of 8/3/1998  
 1998 Taught a weeklong methods course in Chemistry for teachers at Univ. of IL Chicago 7/98  
 1998 Featured Presenter for Museum of Science and Industry, Chicago for the opening of their new \$50 million addition 7/23  
 1998 Ran/set up/taught two-week course called "Landmarks in Nineteenth Century Science & Technology in England, Wales, & Ireland" in Europe 6/17--7/4/98  
 1998 Phillips Exeter Academy Mathematics & Technology Conference Key Note Speaker 6/14/98  
 1998 Science Program for CFP group at FermiLab 6/6/98  
 1998 Wheatville, IN Science Demonstration Program 5/23/98  
 1998 New York Hall of Science Museum Evaluation Team member 5/18/98  
 1998 Put together a team of teachers for Learning Curve to develop science kits 5/98  
 1998 National Science Olympiad Key Note Speaker for 4000 people 5/15/98  
 1998 Circleville Ohio Science Demonstration Program 5/9/98  
 1998 2 Science demonstrations programs at FermiLab for over 1600 kids and parents 4/26/98  
 1998 American Science & Surplus Program in Chicago 4/25/98  
 1998 Museum of Science & Industry Demonstration Program for Members event 4/17/98  
 1998 American Science & Surplus Program in Wisconsin 4/14/98  
 1998 Shorewood Science Night Program 4/3/98  
 1998 Cub Scout demonstration program in Naperville 3/21/98  
 1998 Michigan School system Demonstration program 3/17/98  
 1998 13th time on David Letterman Show. This time I brought kids to do the Science Demonstrations 3/3/98  
 1998 Keynote Speaker for New Mexico Tech Performing Arts Series Socorro, NM at NM Tech coinciding with State Science Olympiad 2/20/98  
 1998 Student demonstration program for Evanston Schools 2/16/98  
 1998 Did demonstrations and was interviewed on WGN TV for science week. 2/16/98  
 1998 Ran Chem West meeting at Carl Sandburg High School for teachers 2/11/98  
 1998 Cub Scout demonstration program in Naperville 2/8/98  
 1998 Ran Woodrow Wilson Follow-up at Univ. of Michigan Dearborn for 60 teachers 2/7/98  
 1998 Demonstration program for Northwestern Univ. ACS/Student group for 600 students and faculty 1/28/98  
 1998 Ran Benefit demonstration for DuPage Children's Museum 1/15/98  
 1997 Demonstration Program for Madison J. H. S., Naperville 12/15/97  
 1997 Ran Teachers workshop in SUNY Purchase University in NY for teachers 11/22/97  
 1997 Science program for 12 high schools, more than 800 kids 11/21/97  
 1997 Keynote Speaker, Corridor Partnership for Excellence in Ed. for Academically Talented High School Students part of the Saturday Scholars Series. Did full morning program of demonstrations & discrepant events 11/15/97.

