

# ENGINEERING News

Kazuo Inamori School of Engineering  
Alfred University

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## NYSTAR-University Nanotech facility to be inaugurated April 27

### Technology Transfer Symposium Planned

The new NYSTAR-funded Alfred University-Clarkson University Nanotech research collaboration will be inaugurated on April 27, 2006, in a 9:00 am ceremony at the Ceramic Corridor Innovation Center, Alfred, NY.

Late in 2005, a \$1.8 million grant made to the Alfred University Center for Advanced Ceramic Technology (CACT) by the NYS Office of Science, Technology and Academic Research (NYSTAR) Center for Advanced Technology Development Program was announced by NY Governor George E. Pataki.

The funds, to "develop pilot plant facilities and expertise in the synthesis of nano-sized particles and subsequent processing and consolidation into nano-structured ceramic components with enhanced properties," will enable AU researchers, working with colleagues at Clarkson University's Center for Advanced Materials Processing, to develop molecular-sized building blocks for new materials, and use them to manufacture prototypes of electronic components. Partner industries in the collaboration include Ferro Corporation, Ferronics, Inc., AVX, and Cooper Power Systems.

In conjunction with the morning celebration, an afternoon symposium on issues in technology transfer will be held in Nevins Theater, AU Powell Campus Center.

Confirmed invited speakers currently include Marjorie K. Zach, Director of Sponsored Research,

#### Event Schedule for Thursday, April 27, 2006

9:00 am	<b>Facility Dedication, at Ceramic Corridor Innovation Center, Alfred NY.</b>
11:20 am	<b>Scholes Lecture, Holmes Auditorium, Harder Hall, AU.</b>
12:30 pm	<b>Scholes Lecture Luncheon, Howell Hall, AU. (reservation required)</b>
2:00 pm	<b>Symposium on Technology Transfer, Nevins Theater, Powell Campus Center, AU.</b>

(Continued on page 4)

## Fractography of Glasses and Ceramics

July 9-12, 2006  
Rochester, NY, USA

Abstract and manuscript guidelines are now available for submission of contributions to Fractography of Glasses and Ceramics V.

(Continued on page 6)

## Adrian Wright is 2006 Scholes Lecturer



Dr. Adrian Wright

Dr. Adrian C. Wright, professor of amorphous solid state physics, J.J. Thomson Physical Laboratory, University of Reading, will present the 2006 Samuel R. Scholes Award Lecture entitled "GLASS: Genesis to Apocalypse." This year's lecture will be presented on Thursday, April 27, 2005, at 11:20 am in Harder Hall Auditorium.

In his talk, designed to be enjoyed by both scientists and non-scientists, Wright will explore the past, present and future of glass from the stone-age use of volcanic silica glass (obsidian) to the 21<sup>st</sup> century's rapidly evolving understanding of new glass-forming systems. The factors which led to an improvement in glass quality will be examined, with particular emphasis on the

(Continued on page 5)

## Start your engines!

### AU Saxon Racing prepares for its first entry in Formula SAE competition

Imagine a racecar that should rival the performance of a Chevy Corvette and that would also cost about half as much - you might ask where you could buy one of these cars. Unfortunately, it won't be up for sale. Rather, this car is being designed as Alfred University's entrant in this year's Formula SAE Competition.

For over a year, over a dozen AU students have been quietly designing and building a racecar that should produce performance numbers comparable to a Chevy Corvette as part of the Formula SAE Competition, an international collegiate contest held each year by the Society of Automotive Engineers (SAE). The goal of the competition is for engineering students to put their classroom knowledge to practical use by having them design, build, and race a small open-wheel racecar.

As this is the first time that AU students have entered the competition, AU Team SAE had no previous designs upon which to base its car - a distinct disadvantage in a competition having an under 2-year timeframe! The SAE team members have risen to the occasion with



AU Team SAE and friends.

design highlights including a custom engine control unit (ECU) designed by a pair of our senior electrical engineers, along with a stiff lightweight frame that was created as a senior design project by one of our mechanical engineers. These two components, plus all of the car's other features, were only the technical difficulties of this project. In addition, funding for the project has been another difficulty for the team to overcome.

