After more than five years of planning, and with help from many research students, staff and faculty members, the 32nd American Chemical Society Great Lakes Regional Meeting was held at the Fargo Holiday Inn, June 4-6. Greg McCarthy was the Meeting Chair, and Harmon Abrahamson, Chemistry Chair at UND, organized the Program. The number of participants (380) exceeded expectations, and 245 papers were presented. The ACS staff who helped with the meeting said that this was one of the most professional and successful regional meetings they had seen.

The meeting was held under the auspices of the Red River Valley Section of the ACS, to which NDSU and UND belong. Faculty from Moorhead State and Concordia also helped with program organizing and logistics. Thanks to the high registration numbers and excellent fund-raising efforts, the GLRM met all of its expenses, and made a small profit for the ACS Section and Region.

The major symposium at the meeting was organized by Mukund Sibi and Greg Cook. Asymmetric Synthesis for the 21st Century drew audiences of more than 100 for most of its sessions.

Other department faculty organizing symposia and sessions were Philip Boudjouk, Sanku Mallik, Kenton Rodgers, and Dennis Tallman. Several faculty from UND, and Gordon Bierwagen from P&C, also developed symposia. Roy Garvey, Greg Oswald, Denley Jacobson, Joe Eaton, and Dean Grier organized the program book, exhibits, meals and breaks, AV and student help, and poster board construction, respectively. And former Dean Allan Fischer, who was Meeting Chair the last year, was a major reason the meeting was a success.

Many graduate students attended an ACS Workshop on chemistry careers.

Graduate student Jason Hallman (foreground, left) was one of 60 presenters at the Sunday evening poster session.

ACS Great Lakes Regional Meeting a Great Success

Nobel Laureate Mario Molina Presented 16th Broberg Lecture

The largest audience ever for a Joel Broberg Lecture (nearly 300) listened to Mario Molina’s presentation on The Antarctic Ozone Hole at the 16th Annual Lectureship on October 2, 2000.

Professor Molina is Institute Professor at the Massachusetts Institute of Technology. He has been involved in developing our scientific understanding of the chemistry of the stratospheric ozone layer and its susceptibility to human-made perturbations.

He was a co-author, with F.S. Rowland, of the 1974 publication in the British magazine Nature, of their research on the threat to the ozone layer from chlorofluorocarbon (CFC) gases that were being used as propellants in spray cans, as refrigerants, as solvents, etc. More recently,
This summer, the Department of Chemistry hosted ten undergraduate students in a Research Experience for Undergraduates program funded by the National Science Foundation.

Directed by Profs. Gregory Cook and Mukund Sibi, the students were paired with Chemistry faculty mentors in the department and immersed in a 10-week experience in a research lab and exposed to a broad scope of ongoing chemical technology in the department.

The students benefited from an organized program of professional development activities including seminars, workshops, and individual research projects. A partnership with Prof. Greg Gillispie's company, Dakota Technologies, Inc., provided a unique opportunity for students to participate in an industrial research setting as well.

A number of social activities afforded ample opportunity for the participants to develop lasting friendships, and by the end of the program, many students were sad to leave. The program culminated in a symposium in which the students presented the results of their research efforts. Professor Gunda Georg, from the Department of Medicinal Chemistry at the University of Kansas, and Professor Doreen Leopold, from the Department of Chemistry at the University of Minnesota, gave keynote lectures in the symposium. The summer 2000 REU program seems to have been a complete success and complemented the usual array of undergraduate researchers in the Chemistry Department.

Plans are already in the works for next summer’s REU program. It is anticipated that 16 positions for the undergraduate research experience will be available in 2001. The deadline for applications will be March 1, 2001. Details will be posted on the department’s web page.

REU Students were:
Joy Lichtsinn, U. MN, Morris
Heidi Doyen, U. MN, Morris
Melanie Funfar, Moorhead, MN
Nichole Korpi, Moorhead, MN
Jennifer Kuschel, Knox College
Tim Lorbiecke, Minot State Univ.
Nichole Miller, Augustana College
Theresa Rosendahl, Williston State
Vester Wilson, University of Mary
Dave Lin, Creighton University

On March 14th NDSU hosted the annual Science Fair for schools. Pictured: Dr. Joseph Eaton. Others who assisted were Drs. Michael Page, Roy Garvey and Gary Stolzenberg from the Chemistry Department.
Chapman names Boudjouk vice president

The vice presidency for research, creative activities and technology transfer is a new position at NDSU. Boudjouk will report directly to the president and will be responsible for advancing research and creative activities and fostering entrepreneurial projects. He also will provide leadership for enhancing NDSU's national status as a research and graduate institution. An immediate priority will be to assist in establishing NDSU's new research and technology park. Ground breaking for the park, to be located on the north end of campus, will be this spring.

