

Newsletter

MSU Physics and Astronomy Department

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Raymond L. Brock Chair, Department of Physics and Astronomy
Wolfgang W. Bauer . . . Associate Chair for Undergraduate Instruction
Phillip M. Duxbury Associate Chair for Graduate Instruction
Bernard G. Pope Associate Chair for Operations
Eugene J. Kales Newsletter Production Editor

In and Around the Department

At the end of every Spring Semester the Physics & Astronomy Department recognizes the achievements of faculty, students, and staff personnel at a reception. Annual awards are presented, some of which go back to 1968. Some awards are associated with names. The oldest of these awards was established to honor Thomas H. Osgood who was an important presence in the University, the College and the Department for decades. He served as Department Chair, Dean of the College of Arts and Sciences (before the breakup into three Colleges) and Dean of the Graduate School, some of these concurrently during the early '50s. He was also served as Scientific Attaché in the US Embassy in London. Upon his retirement from his administrative positions he returned to the Physics & Astronomy Department and spent several years as a lecturer in introductory physics courses which he taught with dignity and high standards mixed with humanity. Very few of us can claim to have received the ovation that Professor Osgood was honored with at the end of each term's lectures. When he retired from the university in the late '60s the Thomas H. Osgood Undergraduate Award was established by the department in his honor and each year since 1968 the top graduating senior (or seniors in some years) for that year receives a certificate, a small honorarium, and his/her name is inscribed on a plaque which resides in the first floor corridor in the PA Building. Tom Osgood attended our weekly colloquia until he was into his 90s and many of us enjoyed conversations with him at the pre colloquium coffee sessions. When he died on October 15, 1992, at the age of 92 his heirs established the Thomas H. Osgood Memorial Award for Faculty Excellence in Teaching. Two awards are presented each year to recognize excellence in undergraduate teaching - one to a tenured faculty member and the other to a yet untenured person. The first awards were presented to Jerry Cowen and Michael Thoennesen in 1995.

The Sherwood K. Haynes Award for Outstanding Graduate Student was established in recognition of Sherwood Haynes's strong impact on the growth of our graduate program during his ten-year tenure as Department Chair starting in 1958. Because of his unrelenting recruiting efforts the number of enrolled graduate stu-

dents more than quadrupled during the period when he was in charge. Consequently, when he retired as chair this award was established to commemorate his successful efforts. Since 1970 thirty-eight students completing PhDs have been recipients of the annual SKH award. Those selected were recognized for their academic performance, success in their research and timely completion of the dissertation and promise for a successful career as physicists. Most of the awardees have indeed gone away from MSU and lived up to the promise which led to the award.

The Bruce VerWest Award was established in the early 80s with funds donated by Bruce J. VerWest (BS '71) and has been awarded since 1983 to the outstanding student majoring in Physics or Astronomy who was entering his/her senior year. The basis of the award, as designated by VerWest, was to be strictly on performance in academic work and, in most cases, research participation during the three years leading to the senior year, irrespective of financial need. Some years we have had multiple winners of this award (in 1988, for example, Tim Wagenmaker, Robert Pelak, and Richard Radtke all had GPAs greater than 3.9 and had participated in research before they entered the senior year). After leaving MSU Bruce VerWest went on to receive a PhD at the State University of New York at Stony Brook. He later was on the faculty at Texas A&M, researched at Los Alamos and is now at Atlantic Richfield.

The Physics-Astronomy **Award Winners for 1999-2000** are: Bruce Ver West Award for Outstanding Junior to **Aleksandar Donev**; Thomas H. Osgood Undergraduate Award for Outstanding Senior to be shared by **Adam Smith and Jeroen Thompson**; Sherwood K. Haynes Graduate Award for Outstanding Graduate Student to **Dan Magestro**; Outstanding Graduate Teaching Assistant to be shared by **Chris Freigang and Karen Kinemuchi**; Thomas Kaplan Award for Best CMP Brown-Bag Talk to **Frank Kuehnel**; Outstanding Graduate Classroom Teacher to **Wayne Repko**; Outreach Award to **Dan Stump** for his work with the Mid-

Our New Building



The Bio-Medical and Physical Sciences building construction is proceeding on schedule, with a target completion date of January, 2002. At present, the steel work for the seven story (basement plus six floors) research tower and the four story office portions of the building is complete. The basement interior walls are finished and work has begun on the first and second floor interior walls. Yet to be completed is the steel work for the two story western extension of the building, which will house a variety of physics and astronomy teaching and research labs as well as the mechanical and electrical shops, central computing facilities and the loading docks.