- 1997 Helped plan and presented at the CHEM WEST meeting at Wheaton College 11/97
- 1997 Two Demonstration shows for Winston School Science Fair - 5000 kids 11/8/97
- 1997 Science demos for KARE- TV, Garnett TV, Minneapolis, MN Saturday Science Chemistry Day 11/1/97
- 1997 CHEM DAY Program giving the Larry Conroy Memorial Lecture/demonstration show at Univ. of MN, 11/1/97
- 1997 12th time on David Letterman Show. This time I brought kids to do the Science Demonstrations 10/97
- 1997 Kids and science demos on CBS News October 29, 1997
- 1997 Keynote Speaker for Regional ACS meeting in Roanoke, VA 10/19/97
- 1997 Keynote Speaker for Florida State Science Teachers in Panama City, FL 10/18/97
- 1997 Chem West meeting at University of IL Chicago 9/29/97
- 1997 WEIRD SCIENCE program for Science City Festival at the Kansas City Museum, MO 9/27/97
- 1997 Science demos for Fox Thing in the Morning FOX TV 9/26/97
- 1997 Demonstrations on AM 1000 Talk Radio Show 9/19/97
- 1997 Demonstrations on Bozo's Circus WGN TV, which aired in October 9/23/97
- 1997 Day-long teachers workshop for Grand Valley State Univ. in MI 9/13/97
- 1997 Ran full afternoon make-and-take workshop for teachers at ChemEd 97 in Minneapolis Minnesota 8/97
- 1997 Three-day program for IL Power Doing Science Demos for General Public at Decatur Days 8/1-3/97
- 1997 Taught a weeklong methods course in Chemistry for teachers at Univ. of IL Chicago 7/97
- 1997 Three-day program for CILCO Doing Science Demos for General Public at Heart of IL Fair 7/11-13/97
- 1997 11th time on David Letterman Show doing Science Demonstrations 7/31/97
- 1997 Woodrow Wilson National Fellowship Team Leader, CHEM TEAM 8, did weeklong workshops at two colleges during the summer 1997. In charge of selecting content, labs, and 250-page book of materials, see three colleges below:  
     University of Michigan, Dearborn 7/8--7/12 /97  
     College of St. Mary, KS 7/15--7/19 /97 1997
- 1997 Ran/set up/taught two week course called The Founding and Early Flowering of the Royal Society. This course involved the History of Science in Ireland and England tour in Europe for FermiLab/Aurora Univ. 6/97
- 1997 WEIRD SCIENCE SHOW for general public in Halmstad Sweden 6/10/97
- 1997 Ran 2-day workshop for teachers in Halmstad Sweden 6/97
- 1997 Keynote Speaker for Connecticut Science Teachers Association First Annual Meeting at Sacred Heart University 5/31/97
- 1997 Keynote Speaker for ACS/Education Day Program for Purdue, Indianapolis, IN section 5/23/97
- 1997 Keynote speaker for 3500 kids at a Science Program in South East MO State Univ. Cape Girardeau, 5/16/97
- 1997 Fox Thing in the Morning FOX TV Chicago May 6. 1997
- 1997 Celebrate Aurora Science Program for SCITECH Aurora, IL 4/26/97
- 1997 WEIRD SCIENCE SHOW River Forest School District Science Night 4/25/97
- 1997 Invited as a Keynote Presenter at Fermilab's Annual CHEMICAL MAGIC SHOW, a celebration of Nat. Sci. & Tech. Week. This program is for elem. school students, teachers and parents District Science Night 4/17/97
- 1997 Keynote Speaker for New Mexico Tech Performing Arts Series in Socorro, NM at NM Tech coinciding with the State Science Fair April 11-12, 1997.
- 1997 Two Presentations at the NSTA National Meeting [National Sci. Teachers Association] in New Orleans WEIRD SCIENCE SHOW 3/97
- 1997 WEIRD SCIENCE SHOW School District Science Night 3/25/97
- 1997 WEIRD SCIENCE SHOW for American Science Center Grand Opening Program Chicago 3/22/97
- 1997 Keynote speaker for San Diego County Office of Ed. Science Day in San Diego, CA 3/15/97
- 1997 Dunlap School District full-day science program 2/17/97
- 1997 New Trier High School Jazz band program Science Demos 3/15/97
- 1997 Planned/ran CHEM WEST meeting at Lincoln-Way High School 2/24/97
- 1997 Polymer workshop for Panama City/ Panhandle Science Teachers organization/in-service 2/15/97
- 1997 Keynote speaker for Panama City/ Panhandle Science Teachers organization/in-service 2/15/97
- 1997 Planned/ran CHEM WEST meeting at Lincoln-Way High School 1/30/97
- 1997 10<sup>th</sup> time on David Letterman Show doing Science Demonstrations 1/3/97

**Left off years from 1980-1996**

**Goals I would like to reach:**

1. I would like to work on web based materials for high school teachers. The World Wide Web is to personal computers as networks are to television sets. The Web is the gateway to the digital dimension for students. The Web allows access to participating Internet computers anywhere on the planet to acquire vast amounts of information in the form of text, pictures, sound and even film clips. Web sites will be the building blocks of the Information Age just as atoms and molecules were the building blocks of the Industrial Age.
2. I would like to put together a demonstration book for teachers that is almost "Turn Key." By that I mean one that scripts the demonstrations so that teachers could use them as they are and incorporate them directly into his or her lessons. It would include the "hooks" that would draw kids into thinking about the concept one wishes to put across.

3. I would like to produce a series of discs {CD-ROM, DVD or Web based} that treat a series of demonstrations as a learning experience. Many of the demonstrations would be open-ended and would set the stage for further class discussion, labs and other demonstrations. The emphasis would be on the phenomenological approach to science (i.e., teaching by introducing the phenomenon first through a demonstration or a lab). Discrepant events would provide methods to motivate students.

4. I would like to work on what I call the cellulose-free textbook-- all on computer, laser disc, and/or some form of CD-ROM or DVD. It would be a Newton- type device, something that each student would keep with him/her and use, with all the content and "work sheets" built in or downloaded at the appropriate time. They could even access material through an e-mail type system from their home. This may be a bit far-out but it is nice to dream.