"This position is a major commitment for NDSU, just as the research and technology park is breaking new ground for the region," said Boudjouk. "Research and creative activity have always been central parts of the university's mission. Through the creation of this position, NDSU is placing even greater emphasis on making the products of scholarly activity available to the region's business community. I can't think of a time in state history when technology transfer from the university to the private sector has been more critical."

Boudjouk has a bachelor's degree in chemistry from St. John's University, Jamaica, N.Y., and a doctorate in Inorganic Chemistry from the University of Wisconsin-Madison. He has received numerous awards for teaching and research including being named the Chamber of Commerce Distinguished Professor (1985), University Faculty Lecturer (1985), he received the first annual Research Award from the College of Science and Mathematics (1992) and in 1998 he was named the Jordan A. Engberg Scholar, the first endowed professorship at NDSU.

"I want to thank search committee chair Dr. Charles Peterson and all members of the committee for their excellent work," said Chapman. "There are many challenges facing North Dakota now and NDSU is in a good position to help meet those challenges through the power of faculty scholarship. These faculty members are in place now, the technology park will provide the infrastructure we need to serve North Dakota's businesses and Phil Boudjouk will provide the leadership to make exciting things happen."

Boudjouk will begin his duties immediately. In the short-term, his offices will be in Old Main but will be relocated to the research park when its administrative building is completed.

News from the Boudjouk Lab

Dr. Tom Ready has been working as a post doc in the Boudjouk Lab during the last year.

He grew up in the arid vistas of Midland, Texas, which at the time, was a regional center for the oil industry in the U.S.

Tom received his B.S. and M.S. in Chemistry at the U.Texas where under the direction of Keith Pannell, he studied the complexation of molybdenum complexes of selendadiazoles. He went on to receive his Ph.D. in Inorganic Chemistry under the direction of Marvin Rausch at the U. Massachusetts studying homogeneous "single site" (Ziegler-Natta) catalysis of olefins.

Seeking to broaden his chemistry knowledge further, he joined the Boudjouk group here where his work centers on the application of functionalized polysioxanes towards coatings and cie-materials. The coatings project has led to a fruitful collaboration with Dennis Tallman's group and Gordon Bierwagen's group.

When his tenure at NDSU is completed, Mr. Ready hopes to continue polymer research at another venue. He is open to both academic and industrial opportunities which may be in his future.
Outstanding NDSU Alumni Honored at Homecoming

Alumni Achievement Award

Mary Ann Tucker received one of four achievement awards at the 2000 Alumni Awards dinner on October 13, 2000. Mary Ann received her bachelor’s degree in chemistry at NDSU. She also earned a master’s degree in chemistry from Iowa State University and a master’s degree in business administration and juris doctor degrees from Indiana University. Tucker retired in 1998 from BFGoodrich and Co., where she was vice president and associate general counsel. She was responsible for all intellectual property matters, including obtaining, maintaining and enforcing patent, trademark, copyright and trade secret protection for the company’s technologies. She recently started Tucker Law Offices, an intellectual property practice. Prior to her employment at BFGoodrich, Tucker worked for Bausch & Lomb as the staff vice president and assistant general counsel, and she worked at Eli Lilly and Co. for 22 years.

Tucker is admitted to practice by the state bars of Ohio, Indiana, New York, the U.S. Supreme Court and several district and appellate courts. She also is registered to practice before the U.S. Patent and Trademark Office. Tucker’s professional associations have included the Commerce Department’s International Advisory Committee on Intellectual Property and Trade, Cleveland Intellectual Property Association, American Intellectual Property Association and Association of Corporate Patent Counsel. She has served as president of the National Inventors Hall of Fame, an organization which recognizes the world’s greatest inventors. She also has served on the boards of the Akron Symphony Orchestra and the Akron Salvation Army.

