

THE DAYTON SECTION

DAYTON SECTION'S WEB PAGE ADDRESS

http://www.udayton.edu/~acs

DAYTON SECTION OFFICERS, 1998

Dr.Frank Lonadier, Chemistry Dept., Sinclair Comm. Coll., Dayton, OH 45402-1460; Office: 512-2308; flonadie@sinclair.edu

Dr. Glen Buell, 3548 Eastern Dr., Beavercreek, OH 45432; Home: 426-2937; glen.buell@wright.edu

IMMEDIATE PAST CHAIR

Dr. Ken Turnbull, Dept. of Chemistry, Wright State Univ., Dayton, OH 45435-0002; Office:775-2671; Kenneth.Turnbull@wright.edu

SECRETARY

Dr. James Gord, AFRL/PRSC, Bldg. 490, WPAFB, OH 45433-7103 Office: 255-7431; gordjr@pr.wpafb.af.mil

Dr. Lalgudi Natarajan, Wright-Patterson AFB, OH 45433 Office: 255-3808, Ext. 3104; Lalgudi.Natarajan@afrl.af.mil

Dr. John Fortman, Dept. of Chemistry, Wright State Univ., Dayton, OH 45435-0002;Office: 775-2188; jfortman@discover.wright.edu

Dr. Steve Trohalaki, Wright-Patterson AFB, OH 45433 Office: 255-6671, Ext. 3147; Steven.Trohalaki@afrl.af.mil

PROFESSIONAL PRACTICES COMMITTEE CHAIR

Dr. Dan Ketcha, Dept. of Chemistry, Wright State Univ., Dayton, OH 45435-0002; Office: 775-3230; dketcha@desire.wright.edu

COMMITTEE CHAIRS

MEMBERSHIP COMMITTEE

Dr. Don Sullenger, 135 Bethel Rd., Centerville, OH 45458; Home: 433-7904; sullengerdb@worldnet.att.net

PUBLIC RELATIONS COMMITTEE

Dr. Steve Trohalaki, Wright-Patterson AFB, OH 45433 Office: 255-6671, Ext. 3147; Steven.Trohalaki@afrl.af.mil

COLLEGE AWARDS COMMITTEE
Dr. Dennis Flentge, Cedarville College, Cedarville, OH
45314; Office:766-7949; flentged@cedarville.edu

HIGH SCHOOL AWARDS COMMITTEE

Mr. Berch Carpenter, 1700 Spillan Road, Yellow Springs, OH 45387; Home: 767-7068; berchc@msn.com

PATTERSON-CRANE AWARD COMMITTEE Ms. Margaret Roach; Home: 836-3029; mroach@erinet.com

BULLETIN EDITOR
Dr. Dave Tomlin, Wright-Patterson AFB, OH 45433
Office: 255-3808, Ext. 3181; David.Tomlin@afrl.af.mil

INDUSTRIAL RELATIONS COMMITTEE

Mr. Scott Purdin, Isotec, Inc., 3858 Benner Rd. Miamisburg, OH 45342; Office: 859-1808 x321; Scott.Purdin@mathesongas.com

EDUCATION COMMITTEE Dr. Paul A. Fleitz, 3030 Fairmont Ave., Dayton, OH 45429; Office: 255-6671, Ext. 3105; Home: 294-4283 Paul.Fleitz@afrl.af.mil

INVESTMENT COMMITTEE

Dr. Harold Rosenberg, 3244 Early Road, Dayton, OH 45415; Office: 277-1973; Home: 274-6947

SECTION CAREER PROGRAM

Dr. Glen Buell, 3548 Eastern Dr., Beavercreek, OH 45432; Home: 426-2937; glen.buell@wright.edu

SECTION HISTORIAN

Mr. Doug Hufnagle, TRW Avionics Systems Division, WPAFB, OH 45433; Office: 255-0946; Doug.Hufnagle@afrl.af.mil

WOMEN CHEMISTS COMMITTEE (Co-Chairs)

Dr. DeLyle Eastwood, Dept. Eng. Physics, AFIT, WPAFB, OH 45433; Office: 255-3636 Ext. 4537; DeLyle Eastwood@afit.af.mil Ms. Jennifer Shaw, Scitex DPI, 3000 Research Blvd, Dayton, OH 45420; Office: 259-3758

YOUNGER CHEMISTS COMMITTEE

Ms. Melissa Gantt, Eurand America, 845 Center Dr., Vandalia, OH 45377; Office: 898-9669

WEBMASTER

Dr. Dave Tomlin, Wright-Patterson AFB, OH 45433 Office: 255-3808, Ext. 3181; David.Tomlin@afrl.af.mil

BULLETIN

September–October, 1999

Next Meeting:

"Nature and Gods: Science and Scientists (Five Myths Which Describe Origins of Science and Problems of Scientists)"

> Wright State University Wednesday, October 13, 1999

DATED MATERIAL -- MEETING ANNOUNCEMENT -- DO NOT DELAY

PERMIT NO. 517 DAYTON, OHIO U. S. POSTAGE PAID NON-PROFIT ORG.

