

# ENGINEERING News

Kazuo Inamori School of Engineering  
Alfred University

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## NEW COURSE!

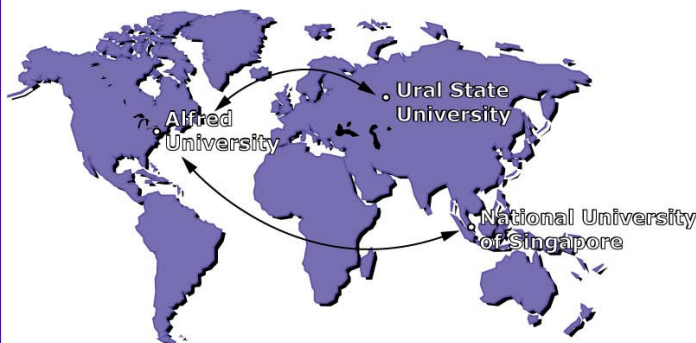
### Energy Relevancy of the Glassmaking Process

July 25-27, 2006

A new short course developed by the CGR under a grant from the U.S. Dept. of Energy Energy Efficiency and Renewable Energy (EERE) Industries of the Future program — a significant discount is offered to CGR and GMIC members.

Contact Marlene Wightman,  
[wightman@alfred.edu](mailto:wightman@alfred.edu), for  
pricing details.

## International collaboration on solid electrolytes funded Materials World Network project links AU, Ural State University in Russia, and Nat'l University of Singapore



An international team will investigate transport in trivalent ion tungstates and related materials using a combination of experimental and computer modeling techniques. "Transport and Reaction Phenomena in Trivalent Ion Tungstates and Related Systems," a Materials World Network (MWN) research project, is an

international collaboration among Alfred University, Ural State University (USU) in Russia, and National University of Singapore (NUS).

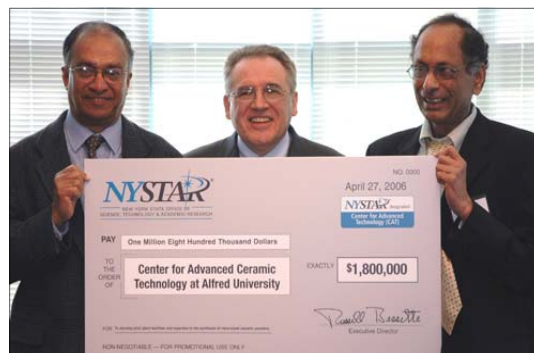
The National Science Foundation funds 15-30 MWN Cooperative Activity in Materials Research proposals between US Investigators and their counterparts abroad each year. **Dr. Do-reen Edwards**, associate professor of materials science and engineering leads the collaboration team in the Inamori School of Engineering. Dr. Arkady Neiman leads the USU effort, while their counterpart in Singapore is Dr. Stefan Adams.

(Continued on page 5)

## NYSTAR-University Nanotech facility inaugurated CACT sponsors technology symposium in celebration

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

Funded by 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) the collaboration seeks 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," and will enable AU researchers, working with colleagues at Clarkson University's Center for Advanced Materials Processing, to develop molecular-



Center directors **Dr. Vasantha Amarakoon**, CACT, (l) and **Dr. S.V. Babu**, CAMP, Clarkson University, (r) flank **Dr. Russell Bessette**, NYSTAR director, to accept the \$1.8M funding for the new Nanotech Collaboration

(Continued on page 4)

## Engineers receive AU Convocation Honors

Outstanding students of the Kazuo Inamori School of Engineering were honored at the Alfred University 2006 Honor's Convocation on April 21, 2006. The annual AU Convocation honors all faculty, undergraduate and graduate students who have achieved special honors and awards for their outstanding performance inside and outside the classroom and in service to the AU community. For complete descriptions of the awards, go to <http://engineering.alfred.edu/newsletters/soe>