She and her husband, Robert, split time between their two homes in Indiana and Florida.

Alumni had several roles at the P&C Industrial Advisory Board meeting in September

Clayton George, (Ph.D. 1986) represented 3M on the IAB.
Ligia Martin, (B.S. 1995) represented Bayer Corporation on the IAB.
Jamie Welton (B.S. 1999) presented a poster on her M.S. research in the P&C Department.
Phil Boudjouk and Gordon Bierwagen (Chair, P&C) at poster presented by Lisa Ellingson (B.S. 1999) and senior chemistry major Stacy Nottestad (Tallman group).

IN MEMORIAM

Donald E. Fulp
1944-2000

Don, who taught chemistry at North Dakota State College of Science for many years, was a chemistry alumnus (B.S. 1996; graduate studies, 1966-1968).

He was instrumental in founding and fostering the North Dakota College Chemistry Faculty Consortium.
Waldron Award honors Dennis Tallman

Dr. Dennis Tallman was among three NDSU faculty receiving prestigious awards at the President's Convocation 3 p.m. Thursday, April 13, at the Alumni Center.

Dennis Tallman, professor of chemistry, is honored with the Fred Waldron Award for Excellence in Research. All the awards are sponsored by the NDSU Development Foundation.

“This year’s process was difficult because of the number of outstanding candidates. The committee struggled to select just one in each of these categories because we had so many good nominees,” said Craig Schnell, vice president for academic affairs.

“Dennis Tallman is just the sort of faculty member for which the Waldron Award was designed,” wrote Philip Boudjouk, professor of chemistry, and Gregory McCarthy, professor and chair of chemistry, in a letter of nomination. “Professor Tallman has been a leader in the field of analytical electrochemistry for over two decades. His reputation has been secured by his meticulous and thorough experimental work, combined with a solid grounding in theory.”

The letter said Tallman has received nearly $1 million in competitive principal investigator grants and has been a key partner with Gordon Bierwagen, professor and chair of polymers and coatings, in more than $4.5 million in grants for research on corrosion of metals and protective coatings.

Tallman earned his bachelor’s degree and doctorate at The Ohio State University, Columbus. He is a member of the American Chemical Society, The Electrochemical Society, Society for Electroanalytical Chemistry, National Association of Corrosion Engineers, Phi Lambda Upsilon, Sigma Xi and Phi Kappa Phi. He received the NDSU College of Science and Mathematics’ Dean’s Award for Excellence in Research in 1993.

He has given more than 80 presentations at national and international meetings and his vita lists 80 publications.

from: It’s Happening at State, March 22, 2000

News from the Tallman Lab... by Vicki Johnston Gelling

This has been an eventful year filled with celebration in Dunbar 151. Stacy (Rohlik) Nottestad married her sweetheart, T.J. Nottestad, at Bethel Evangelical Free Church August 5th. T.J. is a NDSU senior majoring in Business. We wish Stacy and T.J. a life filled with happiness and prosperity! Also, the NDSU softball team captured the National Championship. Michelle Wiest, right field, has been a member of our group since her first semester at NDSU. Congrats, Michelle!

This summer we added a new member to our laboratory, Thane Underdahl. Thane hails from Jamestown, North Dakota where he graduated from Jamestown High School in 1995. He continued his education at the University of Minnesota-Morris and obtained a Bachelor of Arts in Chemistry in 1999. Thane enjoys reading works of literature by Martin Amis, biking, and running. We would like to extend a warm welcome to Thane!

Dr. Dennis Tallman has been as busy as ever. His recent travels have brought him to Australia, Athens, and Washington D.C. The trip to Australia at the beginning of the year was purely research orientated (or so he tells us!!). He did bring back large quantities and varieties of new and unique conducting polymers—enough to keep our lab busy for months!! Dennis was in Athens for the 26th International Conference in Organic Coatings where he presented a paper titled “Electroactive Conducting Polymers for Corrosion Control: Studies of Poly(3-Octyl Pyrrole) and Poly(3-octadecyl pyrrole) on Aluminum 2024-T3 Alloy.” Last week he accompanied Jie He and myself to Washington D.C. for the American Chemical Society (ACS) national meeting. Dennis was an invited speaker and

cont’d page 10
Our Scholarship Recipients Say “Thanks”

Our student-scholars wish to offer many thanks to those who have contributed to the Chemistry Department scholarship and award endowments. Scholarship recipients received their awards at the College of Science and Mathematics “Day to Celebrate Scholarship” rally on April 29th. This year’s scholars were:

American Institute of Chemists Foundation Outstanding Senior Award. An appropriate recognition and a one-year Student Associate membership is presented in recognition of achievement by an outstanding senior.