Dayton, Ohio 45402-1267 140 East Monument Avenue Eugene W. Kettering Center Dayton Section AMERICAN CHEMICAL SOCIETY

Meetings...

October

Date: Wednesday, October 13, 1999

Place: 230 Millett

Wright State University

Agenda: 6:45 PM — Social

7:30 PM — Speaker

Speaker: Dr. Rudolph Marcus

Topic: "Nature and Gods: Science and Scientists

(Five Myths Which Describe Origins of Science and Problems of Scientists)"

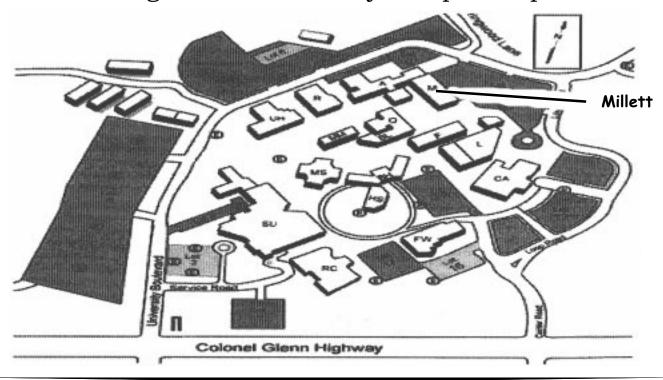
Biography:

Dr. Rudolph J. Marcus writes and consults on cross-cultural technology transfer. At its best, cross-cultural technology transfer can smooth the progress of scientific work across the cultural barriers unwittingly imposed by different countries, disciplines, paradigms, institutional subdivision, genders, races, or religions; it also involves translating scientific problems and accomplishments from one to another of those cultures. During 20 years at the Office of Naval Research (ONR), Dr. Marcus initiated cooperative basic research programs in photochemistry and in computer-controlled experimentation and lived in Japan for two years as scientific director of ONR Far East. In personal research prior to the existence of word processing software, Dr. Marcus evolved and published the heuristic techniques of working with alphanumeric databases that are now used for industrial chemical information systems. He earned a Ph.D. in physical chemistry at the University of Utah. In 10 years of bench work at SRI International, Dr. Marcus published extensively on techniques for observing photochemical reactions occurring within the focal spot of a solar furnace; those techniques are now used for cleanup of polluted groundwater. Dr. Marcus is a contributing editor of CHEMTECH, in which Rudy's Digest appears monthly. It is a series of short chapters from a work in progress tentatively titled Science: What Is Said About Nature. In 1994 and 1995, Dr. Marcus was an ACS Tour Speaker twice each year with four different talks on scientific ethics as well as one on science in Japan.

Abstract:

We scientists struggle every day with the accomplishments and problems that these five stories describe. Three of these stories are ancient: one deals with human flight, another with harnessing the sun, and a third with finding energy. A story from the Middle Ages deals with science and scientist. A modern story deals with science strategies. Some examples show the pertinence of those stories to our work as scientists. Questions for use in interactive discussion or in personal reflection are included for each of those stories. Neither the questions nor the examples are an exhaustive list; this is an invitation for you to bring your own questions and your own examples to the consideration of these five powerful stories

Wright State University Campus Map



Musings From the Chair



Here's hoping that you had a profitable and cool summer. Since the last Bulletin was published, the Section has been busy and I will try to bring you up to date on some matters.

The High School Awards meeting was a success with a good showing of the recipients and John Fortman performing his magic as a speaker. In the same month a successful Patterson Crane Awards banquet and presentation was held in Columbus and attended by a good showing of Dayton Section members. We need to thank Ms. Margaret Roach for a job well done.

In July the Section was notified that the Dayton Section had

been nominated for three Phoenix Awards plus an Outstanding Section Award. We can all take credit for the Outstanding Section Award nomination, while the Phoenix Awards nominations are the result of the extra efforts of Dr. Steve Trohalaki and Dr. Paul Fleitz, as well as others who expended superior effort. The awards will be presented at the ACS meeting in New Orleans, thus it will probably be after the Bulletin is published before we will know. It is an honor just to be nominated.

A long time member of the Section passed away in July and his Estate has made a contribution to the Section in his memory. Even as the Section expresses our deepest sympathy to his family, we on the Board must think that we made a positive difference in his life.

Again let me sign off with the message that if you have any questions, comments or criticisms please let me know. You will find the address, phone number and email address on the masthead.