**Christopher Michael Brenna (senior CES)**

*Materials Research Society Outstanding Senior Poster*

**Grant Eric Brown (senior EE)**

*Hal W. Metzger Award in Astronomy*

*The Donald R. Pautz Memorial Award*

**Katherine Anne Rider (senior MSE)**

*The Dr. Richard C. Martin Outstanding Senior Scholarship*

**William Shaler Brown (senior ME)**

*Faculty Award for Academic Excellence in Mechanical Engineering*

**Kevin J. Brucher (senior ME)**

*Faculty Award for Professional Achievement in Mechanical Engineering*

**Julian Ross Carpenter (sophomore CE)**

*C.A.N.Y. Scholes Award*

*Curtis E. Scott '72 Scholarship Endowment*

**Carlo Richard DiRisio (senior EE)**

*Faculty Award for Outstanding Electrical Engineering Senior*

**Kimberly Ann Gemmell (junior CE)**

*Faculty Award for Outstanding CEMS Junior*

**Adam Jon Gernstl (sophomore ME)**

*American Society of Mechanical Engineers Outstanding Student Award*

**Erin Sue Hendrick (senior MSE)**

*Advancement of Women in Engineering Award*

**Everton Irvine Henriques (PhD student CE)**

*The Dr. Richard C. Martin Outstanding Teaching Assistant Award*

**Mark Owen Naylor (senior GES/Art & Design)**

*General Electric Excellence in Glass Science Award*

**Timothy Andrew Nedimyer (senior CE)**

*Undergraduate Tutor Award*

**Mark Albert Roscup (sophomore CE)**

*Harry J. Odink Memorial Award in Ceramic Engineering*

**Heidi Marie Schulze (senior MSE)**

*Faculty Award for Outstanding CEMS Senior*

**Daniel Christopher Skorski (sophomore CE)**

*The Mark S. Miller Memorial Scholarship*

**Janelle Villone (senior MSE)**

*State University of New York Chancellor's Award for Student Excellence*

**Ling Wang (PhD student MSE)**

*Korean Alumni Association of Alfred University Award*

**Brett Thomas Williams (Freshman EE)**

*Phi Kappa Phi Book Award*

**Seward Christian Molina (sophomore EE)**

*Modern Languages Culture Award*

**Ryan Wayne Musson (junior CE)**

*The Jim R. Tinklepaugh Memorial Scholarship*

## Mauro PhD '06 tapped for Young Scholars Award

John Mauro (AU BS '01, PhD '06), now at Corning Inc., is the 2006 recipient of the American Ceramic Society's Norbert J. Kreidl Award for Young Scholars. The award, presented by the Glass and Optical Materials Division of the American Ceramic Society, is given to a "student selected each year on the basis of research excellence in glass science."

The award was presented at the Glass and Optical Materials Division meeting in Greenville, S.C., on May 18, 2006. Mauro presented a lecture at the gathering on "A New Model of the Glass Transition." The award included a Steuben glass tetrahedron and a \$300.00 check.

His winning entry resulted partially from an independent study undertaken with Dr. Arun Varshneya, professor of glass



**Congratulating Dr. John Mauro on his award, from l-r, Dr. Kathleen Richardson (Chair, Glass & Optical Materials Division), Dr. Matt Dejneka (Chair, Program Committee); Mauro, and Dr. Arun Varshneya.**

science, building on earlier collaborations with Dr. Roger Loucks, assistant professor of physics, and Dr. Jitendra Balakrishnan of Corning, Inc.

Mauro utilized quantum mechanical calculation of interatomic potentials for selenium to compute the possible "inherent structures" (energetically favorable molecular conformations) in an enthalpy landscape, subsequently computing the volume of the entire ensemble as it cooled from a liquid state to the glassy state and showed remarkable agreement with experimental data obtained conventionally. His earlier collaboration on the complex quantum mechanical equations paved the way for this new

unique approach which hitherto had never been tried.

Mauro is a senior research scientist with Corning Inc.'s Science and Technology Modeling and Simulation Group.