While meeting technical challenges, students working on the AU Formula SAE project have had to secure donations and

outside sponsorship to fund this project. In the past couple months, the team has managed to secure enough support, both in terms of cash and in-kind donations, to be able to finish the car and make it to the competition, barring any major hitches. AU Saxon Racing expresses their immense gratitude to all of the sponsors. The team especially thanks AU's Kazuo Inamori School of Engineering and Mr. Jay Katz, both of whom have donated well over \$1,000 to the cause. Special thanks go to URREA Professional Tools for their donation of \$1,000 worth of new hand tools. The AU entry in this prestigious competition would have been impossible without the support of all of our sponsors!

The Formula SAE team faces an immense amount of work in the few months remaining before the eagerly anticipated May 2006 competition in Detroit, MI. For more information regarding the AU Team SAE project, the team's sponsors, and the upcoming competition, check out the website, <http://www.saxonracing.com>.

## Amoroso serves up a tasty "Brunch" for AU listeners on WALF

Graduate student Jake Amoroso (MSE) serves up a personal blend of entertainment for on WALF, FM 89.7.

Amoroso started as a DJ while a freshman in 1999. With roommate Josh First (AU 2003), he hosted a 2:00 am show! They got friends to call in so it felt like maybe someone else was listening - perhaps they were! He was hooked on playing music in the studio, eventually getting a time slot more conducive to living normally.

Amoroso's had a show nearly every semester since, with various friends as co-hosts. A favorite was during his senior year with Nate Sherman (AU BFA 2004). He recalls, "Our styles were not always similar, so we often had to find ingenious ways to segue into each other's songs!" WALF DJ's are often a group of friends who don't really coordinate music and gags, but will simply DJ together and support each other.



Grad Student Jake Amoroso in WALF's Studio1.

For his Fall 2005 show, "Brunch on Monday," Amoroso brought together a collection of music - mainstream bands, but not their most popular songs. He featured older music, especially electronic. His show reflects his mood, or the social mood in the news. "I never predetermine my show," he says, "rather I work "with" the show and try something new every time."

Typical artists might include Dylan, the Beatles, Kosheen, Cormega, Cee-lo Green, My Morning Jacket, Wilco, and Dream Theater; always ending with a song by "Dune" or one from the "Team America" soundtrack. Amoroso's shows are not all music - you might hear aliens, metal, jokes, rap, country - even white noise - during the show.

WALF has been on the air since 1971 and reaches all of Alfred, Alfred Station and parts of Almond. You can listen worldwide (with either Winamp® or Windows Media Player®) at WALF's award winning website; <http://www.walfradio.org>. WALF is now ranked at #17 on Princeton Review's Best 357 Colleges Rankings for Great College Radio Stations.

Amoroso hosts "Alfred Exposure" on Saturdays at 10:00 am during the Spring 2006 semester.

## Meet an Engineer with “Horse Sense”

Sophomore engineer Lisa Landis (EE) can handle more than a calculator – she competes for Alfred University’s Equestrian Team as an intermediate division rider and hopes to advance soon to the open division. “I picked AU as the school that I wanted to go to,” says Landis, “the equestrian team was just a plus for me.”

AU’s Equestrian Team competes in the Intercollegiate Horse Show Association (IHSA). In competition, riders do not use their own horses, but rather are paired randomly with horses provided by the competition host. Competing with other riders at a similar level of expertise, team members progress by accumulating points. Competition levels begin at walk-trot, then through walk-trot-

canter to the novice, intermediate and finally open divisions. The three latter divisions compete both on the flat and over fences.

Horse ownership is not needed to compete in the IHSA, or to enjoy AU’s equestrian program! Competition plays a role, but student enthusiasm and team spirit are the major objectives of the AU and all IHSA teams. Emphasis is on learning, sportsmanship and fun. AU’s team is scheduled to compete in a total of seven intercollegiate shows this year. The program has been very successful over the years, routinely sending riders through the regional and zone competitions, and on to the national championships.



Both Landis and Sailor, who shows under the name “Don’t give up the Ship”, enjoy the new AU Equestrian Center, located about three miles from campus.

## Engineers earn athletic honors

**Chris Reynolds named to Football Gazette and Empire 8 all-star teams.**

Place-kicker Chris Reynolds was among the three AU offensive players to receive third-team all-star honors in the Football Gazette East Region. All-star teams were named by Don Hansen’s Weekly Football Gazette, a leading web site covering college football.