The Physics Astronomy Department will occupy the third and fourth floors of the office tower, with the Chair's office located on the fourth floor. Our undergraduate office suite will be located on the first floor, together with the lecture halls, classrooms and teaching labs. The condensed matter research labs are located in the basement. These include a large clean room facility and common space for chemical and materials preparation as well as about 17,000 sq. ft. of dedicated research labs.

Wayne W. Repko



Department of Physics & Astronomy
East Lansing, MI 48824-1116

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Michigan Physics Alliance, and with programs for high school teachers and high school students (CHAMP Program); Thomas H. Osgood Teaching Award (Non-Tenured) to **Rong Liu**; Thomas H. Osgood Teaching Award (Tenured) to **Vladimir Zelevinsky**; Distinguished Staff Award to be shared by **Amparo Alvarado** and **Janice Ridenour**. Longevity recognition: **Marc Conlin** 30 years of service to MSU, **Janice Ridenour** 25 years, **Eugene Kales** 20, **Thomas Palazzolo** and **John McIntyre** 15. **David Oostdyk**, senior, received Leroy G. Augenstein award from College of Natural Science. **Emil Bozin** won the "Pauling Poster Prize" at the annual meeting of the American Crystallographic Association in July 1999. **Julius Kovacs** received the CNS Alumni Meritorious Award. **William Hartmann** and **Harry Weerts** were named CNS Distinguished Faculty, and Bill has just been named President-elect of the Acoustical Society of America. Books have been published by **Wolfgang Bauer**, **Phillip Duxbury**, **Thomas Kaplan**, **Michael Thorpe**, and **Gary Westfall**. **Timothy Beers** has been invited to give a lecture this fall in Cambridge, England, before the Society for Application of Research as part of their Lecture Series. **Edwin Kashy**, University Distinguished Professor, has been selected to receive the William Elgin Wickenden Award in recognition of his paper "Using Networked Tools to Promote Student Success in Large Classes" which was published in the October 1998 Journal of Engineering

Education. **C. Konrad Gelbke** was honored by the Michigan Association of Governing Boards as one of two MSU faculty for distinguished scholarly activity and public service. **Wolfgang Bauer** received the Alexander-von-Humboldt Foundation Distinguished Senior U. S. Scientist Award.

Stuart Tessmer (above) was awarded a prestigious Sloan Foundation Fellowship as a young scholar of outstanding promise. **Gary Westfall** and **Raymond Brock** were named American Physical Society Fellows. Society of Physics Students recently elected: **Jeris Stueland**, President; **Erik Strahler**, Vice President; **Desmond Kursinsky**, Treasurer; **Lynn Carlson**, Secretary; **Zachary Constan**, Graduate Rep; **Amanda Bayless**, Senior Rep; **Andy Rogers**, Junior Rep. MSU Student Employee of the Year Finalist **Nathan Verhanovitz**, Honorable Mention **Christina Bright** and **Michelle Busch**. □



Science Theater

Peter Semig



I thought I was going to go to the meeting, eat the free pizza and get the heck out of there. I could not have been more wrong. Even though the pizza was great, the meeting proved to be intriguing beyond my wildest expectations. Little did I know that two years later I'd become the Director of Science Theatre. At first I thought Science Theatre was some sort of weird play. Again I was wrong.

Science Theatre is a science outreach organization comprised of a group of graduate and undergraduate students here at Michigan State University. Currently there are five divisions including Engineering, Physics, Chemistry, Biology, and Computer Science. We travel to a plethora of K-12 schools and perform demonstrations that convey scientific principles in a fun and exciting manner. Our demonstrations come in two flavors: stage shows and hands-on demos. The stage shows are usually for larger audiences while the hands-on demos are more personalized--perfect for small groups of kids. Some of our demos include methanol cannons, hovercraft, police radar, Bernoulli's Principle, logic gates, acids & bases, bed of nails, and color vision.