## ME Seniors take 1st, 2nd in ASME Speaking Competition



Dr. John Williams, Chair, Olean Section of ASME, and Chair, Mechanical Engineering Technology at ASC, congratulates Kevin Brucher (right) on his 1st place presentation.

Three senior ME students, Adam Morgan, Kevin Brucher and Willie Brown, went forward from an internal competition to represent Alfred University against Alfred State College at the 5th Annual Technical Speaking Competition sponsored by the Olean Section of the American Society of Mechanical Engineers. The competition took place in AU's Knight Club on April 20, 2006. Six students from AU and Alfred State College presented their work.

Brucher (Dr. Steve Mayes, assistant professor of mechanical engineering, advisor) took first place, winning \$200, for his presentation of "A Self-Propelled Nextel Series Pit Box Frame." Brown (Dr. Steve Mayes, advisor) won a \$100 second place prize for his work "Tractor Mounted Suspended Wood Splitter."

The Olean ASME expressed special thanks to Dresser-Rand of Olean, NY, for sponsoring the competition and providing funding for the awards.



Dr. John Williams, Chair, Olean Section of ASME, and Chair, Mechanical Engineering Technology at ASC, congratulates William Brown (right) on his 2nd place presentation.

## Corman '02 leaving AU to join Olympic training program

Andy Corman (BS CE 2002), engineering enrollment specialist with the Office of Admissions, has been the first face of Alfred University Engineering to prospective students for several years. Also a familiar face to our athletes, Corman has trained with AU's cross country and track & field teams; competing in road races and triathlons each year.

This year he overcame the record heat to finish 215th in the April 18, 2006, Boston Marathon, enough to attract the attention of Coach Scott Slade of the Soka Track Club



Andy Corman

([www.sokatrackclub.com](http://www.sokatrackclub.com)), based out of Soka University, Aliso Viejo, CA. The club started an elite development program in 2005.

Corman has been invited to join a small group of athletes to train full time in hopes of qualifying for the 2008 Olympic trials and in July will be moving out to California.

Corman feels his best chance is in the marathon, but Coach Slade may feel differently. Corman still holds the AU record in the 5K.

"I am very excited about this opportunity for myself," said Corman, "yet I am sad to leave Alfred University. It has been my home and community for a long time, but I have to take advantage of this chance. It, along with my friends here will always hold a special place in my heart."

"I will be training with athletes from all over the US and one athlete from England. The facilities are amazing as many past and current Olympians from Track and Field, Swimming, and Ice Skating train there all year long."

## Schulze earns Phi Beta Kappa honors

Heidi Schulze, senior MSE, was inducted into Alfred University's Phi Beta Kappa chapter in their April induction ceremony. AU's Alpha Gamma Chapter of Phi Beta Kappa inducted 20 students and two alumni during the ceremonies.

Phi Beta Kappa is considered to be among the most prestigious of honor societies, and is dedicated "to the ideal of excellence in the liberal arts and sciences." There are fewer than 300 colleges – roughly 15 percent – nationwide that have been granted a Phi Beta Kappa chapter.

## Carpenter is named Scholes Scholar



Julian R. Carpenter (sophomore CE, at right) was named Scholes Scholar, prior to the Scholes Lecture, April 27, 2005; the award being presented by Dr. Alix Clare, professor of glass science.

The Scholes Scholar award, sponsored by CANY in honor of Dr. Samuel R. Scholes, is based on outstanding performance in the freshman year.



## Misture, Cormack receive NSF funding

**\$239,933 awarded for Experimental and Computational Study of Local Cation Environments in Oxide Photocatalysts**

**D**r. Scott Misture, associate professor of materials science, and Dr. Alastair N. Cormack, Van Derck Frechette Professor of Ceramic Science, and Dean, Kazuo Inamori School of Engineering; have been awarded a \$239,933 NSF grant for an experimental and computational study of local cation environments in oxide photocatalysts.