Scott L. Peterson (Bismarck, ND)

Donald Bolin Memorial Scholarship. Scholarships awarded to outstanding student majors in chemistry.

Patrick J. Griffin (Fargo, ND) Elizabeth A. Hillerson (Yankton, SD) Linda M. Mizeur (Williston, ND) Rebecca R. Wertish (Faribault, MN) Jonathan M. Zurbey (Fargo, ND)

Chemistry Department Honor Scholarship. Scholarships presented to chemistry majors on the basis of scholastic achievement.

Angela R. Eppler (Fargo, ND) Todd M. Roper (Shakopee, MN) Tad D. Stewart (Williston, ND)

Lawrence M. Debing Memorial Scholarship. An endowment established to provide general assistance as well as scholarship funding for the Department of Chemistry.

Mei Liu (Beijing, China)

American Institute of Chemists Foundation Outstanding Senior Award.

Scott L. Peterson (Bismarck, ND)

Donald Bolin Memorial Scholarship.

Patrick J. Griffin (Fargo, ND) Elizabeth A. Hillerson (Yankton, SD) Linda M. Mizeur (Williston, ND) Rebecca R. Wertish (Faribault, MN) Jonathan M. Zurbey (Fargo, ND)

Chemistry Department Honor Scholarship.

Angela R. Eppler (Fargo, ND) Todd M. Roper (Shakopee, MN) Tad D. Stewart (Williston, ND)

Lawrence M. Debing Memorial Scholarship.

Mei Liu (Beijing, China)

Ralph E. Dunbar Memorial Scholarship. Scholarships awarded to chemistry majors on the basis of scholastic achievement and character as exemplified by Ralph E. Dunbar, Dean of the College of Chemistry and Physics, 1945-1960.


Merck Outstanding Student in Organic Chemistry Award. A handbook, The Merck Index is presented to an outstanding upperclassman majoring in chemistry.

Marissa A. Wisdom (Washburn, ND)

Roy Milde Fellowship Award. A scholarship presented to an outstanding graduate student who has been enrolled in the chemistry program for more than one year. Preference is given to graduates of North Dakota high schools and colleges.

Victoria Gelling (Forest River, ND)

James & May Sugihara Scholarship. A scholarship presented to outstanding students majoring in chemistry.

Zoha AL-Badri (Winnipeg, Canada)

Sugihara Scholarship cont’d

Christina M. Bulisco (Grand Forks, ND) Krista M. Fisher (Dickinson, ND) Stephanie L. Lerach (Oakdale, MN) Renee B. Peterson (Grandin, ND)

Dr. Robert & Mary Ann Tucker Presidential Research Fellowship. An endowment established to assist graduate students in chemistry. It provides for a student’s salary stipend, direct research expenses and research-related travel.

Zoha AL-Badri (Winnipeg, Canada)

Undergraduate Research Fellowships in Chemistry. These $1,200 fellowships are awarded to outstanding freshmen majoring in chemistry and who are interested in a career in research.

Jamie C. Baxter (Minot, ND) Marcus L. Fries (Mott, ND) Sandra L. Hagen (Watertown, SD) Scott D. Rothstein (Sauk Rapids, MN) Daniel J. Sattler (Minot, ND)

Richard Glenn Wedel Memorial Scholarship. A scholarship presented to an outstanding student majoring in chemistry.

Stacy M. Rohlik (Vesta, MN) Marissa A. Wisdom (Washburn, ND)
The Rasmussen group is continuing to grow. In May, Patrick Griffin joined the group after previously doing work in the Boudjouk group. Melanie Funfar of Minnesota State University-Moorhead joined us this summer under the Research Experiences for Undergraduates (REU) program. Tessa Calhoun, a senior at South High School in Fargo, did research under the Governor's School program. Melanie and Tessa have both decided to stay on and continue doing research as full group members through the 2000-01 academic year.