Dayton Section Members Participate in Ohio State Capitol Day

Three Dayton Section members joined 22 members of other Ohio ACS Sections in Columbus on June 23 for the second State Capitol Day. It was held in conjunction with an OLGA (Office of Legislative and Government Affairs) workshop and at the Central Regional Meeting of the ACS. Ohio ACS members inaugurated OLGA's State Capitol Day series in May of 1988.

The OLGA workshop included an address by Senator Charles Horn, Chair of the Senate Committee on Economic Development and Technology, who is a dedicated supporter of ACS's involvement with Ohio state policymakers. Other guest speakers included staff from the district offices of U.S. representatives John Kasich and Deborah Pryce, who suggested effective ways to communicate with elected officials. ACS staff also discussed ACS's *Public Policy Priorities*, the federal appropriations process, and individual ACS member involvement.

In meetings with state legislators and with Governor Bob Taft's education advisor, George Tombaugh, Ohio ACS members expressed their concern over the recent changes in the state certification requirements for high school chemistry teachers and the minimal science requirements for elementary-school and middle-school teacher certification. Members urged that teachers be required to hold content area qualifications that are specific to chemistry in order to receive high-school chemistry teacher certification.

The Dayton Section is Nominated for Three Phoenix Awards

The National Chemistry Week Task Force has nominated the Dayton Section for Phoenix Awards in the categories of *Most Creative Activity, Best Chemical Demonstration Show, and Best Media Coverage of Section Events.* The awards will be presented during the ACS national meeting in New Orleans at a new event called the ChemLuminary Awards. Our stalwart Councilor, John Fortman, will brave the heat and humidity of New Orleans in August to represent the Dayton Section at the ceremony.

The Patterson College Chemistry Awards

The Patterson College Chemistry Award is presented to outstanding junior chemistry majors attending the colleges and universities within the Dayton Section, American Chemical Society. Each student receives a certificate of recognition and a cash award of \$300. Students are selected on the basis of academic achievement, campus involvement, character, and potential for success.

Amy Nicole Davis Wright State University

Amy Nicole Davis was born in Circleville, Ohio. As a student at Circleville High School, she was involved in cheerleading, annual staff, Key Club, and National Honor Society. She served as junior editor of the yearbook for one year and editor the following year. Upon graduation, she was an Honors graduate and received an Honors Diploma.

After graduating from high school, she moved to Dayton, Ohio where she now attends Wright State University. She is currently a third year honors student in the Chemistry program. During her sophomore year, she worked under the supervision of Dr. Kenneth Turnbull on the preparation of potentially antiviral acyclic pyrazole analogs of pyrazofurin and she presented this project as a poster at the 1998 ACS Convention in Dallas, Texas. As a junior, Amy is now a teaching assistant for the Chemistry Department and has been involved in Slimefest and the Wright State Demonstration team for National Chemistry Week. Additionally, as a member of the latter, she has traveled to various local elementary schools.

Amy's future goal is to become a Chemistry teacher, and after graduating from Wright State in June, 2000 with a degree in Chemistry, she plans to attend graduate school to obtain a degree in high school education.

Jeremy Spitler Wittenberg University

Jeremy Spitler was born on November 3, 1977 to Thomas and Debra Spitler. He grew up in the small town of Brookville, Ohio with his parents and two sisters, Tricia and Kimberly.

Science stood at the bottom of Jeremy's list of favorite subjects during elementary and middle school. It was not until high school that his knack and passion for the sciences emerged. As a freshman Jeremy was named the outstanding math student for the freshman class. He was also awarded the outstanding science student for both his sophomore and junior years.

After graduating from Brookville as valedictorian, Jeremy proceeded to Wittenberg University where he is currently a junior majoring in Chemistry and minoring in Biochemistry/ Molecular Biology. Since at Wittenberg, Jeremy has been inducted as a member of the Phi Beta Kappa National Honorary and is a founding father of the Nu-Zeta chapter of the Lambda Chi Alpha fraternity, where he has held the position of scholarship chair and is presently the treasurer.

Last summer Jeremy performed organometallic synthesis research of phenyl-methyl acetylene reactivity with nickel tetracarbonyl under the guidance of Dr. James Hermanson. This summer, in collaboration with Dr. Mark Foster's research group at Ohio State University, he will be doing, under the direction of Dr. Amil Anderson, molecular dynamic simulation studies of the bacterial peptide deformylase enzyme.

In his free time, Jeremy enjoys participating in extracurriculars stemming from his fraternity and other clubs that he is involved in, such as the Pre-Allied Health Careers Club. He also plays several intramural sports.

Maranatha Ruberg Cedarville College

Maranatha Ruberg is a junior at Cedarville College with a chemistry major and biology minor. She grew up in a little town in east central Indiana. As any child, she was curious about the world around her and was especially interested in the world of medicine. Her dad is a pastor, and he would come home from his hospital visits with many stories. It was from him that she learned beginning things about the health professions.