Reynolds, a Second Team Empire 8 all-star this season and an honorable mention selection in 2004, made eight



Chris Reynolds

field goals this year, second in the conference. He made 94.6 percent of his extra points attempts (35 of 37), which ranked first in the Empire 8.

**Jodi Butterfoss earns Empire 8**

**tennis honors.** Junior ceramic engineer Jodi Butterfoss has earned First Team all-conference honors in singles for the third straight year with an overall season 11-2 record. Butterfoss was 7-2 in conference competition this season.



Jodi Butterfoss

**Sportsperson of the Year honors.** Jeff Norton (senior ME, not pictured) has been named AU’s Empire 8 men’s X-Country sportsman of the year, while junior defender Zach Wise (ME) has been named AU’s Empire 8 men’s soccer Sports-person of the year.

Honorees are chosen by their coaches for outstanding sportsmanship in keeping with the conference’s mission of “competing with honor and integrity.”



Zach Wise

## Grad Students present research at MRS Boston



Graduate students Nathan Empie (PhD, MSE), Stephen Florczyk (MS, BMES) and Christopher Maier (PhD, MSE) presented results from their graduate research at the recent MRS fall meeting, November 28-December 1, Boston, MA. A special graduate student poster session and student mixer laid the foundations for future networking among these young scientists.

At left, (l-r) Steve Florczyk and Nathan Empie at the MRS graduate student mixer.

At right, Chris Maier at the MRS graduate student poster session.





## CGR: targeted glass industry research

The NSF Industry-University Center for Glass Research (CGR) held its winter 2006 meeting in San Antonio, TX, on January 10-12, 2006.

Representatives from Johns Manville International, St. Gobain Recherche, US Borax, US Silica, Ferro Corp., Owens-Illinois, and Corning Inc. joined 10 CGR faculty and staff to review 12 faculty proposals from Alfred University and The Pennsylvania State University and to receive 2 semi-annual project progress reports.

Faculty research proposals were written to address specific industry-expressed problems as defined by "problem statements" submitted by the CGR member companies. This solicitation resulted in numerous projects that met expressed corporate needs, making the selection process very difficult. "The projects were much better this year and we would have funded all of them if we had the money," commented one CGR industrial member after the voting.

Projects selected for 2006-07 funding:

**Batch Melting Kinetics** (Dr. Scott Misture, associate professor of materials science and engineering, Inamori School of Engineering, AU).

### Nanomechanical Properties of

**Commercial Glasses** (Dr. Carlo Pantano, distinguished professor of materials science and engineering, PSU).

**The Effect of Process on Adsorption Sites on Multicomponent Glasses** (Dr. Karl T. Mueller, associate professor of chemistry, PSU).

Each project is slated for a duration of one year and is intended to provide for the support of one graduate student.

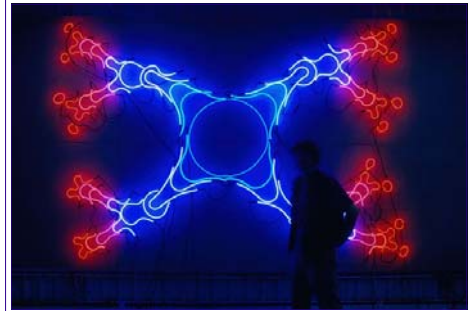
Attendees also enjoyed an afternoon tour of the facilities of the Southwest Research Institute with Dr. Vijay Jain (AU PhD 1988).

The Center for Glass Research is a consortium of industrial glass companies and suppliers who have gathered together to jointly fund graduate research that supports the glass industry.

CGR has three specialized university sites: basic and advanced glass research (AU), glass surfaces and interfaces (PSU), and refractories for glassmaking (University of Missouri-Rolla).

The results of the research are shared between the member companies. For more detailed information, please contact CGR Director, Dr. Harrie J. Stevens, [stevenshj@alfred.edu](mailto:stevenshj@alfred.edu)

## Engineer-artist in the spotlight; another take on glass!



This large neon sculpture by Mark Naylor (senior BFA and GES), one of our many students who combine a talent for art and design with their skills in engineering, was recently featured in the "New Glass Review."

That's a man's silhouette in the foreground, to give a sense a scale of the work!

Naylor, a member of the ceramic engineering honor society Keramos, has been noted recently for his research project for CEER, "Solar-absorbing ceramics increasing the efficiency of environmentally-friendly energy production," with Dr. D. Edwards.