Photocatalysts based on  $\text{TiO}_2$  are currently in use or under development for applications with profound political, economical, and environmental impacts such as generating hydrogen from water and removing  $\text{CO}_2$  from power plant operations will reduce the total greenhouse gas emissions. Instead of searching for methods for incremental improvements in the single oxide



**D. Scott Misture**



**Dr. Alastair Cormack**

system, layered ceramics present the opportunity to make breakthrough advances in understanding and performance of photocatalysts.

The grant funds a two-year graduate research investigation on layered Aurivillius ceramics as the host system. The crystal structure allows precise control of the Ti-O, Nb-O, and

Ta-O bond lengths over a wide range, enabling AU investigators a means for direct evaluation of the effects of the layered structure and ferroelectric domains on charge recombination, as well as investigating effects of aliovalent cation doping on properties.

The experimental work will center on the use of diffraction, complemented with X-ray absorption and photoelectron spectroscopy to characterize the structures in detail. Density functional theory computer simulations will be performed using both energy-minimized structures and intentionally strained structures to track the electronic band structure, defect energies, and dopant clustering tendencies in parallel with experiment.

## CEER announces funded research

**T**he Center for Environmental and Energy Research (CEER) has received US EPA approval for funding two one-year graduate research projects, commencing May 2006. The projects were recommended for funding by CEER's Science Advisory Committee at the February 2006 annual meeting.

Proposed research approved for funding are:

**Preparation of Ceramic Glaze Waste for Recycling using Froth Flotation**  
(Investigator: Dr. William Carty)

Pb-containing and Pb-free fritted glazes that contain pigments and colorants are problematic for recycling. The focus of this research will be to use

froth floatation to separate pigments from glaze frit. The information from this study will allow surfactants to be selected based on the nature of the pigment and frit particles to allow the efficient separation of these species. In this way even complex glaze systems can be separated by using a predetermined multi-step floatation process.

**Elimination of Lead from Ceramic Glazes by Refractive Index Tailoring**  
(Investigator: Dr. William Carty)

A recent study shows the concentration of lead in a leaded glaze is greater at the surface. A higher index



**Dr. William Carty**

of refraction and lower viscosity must therefore characterize the surface of a leaded glaze, leading to unique properties over a glaze with constant composition and refractive index. Using an improved understanding of melting behavior in glazes, it is thus proposed that the characteristics of a leaded glaze can be imitated with a lead-free glaze.

For more information on CEER research and programs, contact Terese Vascott, CEER Interim Director, [vascott@alfred.edu](mailto:vascott@alfred.edu).

## Nanotech facility-Technology Symposium

*(Continued from page 1)*

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 celebration, the afternoon symposium "The Role of University/

Industry Collaboration in the Current Climate of Globalization and Outsourcing" was held in AU's Nevins Theater.

Speakers included Dr. Guven Yalcintas, Vice President for Technology Transfer, SUNY Research Foundation; Dr. Vasantha Amarakoon, CACT Director, Prof. Ted Hagelin, Director, NYS Science and Technology Law Center; Ms. Marjorie Zack, Director, Sponsored Research

Service, RIT; Mr. Douglas Mann, Corning, Inc.; Mr. John Olenick, President, EnrG Inc.; and Dr. S.V. Babu, Director, Center for Advanced Materials Processing (CAMP) – Clarkson University.

A casual dinner at the Snug Harbor, in Hammondsport, NY, ended the day for a number of participants.

## MWN project links AU, Russia and Singapore

(Continued from page 1)

Their work will investigate trivalent-cation conduction and possible polyatomic tungstate anion,  $\text{WO}_4^{2-}$  conduction in materials with the  $\text{Sc}(\text{WO}_4)_3$  structure type. Transport via trivalent cations or via polyatomic species is relatively rare, but would lead to technological advantage in application because of the higher charge transported per particle. A better understanding of these materials may lead to the development of new solid-state electrolytes and devices like fuel cells, batteries, and ion separators.