Maranatha graduated from Eastbrook High School in 1996 where she had been involved in NJHS, French Club, and sports-especially volleyball. Yes, she still liked to hear hospital stories, but had developed another interest-math. She especially liked Algebra, and had a very strong math teacher. During her junior year she got her first taste of real chemistry. The teacher really had an impact in her life by teaching her that hard work pays and that science can be fun and interesting. In fact, she not only took the one required year of chemistry but went on to take the AP chemistry test her senior vear.

Maranatha entered Cedarville as a math major, but after one quarter decided to pursue a more applied science degree. She has learned about the world God created for her and to love Him more for it. She is a Chemistry major and a Biology minor and plans to graduate in June, 2000.

Maranatha has served as a lab assistant for two years, setting up labs and grading reports. She is also a member of O2B, a pre-health professions organization on campus. To stop here would be dishonest for her goals include more than simply working in a lab. People are second in importance only to God in her life. At Cedarville, she was involved with Getting Started, Cedarmania, Home

coming, Junior Jam, and several Christian service ministries. After graduation, she plans to earn degree in pharmaceutical science at Purdue University, and then to use this knowledge to help people.

Wesley N. Sivak University of Dayton

Wesley N. Sivak, son of Gary and Susan Sivak, was born in Dover, New Jersey during the summer of 1978. He spent the first two years of his life in New Jersey before moving to Dayton, Ohio. Growing up, Wesley attended Dayton Christian Schools and graduated in 1996 among the top ten percent in his class. It was at Dayton Christian that Wesley developed his interest in the natural sciences through Mr. Tom Minor. It was Mr. Minor*s unique teaching style and enthusiasm for chemistry and physics that led Wesley to pursue his degree in chemistry at the University of Dayton.

For the past year, Wesley has been working in the Air Force Research Laboratory at Wright-Patterson Air Force Base as a SOCHE student contractor. Under the guidance of Dr. Ruth Pachter, he has completed a project investigating the *Electronic Structure and Properties of Strained Polymers* using a theoretical, quantum- mechanical approach. Wesley is currently beginning a second research project with Dr. Pachter in which he will model biologically active materials and investigate aspects of protein folding. He will also be working this summer in the laboratory of Dr. Sanford Singer, professor of biochemistry at UD, studying the effects of hypertension and various hypertensive drugs on liver and intestinal fatty-acid binding protein levels.

After graduation, Wesley plans to attend medical school while concurrently pursuing a Ph.D. in the medical sciences.

National Chemistry Week Needs Volunteers

The Dayton Section's NCW events typically include Slimefest at the Mall at Fairfield Commons, a Chem Demo Event at Wright State University, and an event at the Museum of Discovery. If you want to volunteer for these events or are interested in creating another event, contact Trohalaki Steve 937.255.6671 x3147 steven.trohalaki@afrl.af.mil. This year, NCW is November 7-13.



Wanted: Section Archivist

Is there a member of the Dayton Section interested in serving as Chair of a committee now forming to set up Section archives? This will be done in connection with the Wright State University archivist, Dawn Dewey, who is prepared to establish and maintain the Section archives at WSU. If interested, pleasem contact Frank Lonadier, Section Chair, 937.512.2308 at flonadie@sinclair,edu, as soon as possible.



"Glory is fleeting, but obscurity is forever. "

Napoleon Bonaparte

"People demand freedom of speech to make up for the freedom of thought which they avoid."

- Kierkegaard

"I do not feel obliged to believe that the same God who has endowed us with sense, reason, and intellect has intended us to forgo their use."

- Galileo Galilei

"The object of war is not to die for your country but to make the other bastard die for his."

- General George Patton

"Copy from one, it's plagiarism; copy from two, it's research."

- Wilson Mizner

"Opportunities multiply as they are seized. "

- Sun Tzu

"He has all the virtues I dislike and none of the vices I admire."

- Sir Winston Churchill

"A great many people think they are thinking when they are merely rearranging their prejudices."

- William James

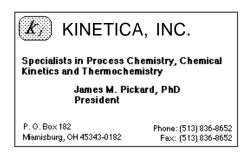
"It could probably be shown by facts and figures that there is no distinctly American criminal class exceptCongress."

- Mark Twain





Member-Services Available





Need Help in Your Career?

The Dayton Section offers assistance in career planning and searching for new positions. Contact Glen Buell (937) 426-2937.

Upcoming Meetings

Board Meetings:

SEP 13th, 7:00 PM OCT 4th, 7:00 PM NOV 8th, 7:00 PM DEC 13th, 7:00 PM

All Board meetings are held at the Kettering Center downtown.

Section Meetings:

NOV 16th, Professional Practices meeting at the Engineer's Club downtown