We have also begun having success at obtaining funding for our projects. In addition to our NSF EPSCoR IIIP grant awarded last spring, we have recently been awarded a competitive Type G starter grant from the Petroleum Research Fund (PRF).

Overall, the group had a very active summer. Scott Rothstein, Daniel Sattler, Kari Mitchell, and Patrick Griffin presented posters at the Great Lakes Regional Meeting in June. Don Kenning gave an oral presentation at the meeting.

The group also traveled to Grand Forks in late July to attend the EPSCoR poster session where Kari and Melanie presented posters.

Chemistry Students Receive 2000 Goldwater Scholarships

Chemistry students Patrick Griffin and Renee Peterson were awarded Goldwater Scholarships. This highly competitive national scholarship (named after Barry Goldwater) provides the recipients with $7,500 per year toward educational expenses. Pat and Renee, now juniors, were the only two recipients in North Dakota this year. Pat works in Dr. Rasmussen's group, and Renee in Dr. McCarthy's group. Seven Chemistry majors have received Goldwater Scholarships in the last 8 years.

Scott Peterson off to Harvard

After five years at NDSU, Scott Peterson graduated with honors and a triple major (Chemistry, Latin, and German) in May. In April, he was selected for the American Institute of Chemists Foundation Outstanding Senior Award. He was an Undergraduate Research Fellow, McNair Scholar and Goldwater Scholar in Dr. Cook's group. Scott is now studying at Harvard.

Vice President Boudjouk describes the capabilities of new NMR facility at ND Legislators vist.

If you are in town, please stop by Ladd 104 and visit. Also, please keep us updated on address changes.
Broberg Lecture features MIT Professor

Professors F. S. Rowland and P. Crutzen for their work in atmospheric chemistry.

The lectures represent the sixteenth year of the Joel W. Broberg Lecture-ship in Chemistry.

This distinguished lecture series, established in honor of long-time NDSU professor Dr. Joel Broberg, was made possible by contributions from alumni, family, friends, faculty and businesses.

Its purpose is really twofold. It's an opportunity to honor a distinguished colleague and teacher, and a way to bring in eminent scientists to better instill in students and faculty the excitement of science in general and chemistry in particular during this age of rapidly exploding technology.

Broberg Lectures:

Dr. Molina was born in Mexico City, Mexico. He holds a Chemical Engineer degree (1965) from the Universidad Nacional Autonoma de Mexico, a postgraduate degree (1967) from the University of research positions at the Universidad Nacional Autonoma de Mexico; the University of California, Irvine and the Jet Propulsion Laboratory at the California Institute of Technology.

Currently he serves on the President’s Committee of Advisors in Science and Technology, the Secretary of Energy Advisory Board, National Research Council Board on Environmental Studies and Toxicology, and on the boards of US-Mexico Foundation of Science and other non-profit environmental organizations. He has received numerous awards for his scientific work including the 1995 Nobel Prize in Chemistry, which he shared with Professors F. S. Rowland and P. Crutzen for their work in atmospheric chemistry.

News from the Sibi Chemistry Lab

This fall we welcome two new post-docs, Zhengang Zong from China and Lakshmanan Venkataraman from India, and a new grad student, Kalyani also from India. Chen and Kyoshin have job offers: Chen in NY and Kyoshin (i.e., if he doesn’t beat someone up!) in Japan. Kyoshin had a baby boy, Eisuke (his middle name is Fargo). Shankar went to India in May and got married. His wife, Latha, joined him a month later. Justin and Pingrong received their master’s degrees and started their new jobs at Bristol Meyers Squibb, and Boehringer-Ingelheim respectively. All the group members presented their work at the Great Lakes regional ACS meeting. Tara’s paper in JACS is in press. Shankar’s review should be coming out in Tetrahedron. Nicole Korpi from MSU worked in our lab as part of the REU program and worked on radical addition to Imines. Muk went to Fribourg and taught a course on asymmetric synthesis and also to Japan to present our work and to enjoy good Sushi.