Not only do we go to K-12 schools, but we also perform on larger platforms. Our biggest show, by far, is

Alumni News

Julius Kovacs

A Little History... The largest number of alumni on our mailing list are fairly recent graduates of this department and institution - fairly recent in the sense that very few recall what was happening here in the years during and immediately after WW II. There was a department before the 1950s! A peek into those chaotic years was offered to us by the late Professor Thomas H. Osgood in a charmingly written letter he sent me on January 30, 1991, about a year and a half before he died at the age of 92. He suggested that perhaps readers of the Newsletter might find his recollections of those years interesting. From 1942 to 1944 most of the work of the little Michigan State College physics department was concerned not

Science Day at Meridian Mall. We bring out all of our hands-on demos and perform a few stage shows. Other events we usually participate in include Chemistry Week and Science Olympiad.

Believe it or not we have even more things going on than shows. Currently we are working on publishing our third edition of Recipes for Science. This book is a guide to our demonstrations for schoolteachers. Another activity we have is responding to "Ask Science Theatre" questions. Our webpage receives many students asking questions, such as "Why is the sky blue?" or "How do fish breathe?" Science Theatre attempts to answer all their questions in order to keep them interested in science.

Students who volunteer for Science Theatre gain amazing amounts of knowledge, pride, and confidence. Even though you may be a Physics student you can still take part in activities put on by other areas of Science Theatre. This allows students to learn demos not in their



discipline. Seeing the excitement and look of realization in the eyes of kids brings an amazing sense of pride. Finally, talking in front of 10-2000 students gives Science Theatre members fantastic public speaking experience. If you would like to find out more about Science Theatre, please visit our website located at <http://www.sciencetheatre.org> or e-mail us at sciencet@pa.msu.edu. □

with any sort of research that we are familiar with today, nor even with the teaching of undergraduate and graduate majors. It was focussed almost exclusively on the teaching of first-year physics to about 2000 army recruits, a number that increased the total College enrollment by at least 40% (our late colleague, Jerry Cowen, was among one of the groups of army recruits enrolled on this campus). The 2000 arrived on campus in installments of about 100 every two weeks. So a new course had to be started for each group in addition to continuing with the students already on campus. A major problem with this was getting teachers. Looking for physics teachers at other campuses wasn't a possibility because

many other colleges were similarly deluged. The whole MSC faculty was surveyed to see who had some physics in his background and a force of about 80 instructors was assembled, drawn from departments of chemistry, engineering, English, music, art, biology, etc. This group was given a refresher course and simple laboratory work had to be designed and apparatus built and made ready for all the classes. Some instructors taught for only short periods, they came, taught for a short time and returned to their own departments. Professor Osgood recalled that one term more than 80 instructors had taught during that term. Laboratories were taught in many buildings around campus as well in the four lab rooms in the old physics building which occupied the site where the main library now sits. By US Army edict, each instructor had to teach 20 class hours per week. As Professor Osgood recalled, one of the most skillful of the temporary help was John W. Shirley, then an instructor in the English department. He had a sound knowledge of physics, was an attractive lecturer to large classes and a deft demonstrator of phenomena to a large audience. In addition he was avidly interested in the history of science and became an expert on the work of Thomas Harriot, 1560-1621, a mathematician and astronomer who apparently used a 10-power telescope and experimented with binary notation. Shirley published a biography of Harriot in 1983 and prior to that, in 1951, Professor Osgood persuaded him to contribute two short papers about Harriot's work to the American Journal of Physics, of which Osgood was then editor.

Tom Bartold (MS '84) has decided to return to academia and will be enrolled in the PhD program in Computer Science and Engineering at the University of Michigan in the Fall. At this time he is in Nice, France enrolled in a language course. **Damian Handzy** Ph.D.'95 and **Phil Zecher** Ph.D.'96, together with another partner, have started "Investor Analytics LLC" - a company that analyses financial portfolios and provides interactive drill-down reports on the web. Much of the information they provide is the results of their own statistical analyses which concentrate on the risk taken in a portfolio. They have recently hired former NSCL REU student **Sherry Campbell** (nee Wolfe), and have just moved into new offices off Wall Street. They can be reached at dhandzy@iallc.com and pzecher@iallc.com, and their site can be found at <http://www.iallc.com>. Anyone traveling to New York City is welcome to stop by. □

url: www.pa.msu.edu/alumni.htm
email: newsletter@pa.msu.edu