## CACT Affiliate "braking" news



**Michael Dunn (at right), president of Redundant Ceramics, a new Affiliate Member of the Center for Advanced Ceramic Technology (CACT), celebrates the company's first silicon carbide brake rotor prototype with Dr. Vasantha Amarakoon, CACT Director.**

**The ceramic rotor was produced in the laboratories of the Kazuo Inamori School of Engineering, Alfred University.**

## NYSTAR Nanotech facility and Technology Transfer Symposium

*(Continued from page 1)*

Rochester Institute of Technology and Dr. Guven Yalcintas, Vice President of Technology Transfer, SUNY Research Foundation. More details will be made available in March.

The planned Symposium will take place after the annual Samuel R. Scholes Sr. Lecture and luncheon. This year's speaker is Dr. Adrian Wright (see story). Those interested in attending are encouraged to contact Marlene Wightman, [wightman@alfred.edu](mailto:wightman@alfred.edu).

## CEER's SAC decides project funding for 2006-07

The Science Advisory Committee (SAC) for the Center for Environmental and Energy Research at Alfred University (CEER) met on February 2, 2006, to evaluate 17 graduate research proposals submitted by Alfred University faculty in application for funding.

SAC members in attendance were Eldred Chimowitz, University of Rochester; Joseph Koo, University of Texas at Austin; Chad Nelson, University of Massachusetts; Louis Pilato, Pilato Consulting; and William Reinhardt, NYS Energy Research & Development Authority. Also participating were S. Bala Krishnan, EPA Project Officer; Terese Vascott, Interim CEER Director; and Dr. David Earl, outgoing CEER Director.

Proposals were reviewed and ranked by the SAC based on project merit,

environmental relevance, principal investigator qualifications, and facilities.

SAC recommended ten graduate research projects for funding in 2006-2008. Three projects are to receive 12-month funding, while the majority will be funded for 18 months. Project funding is designed to be sufficient for a masters degree student.

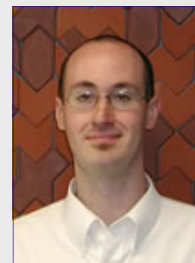
CEER receives major financial support from the Environmental Protection Agency (EPA). The present research grant selection is pending approval by EPA.

(See also September 2005 story [http://engineering.alfred.edu/newsletters/soe/archives/2005/September/rsch\\_cntr\\_news.html#ceer.](http://engineering.alfred.edu/newsletters/soe/archives/2005/September/rsch_cntr_news.html#ceer.))

## 18th University Conference on Glass Science

Conference organizer, Dr. Matt Hall, assistant professor of biomaterials and glass science, has announced that the **18th University Conference on Glass Science** is scheduled for May 20-23, 2007, in Rochester, NY. The topic of the conference is "Mass Transport in Glasses and Glass-Forming Melts."

Still in the planning stages, Hall is assembling an exciting group of invited speakers to lecture on topics such as gas diffusion, ionic conduction, fining of melts, and ion exchange. More details will be posted as they are available at <http://engineering.alfred.edu/outreach/conf/>.



Dr. Matt Hall

## Tang receives NSF education grant for Mag-Lev controls development

Dr. Jianxin Tang, professor of electrical engineering and physics, has recently received an education-grant of \$39,480 from the National Science Foundation. His proposal "A Magnetic Levitation System for Control Engineering Education," addresses real-time magnetic levitation (maglev) control using digital signal processing (DSP).

New course materials and laboratory experiments will be developed for three courses: Signals and Systems (ELEC322), Control Systems (ELEC422), and Digital Control Systems (ELEC424). Tang feels the need to introduce good examples, like



maglev, that represent emerging technologies in these courses. Maglev system control using DSP is ideal for this purpose. First, maglev is commercial technology in three countries and may represent the future of transportation. Second, maglev control is a nonlinear and open-loop unstable system that complements the linear and open-loop stable DC motor system currently being taught in almost all EE con-

trol systems courses across the nation. Last, DSP is a rapidly advancing technology that is used widely in many engineering fields.

Using this NSF grant, Tang expects to develop prototype one-, two-, or three-dimensional maglev systems. Relevant new software, laboratory experiments, and teaching materials will be developed to involve students in the areas of modeling the maglev system, design of the controllers using classical and adaptive control theories, and implementation of the controllers using DSP.