Dr. Sibi was awarded a patent in June which involves a new method of preparing beta-amino acids. The method will increase the understanding of basic biology and has potential uses in the pharmaceutical industry. In particular, beta-amino acid is a component of a drug called “Taxol,” which is being used against cancer.
Campiglia, Swenson, and Gillispie Obtain NSF Funding for Technology Project...by Greg Gillispie

A group of NDSU faculty members has received a $498,000 two-year grant from the National Science Foundation. The grant recipients are Andres Campiglia and Greg Gillispie from the chemistry department and Orven Swenson from the physics department. The overarching goal of the technology project, which will be headquartered in Ladd Hall Room 205, is enhancing and expanding technology partnerships and collaborative research and development throughout North Dakota. Such partnerships could be between different departments and/or different colleges on campus or between NDSU academic units and businesses in the Fargo-Moorhead area and throughout the state. Additional project goals relate to raising the number and visibility of technology-based businesses in the state and increasing the number of graduate students in technology-related areas.

Campiglia, Swenson, and Gillispie are also in the process of formally establishing a Center for Applications of Lasers and Spectroscopy. The Center will provide the instrumentation resources and technical support to allow faculty to try out experiments not currently possible in their own laboratories. A survey of researchers on the NDSU campus who use (or would like to use) lasers, spectroscopy, and related optical instrumentation in their research is underway. The PIs also plan to develop short courses and curricular materials related to lasers and optics. Gillispie, who is also president of Dakota Technologies, is currently serving as director of the Center, but a permanent director will be recruited and hired next year.

“Certainly the hope is to see additional activity and encourage more students to get involved with high technology business,” Gillispie said, noting such partnership may provide increased local employment opportunities for students and graduates. “There’s a lot of talent and brain power on campus. We’d like to give that talent a reason to stay at home. And if we increase interactions between businesses and the university, good things will happen for both. You could imagine technology partnerships between faculty in different colleges, between companies and the university, or between businesses,” Gillispie said. “With noteworthy success stories and greater visibility for the research that’s already being done, that should stimulate people to think about forming a company.”

Philip Boudjouk, vice president for research, creative activities and technology transfer and professor of chemistry, sees great potential for the project. He said an important goal of the North Dakota EPSCoR program is to build up the research infrastructure to the point where it has an impact on economic development. “This is the type of program that will have that impact because people will be trained at the next level to better serve the needs of local and regional industries,” Boudjouk said. “That’s a big thing, to generate students where our companies don’t have to do “long distance shopping” to get what they need - they can get it right here from NDSU.”

McCarthy Receives Award at X-ray Conference

Gregory McCarthy, distinguished professor and chair of chemistry, received the first McMurdie Award at the 49th annual Denver X-Ray Conference July 30-Aug. 4 at the Denver Tech Center. The honor recognizes McCarthy’s “distinguished work which improves the Powder Diffraction File in its purpose of identifying and characterizing inorganic solids.”

McCarthy said the “Powder Diffraction File” is the database used worldwide for identification of solids by x-ray diffraction. “Our entries in this data-base are mostly common compounds, which gives NDSU a lot of visibility in this field,” he said. “My students at NDSU worked under a 15-year grant to measure more than 600 reference data sets for minerals, ceramics, metals and organic chemicals. This award also recognizes their excellent work.”

During the conference, McCarthy helped run the first council meeting of the International X-Ray Analysis Society. He serves as treasurer of the professional society.

McCarthy; Dean Grier, lecturer/research associate and manager of the Materials Characterization Laboratory; NDSU students Stephanie Lerach, Renee Peterson and Eric Jarabek; and Governor’s School student Jordan Sand also presented a paper titled “Effects of Structure Choice on Rietveld QXRD Results for Solid Solutions.”
The McCarthy group is presently wrapping up a four-year coal combustion solids project funded by the Department of Energy (DOE). Results from the study should help guide ash producers and marketers in decisions regarding appropriate and responsible increased utilization of various coal combustion and emission control byproducts. Three smaller projects involving utilization and environmental considerations for coal ashes will begin later this year, in collaboration with DOE’s National Energy Technology Labs and coal-burning electric utilities.

The group has presented research results at several venues this year. In June, Dr. McCarthy presented an invited lecture at a symposium for applied mineralogy in Göttingen, Germany. In August, the group journeyed again to the Denver X-ray Conference. Steph Lerach, Renee Peterson, and Eric Jarabek, our undergraduate research team, presented a paper on solid solution effects on quantitative XRD results. Also at the Denver Conference, Dr. McCarthy was awarded the 2000 Howard McMurdie Award to recognize his “distinguished work, which improved the Powder Diffraction File™ in its purpose of identifying and characterizing inorganic solids.”