Electrochemical studies will be performed on structurally well characterized samples under conditions compatible with the assumptions of the theoretical models. Modeling activities



Dr. Doreen Edwards

will build upon the experimental knowledge and provide predictions that can be tested by specially designed experiments. Researchers at AU and USU will synthesize and characterize materials using electrical methods to probe ion transport and reactivity. Diffraction studies will be conducted at AU and

NUS to provide information about crystal structure. At NUS and AU, computer simulations will be used to identify ion transport mechanisms.

Grad and undergrad students will participate in the project. Collaboration will be facilitated through student exchanges and faculty interactions. While helping achieve the goals of the project, these collaborations will enable students to build international collaborations in their professional careers.

## Faculty present current work at ICC

1st International Congress on Ceramics  
Toronto, Canada  
June 25 - 29, 2006

SE associate professors Dr. Doreen Edwards and Dr. Scott Misture will present their research at the International Congress on Ceramics in Toronto. Both presentations are on Tuesday, June 27, 2006, as part of the Technology Showcase Exhibit and Poster Session II.

Their poster presentations are:

**Interaction of DNA with Nano-Structured Beta-Gallia-Rutile Surfaces**, N.H. Empie; D. Edwards (ICC-P2-10-276-2006) and

**Effects of Hydrogen on the Stability of Fuel Cell Glass Sealants**, S. Misture (ICC-P2-55-277-2006).

## Kohli '86 honored as ACerS Fellow

Jeff Kohli (BS CE '86, MS CE '87, PhD Glass '91) has recently been named a Fellow of the American Ceramic Society. Kohli will be among the new Fellows to be recognized at the ACerS annual meeting, Cincinnati, OH, October 15-19, 2006 (combined with the Materials Science & Technology 2006 Conference and Exhibition - MS&T06).

Kohli, a scientist with Corning, Inc., has had 22 publications and holds 16 US patents (with 3 pending). Kohli



Dr. Jeff Kohli

served as Chair of the ACerS Glass & Optical Materials Division (2003-2004) and is a former Subcommittee Chair for the NSF-Industry-University Center for Glass Research at Alfred University (CGR). Kohli was a nominee for ACerS Board of Directors in 2005.

Kohli's latest challenge will be a 3-year assignment in Wiesbaden, Germany, at Corning GmbH, as European New Products Manager, Corning Environmental Technologies.

## Faculty publications list available on the web

A listing of all engineering faculty publications for the academic year 2005-2006 is now available on the Kazuo Inamori School of Engineering website,

<http://www.engineering.alfred.edu>.

Over 50 refereed publications are included, sorted by general subject area, resulting in a useful introduction to the diverse research interests of the engineering faculty.

## Varshneya, Mauro are invited speakers at International symposium

Dr. Arun Varshneya, professor of glass science and engineering, and Dr. John Mauro (AU PhD Glass 2006) represented the Inamori School of engineering at the recent International Symposium on Non-Oxide and New Optical Glasses; April 9-14, 2006, Bangalore, India.

Varshneya presented the invited talk "Elasticity, plasticity and brittleness during indentation of chalcogenide glasses" while Mauro presented the invited lecture (co-authored with Varshneya) "Ab initio modeling of chalcogenide glass structures."

In addition, they presented recent research in their papers "Nonequilibrium statistical mechanical model of structural relaxation in glass" (J.C. Mauro and A.K. Varshneya), and "Mapping the potential energy landscapes of chalcogen systems (J.C. Mauro, R.J. Loucks, J. Balakrishnan, and A.K. Varshneya).

In the Alfred tradition, John Mauro (left); Arun Varshneya (middle) and Brad Bowden Jr. (BS GES 2002)(right) read the Alfred Sun at the Bangalore meeting.



## 18th University Conference on Glass Science News

**T**he 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."

Organizer Matt Hall, assistant professor of biomaterials and glass science, is assembling an exciting group of invited speakers on topics such as gas diffusion, ionic conduction, fining of melts, and ion exchange.



**Dr. Matt Hall, UCG organizer**

The Conference will be combined with the **Glass and Optical Materials Division** of the American Ceramic Society's Spring 2007 meeting, greatly expanding the complete program offerings.