## Scholes Lecture

(Continued from page 1)

synergy between the development of glass and that of science, from the Roman and Arab ancient world through to the present day and beyond.

Wright is a well-known researcher with interests in neutron scattering and modeling studies of the structure and dynamics of all types of inorganic amorphous solids and is the author of nearly 200 scientific publications. Wright has received many honors from the international glass community; he is a

Fellow of the American Ceramic Society and also a Fellow and past-president of the Society of Glass Technology. Wright has been visiting scientist at Xerox Palo Alto Research Center, Argonne National Laboratory and the University of California, Los Angeles; he has been visiting professor at Stanford Synchrotron Radiation Laboratory, University of Florida (Gainesville) and at the NYS College of Ceramics.

For the complete abstract of his talk go to [http://engineering.alfred.edu/outreach/scholes\\_lecture/lecturers/](http://engineering.alfred.edu/outreach/scholes_lecture/lecturers/)

[wright.html](http://engineering.alfred.edu/outreach/scholes_lecture/lecturers/wright.html). The lecture is free and open to the public. The Scholes Luncheon (reservation required) will follow the morning lecture.

The Scholes Lecture is a highlight of the full-day program which will include an afternoon symposium on Technology Transfer (see article on page 1). To make a luncheon reservation or for more information on the Scholes Lecture or Technology Transfer symposium, contact Marlene Wightman, [wightman@alfred.edu](mailto:wightman@alfred.edu).

## Faculty briefs



**Dr. Jalal Baghdadchi**, associate professor of electrical engineering, reports that his student **Melissa Berman**, an Electrical Engineering senior, presented a paper at the Penn York Undergraduate Research

**Dr. Jalal Baghdadchi** Conference held at Alfred University. The paper was titled "A Novel Learning Method for Intelligent Agents," describing a method for growing a knowledge-base, suitable for machine learning and automation.

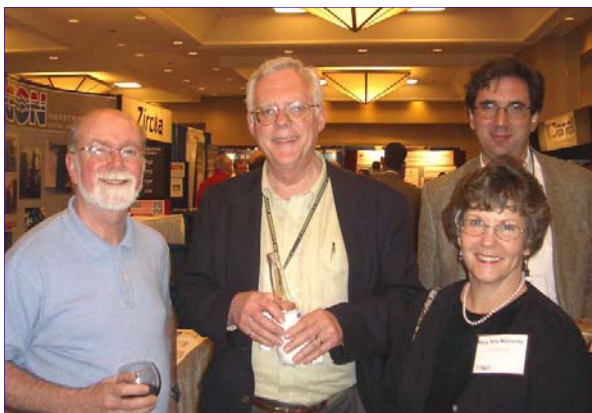
**Dr. Alastair N. Cormack**, Dean of the Kazuo Inamori School of Engineering and Frechette Professor of Ceramic Science, gave two lectures at the first African School and Workshop on X-Rays and Materials, December 12-17, 2005, in Dakar, Senegal. His invited lectures were on the topics "Non-Crystalline Materials" and "Atomistic Computer Simulations."



**Dr. A. N. Cormack**

The school and workshop, organized by the Physics Dept. of the Univ. of Trento, Italy, was held at the Conference Center of the University Cheikh Anta Diop in Dakar, the westernmost place in Africa.

Before returning to Alfred, Cormack traveled on to England to participate in the NETWORK Meeting on Crystal Growth and Dissolution, sponsored by the UK Engineering and Physical Sciences Research Council. His talk, on the dissolution of bioactive glasses, featured the work of graduate student **Todd Zeitler**.



Above (l-r) **Dr. Robert L. Snyder** (professor emeritus, NYS College of Ceramics) Professor and Chair, Materials Science and Engineering, Georgia Institute of Technology; **Dr. James McCauley**, (past Dean, NYS College of Ceramics) Army Research Laboratory; **Mrs. Mary Ann McCauley**; and **Dr. William J. Walker** (AU BS CE 1989, PhD 1996, former asst. Director of the CACT) Federal-Mogul Corp, Ignition Products Tech. Center.

## Fractography of Glasses and Ceramics V

(Continued from page 1)

Conference Co-Organizers **Professor Jim Varner** (AU) and **George Quinn** (NIST) invite you to mark your calendars now, and plan to attend.