Missing from the conference this year was Marissa Wisdom, who graduated in May, and is currently enjoying a job at the Neuropsychiatric Research Institute. She will be entering medical school next year, and we wish her the best of luck. Also graduating this year was Dean Grier, with an M.S. in Soil Science. Dean was appointed faculty lecturer and research associate, and will continue in his research and maintenance capacities as manager of the Materials Characterization Laboratory.

Dr. Tallman’s Laboratory

As stated above, Jie (Jim) He just returned from the ACS national meeting. He presented a poster titled “Scanning Vibrating Electrode Studies of Chromated Epoxy Coatings on Steel and Aluminum Alloys.” When in the lab, Jim can be found at the Scanning Vibrating Electrode Technique instrument unlocking the secrets of corrosion.

Dr. Xiaofan Yang is still capturing amazing images of various samples with the Atomic Force Microscope. Her son, Ray, just started sixth grade and keeps her busy in her spare time.

As for me, the trip to Washington D.C. was eventful, fun, and a great learning experience. I presented a poster titled “Study of Poly(3-Octyl Pyrrole) for the Corrosion Control of Aluminum 2024-T3.” Spending six days in a “big city” sure makes you appreciate what we have here in Fargo.

MCL Manager Dean Grier is congratulated by his dad, Biology Professor James Grier, after successfully defending his M.S. thesis.
time NDSU ran the GLRM (1970), assisted with many meeting details.

Sixty of our undergraduate and graduate student researchers and post doctoral fellows helped with the logistics of the Meeting, and most presented or co-authored papers. Under the leadership of Scott Peterson, the ACS Student Affiliate Chem Club sponsored a poster session, panel discussion, and picnic.

Two luncheons were held. At the Women Chemist’s Luncheon a panel of four women who had graduated from UND or NDSU provided insights from their highly successful careers. The Musicchemistry Group from Creighton University presented a program of chemistry demonstrations to music after the Tuesday luncheon.

Much was communicated and learned, and a good time was had by all.
Chemistry Students Presented Papers at Chemical Conference

NDSU undergraduate students presented scientific papers at the 219th American Chemical Society national meeting in San Francisco, March 26-31. The group, which is the largest scientific society in the world, attracted about 18,000 participants to the conference and more than 8,800 paper presentations.

Marissa A. Wisdom, a senior, and Stephanie Lerach, a junior presented “Quantitative XRD analysis of coal combustion by-products.” The paper is co-authored by Dean Grier, research associate in chemistry; Renee Peterson, a sophomore; and Gregory McCarthy, professor and chair of chemistry. Lerach also presented “Reducing preferred orientation effects in quantitative X-ray diffraction analysis of coal combustion by-products.” Wisdom, Lerach, and Peterson are Undergraduate Research Fellows in the chemistry department.

Other members of NDSU’s ACS Student Affiliate Chemistry Club presented two papers. Krista Fisher, a junior, and Angela Eppler, a senior, presented “Bringing chemistry to young minds.” They described the club’s demonstrations and experiments held at area Fargo elementary schools.

The American Chemical Society is chartered by Congress, with a membership of nearly 159,000 chemists and chemical engineers around the world. The group is considered a world leader in fostering chemical education and research.

Chem-Club Secretary, Stephanie Lerach says...

This summer the Chemistry Club took part in the 32nd Great Lakes Regional Meeting. The Club, with the aid of a grant from ACS, co-sponsored a poster session and the Musicchemistry demonstration. (See story on GLRM) To make the meeting more informational for undergraduates, the chemistry club set up a special session on the role of research in undergraduate education. Four panelists were brought in from funding agencies and academia. The panelists took questions from the undergraduates and discussed the importance of undergraduate research.

A barbeque was also held during the meeting for all undergraduates attending.

New officers have taken over the leadership of the Chemistry Club in the fall. The new officers are Aaron Schwartz and Becky Wertish as Co-Presidents, Stephanie Lerach as Secretary, and Krista Fisher as Treasurer.

The Chemistry Club is once again starting off the year with fundraising activities. We have been selling exam study guides and goggles to the Chemistry 121L and 122L classes during the first few weeks of classes. Plans are again being made for members of the Chemistry Club to attend the San Diego National ACS meeting in March 2001. We are looking forward to another fun and exciting year.