Invited speakers will include:

Dr. Tim Foecke, NIST - Opening Lecture  
 Professor Derek Hull - Keynote Speaker  
 Jan Dusza, PhD, Slovak Academy of Science  
 Terry Engelder, PhD, The Pennsylvania State University  
 S. Jill Glass, PhD, Sandia National Laboratories  
 Jack Mecholsky, PhD, University of Florida  
 Roger Morrell, PhD, National Physical Laboratory, UK  
 Janet B. Quinn, PhD, National Institute of Standards & Technology  
 George D. Quinn, National Institute of Standards & Technology  
 Keizo Uematsu, PhD, Nagaoka University of Technology  
 Sheldon Wiederhorn, PhD, National Institute of Standards & Technology  
 Trevor Wilantewicz, PhD, Rutgers University

**New! 1-day field trip, "Travel Guide to the Fractography of Rock," presented by Dr. Terry Engelder, PSU, July 13, 2006, following the conference.**

Complete conference information updates are at <http://engineering.alfred.edu/outreach/conf/fractography/>  
 To receive further information about Fractography of Glasses and Ceramics V, or to indicate your intention of presenting a paper, please send an email to Marlene Wightman ([wightman@alfred.edu](mailto:wightman@alfred.edu)).

## Faculty and Friends at Cocoa Beach

**T**he Kazuo Inamori School of Engineering was represented by current faculty and numerous alumni at the recent Cocoa Beach meeting. Marlene Wightman, Director of Continuing Education and Outreach, and Dr. Licio Pennisi (AU BS CE 1975), CACT Assistant Director (and roving photographer!), welcomed alumni and friends at the Alfred University Booth in the exhibition. It was a busy meeting place!

**Visitors to the AU Kazuo Inamori School of Engineering displays at Cocoa Beach (at right, l-r) Dr. Kazunori Koga, Deputy General Manager, Business Planning Div., Corporate Business Strategy, Kyocera and Mr. Rod Lanthorne, President, Kyocera International.**





## Alfred University Friends at the Kyoto Prize

The Kyoto Prizes are annual international awards presented to individuals who have contributed significantly to the progress of science, the advancement of civilization and the enrichment and elevation of the human spirit. Each award is accompanied by a cash prize of \$460K. The Kyoto Prizes were established by Dr. Kazuo Inamori, founder of Kyoto-based Kyocera Corporation with a \$200M endowment in 1983.

The awardees are selected by the distinguished Kyoto Prize selection committees and are announced each August. The most recent award ceremony was November 10, 2005 at the Kyoto International Conference Hall. The guest list at the celebratory banquet included luminaries in the arts and sciences from around the world - including these familiar Alfred University faces!



At the Kyoto Prize banquet (l-r) Dr. Satayam Cherukuri (AU PhD 1983), President, Sarnoff Corp.; Dr. Joel Moskowitz, President, Ceradyne Corp and AU trustee; Dr. L. David Pye, dean emeritus, NYS College of Ceramics; Dr. Charles Edmondson, Alfred University President; Dr. Gary Messing, professor of ceramic science and engineering and Head of the Department of Materials Science and Engineering, Penn State.

## Faculty to contribute to Sri Lanka Ceramics Symposium

Three faculty members of the Kazuo Inamori School of Engineering plan to participate in the upcoming Sri Lanka Ceramics Symposium 2006, "Ceramics, Today and Tomorrow," June 10-11, 2006 (Colombo, Sri Lanka).

**Dr. Vasantha R.W. Amarakoon**, professor of ceramic and electrical engineering and Director of the New York State Center for Advanced Ceramic Technology, will present an invited talk on the topic "Materials for Nanobiotechnology; Technologies of the Future."

**Dr. Alastair N. Cormack**, Dean of the Kazuo Inamori School of Engineering, Van Derck Frechette Professor of Ceramic Science, and Director of the Graduate School, Alfred University, will speak on "Modeling and Simulation Studies in Ceramics and Glass - Applicability to Industry."

**Dr. William M. Carty**, professor of ceramic engineering, former Director of the Industry-University Research Center in Whitewares, will present on the topic "Innovations in Ceramic Processing -



**Dr. Vasantha Amarakoon**



**Dr. Alastair Cormack**



**Dr. William Carty**

Issues Related to Energy/ Production Efficiency."

The Alfred University group plans to visit Moratuwa and Peradeniya Universities to explore research and educational collaborative possibilities and hopes to visit potential industrial partners in the glass and ceramics industries while in Sri Lanka.

The Sri Lanka Ceramics Symposium 2006 will present and disseminate information on the latest technology and trends in the global and local ceramic industry and act as a forum for dialogue between local and international ceramic industry professionals.

Symposium topics will include:

- Global Trends in the Ceramics Industry
- Enabling Policy Environment for the Growth of the Ceramics Industry
- Managing Energy Costs
- Advanced Ceramics

and Ceramics of the Future

- Opportunities for the Ceramics Industry in Sri Lanka
- New Technologies Shaping the Ceramics Industry
- Scientific Research: Co-operation between Institutions and Industry

For more information on this international Symposium, contact Lakmali Udugampola, The Sri Lanka Ceramics Council; c/o The Ceylon Chamber of Commerce; No.50, Nawam Mawatha; Colombo 02, Sri Lanka, or visit <http://www.ceramics.lk/events.htm> for online registration information.

# Keramos at Cocoa Beach

## The National Keramos meeting

### 31st International Cocoa Beach Conference & Exposition on Advanced Ceramics and Composites Cocoa Beach, FL, January 22-27, 2006

Three Alfred University Keramos members, Katherine Rider (junior MSE), president, Matt Thompson (junior MSE), vice president, and Dan Skorski (sophomore CE), attended the national Keramos meeting at the 31st International Cocoa Beach Conference on Advanced Ceramics and Composites in Cocoa Beach. The Conference included a student meeting on Sunday in which the Alfred University chapter, along with Washington and Illinois, received the Sapphire (third place) Chapter Award for the work accomplished throughout the fall semester.

On Wednesday, a beach and pizza party preceded the two main attractions of the conference: the mug drop and putter contests.

All entries must be made by undergraduates (not necessarily members of Keramos) using only ceramic, glass or glass-ceramic materials - no reinforcing rods, structures or fibers may be used unless totally fabricated by the students. Faculty or graduate students may only advise the undergraduate team. Putters, balls and mugs (which must be functional, hold 16-20 oz and have a handle) must be made as monolithic pieces. All entries must be made during the current 2005-2006 school year.

The putting contest tests the functional and aesthetic aspects of the putter and ball, while the mug drop tests durability (although there is an award for "Best Looking" mug). Initial drop height is 12 inches, increasing by 6-inch increments to a maximum of 12 feet!

The NYSCC mug did not survive to the 12ft. height, surviving only the first five rounds, but it was quite an experi-

**Dan Skorski putting for the AU Team in an attempt to repeat last year's first-place sweep of putting contest categories. It was not to be: the AU entry came in third!**



**Sapphire Chapter Awardees. Front row, (l-r) Katherine Rider (AU), Shane Boyd (WA), Julie Wong (IL). Back row, (l-r) Brad Johnson, Keramos General Secretary and Matt Dejneka, Keramos President.**



**Three schools entered the putter competition. In order of finish, (l-r) University of Washington, University of Missouri-Rolla, and AU.**



ence to watch the other chapters test the durability of their designs on to the maximum drop. The winners for the mug drop contest were from Missouri-Rolla while the University of Washington took first place in the putter contest.

This meeting had one of the best turnouts for student chapters with 9 out of 11 chapters attending. Between the student meeting and Wednesday's contests, students had the chance to listen to the various talks and attend the conference reception and exhibition, learning more about companies and their products. Overall, the Conference was a significant networking experience for student attendees.

The Keramos Ceramic Putter and Mug-drop competitions were a feature of the ACerS annual meeting up until this year. With the recent consolidation of materials-related research society meetings, these competitions will now be a part of expanded student activities at the annual Cocoa Beach meeting on Advanced Ceramics. The poster competition and student speaking contests, sponsored by the Ceramics Education Council, will remain part of the American Ceramic Society's Annual Meeting which will be held in Cincinnati, Ohio, as part of MS&T '06 Materials Science & Technology Conference and Exposition, October 15-19, 2006.

**AU Engineering News is a print version of our online newsletter. For complete news and updates, go to <http://engineering.alfred.edu/newsletters/soe>**

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