More details will be posted as they are available at <http://engineering.alfred.edu/outreach/conf/>.

## Industrial and University researchers benefit from TA Instrument seminar



**A** Lunch-N-Learn sponsored by TA Instruments ([www.tainstruments.com](http://www.tainstruments.com)) was hosted by the Office of Continuing Education at the NYS College of Ceramics at Alfred University on May 23, 2005. 30+ attendees were from area industries and the local University Community. Topics included DSC, TGA, TMA and DMA testing.

TA used to be known as DuPont Instruments; TA is now a wholly owned subsidiary of the Waters Corporation, Milford, MA.

For more information on outreach programs of AU's Inamori School of Engineering, NYS College of Ceramics, please contact Marlene Wightman, Director of Continuing Education/Outreach, [wightman@alfred.edu](mailto:wightman@alfred.edu).

## New equipment enhances thin films research

**R**esearch on ceramic dielectric thin films conducted by Dr. Xingwu Wang, professor of electrical engineering, requires state-of-the-art deposition technology. The Inamori School of Engineering has acquired a VPT ion-assisted electron beam deposition system (Vacuum Process Technology, Inc., Plymouth, MA); the acceptance test was completed in early April.



Funding for the ion-assisted electron beam deposition is from the NYSTAR-IT Collaboratory (Dr. Alix Clare, professor of glass science, principal investigator).

**At left, graduate student Tao Zhang operates the new VPT ion-assisted electron beam deposition system. Zhang's research has been funded by Biophan Technologies, Inc., Rochester, NY.**

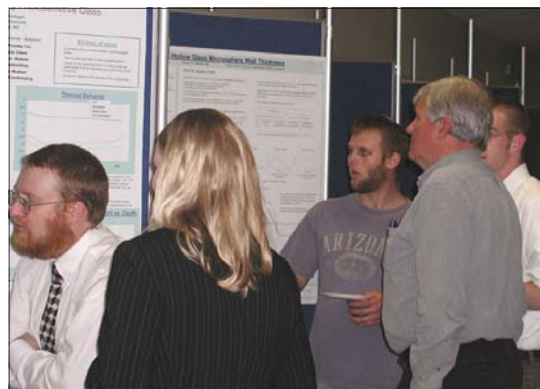
## Engineering Seniors present their research

**E**ach graduating senior engineer must present their senior research thesis in a formal poster session and answer questions from faculty and graduate students.

This year's Thursday evening event was held on April 20, 2006, in McMahon Building. The session was well attended by faculty, staff, undergraduate and graduate students – all looking forward to learning about the work of their students and friends.

The session was also an enjoyable social event prior to the busy final exam period, with refreshments provided by Keramos and organized by Matthew Thompson (junior MSE).

The Materials Research Society gives an award for the Outstanding Senior Poster; this year's award was given to Christopher Michael Brenna (senior CES).



**Dr. Steve Pilgrim and Dr. Paul Johnson discuss senior research results.**

## Engineers organize FIRST Robotics team

**F**reshmen engineers Mirza Strujo and Jeremy Bryant have initiated the process to form Alfred University's latest team – for an international robotics competition called F.I.R.S.T. (For Inspiration & Recognition of Science and Technology).

"The FIRST Robotics Competition is an exciting, multinational competition that teams professionals and young people to solve an engineering design problem in an intense and competitive way. The program is a life-changing, career-molding experience—and a lot of fun" says Travis Curren (freshman ME). Curran was involved with FIRST in his high school. The program creates a mentorship between college and local high school students, usually with a corporate sponsor lending support.

*(Continued on page 7)*



# The Kazuo Inamori School of Engineering Congratulate its Graduates!

## Academic year 2005-2006

### Bachelor of Science in Biomedical Materials Engineering Science

Ryan A. Troyer

### Bachelor of Science in Ceramic Engineering

Alicia Ballard (Dec. 2005)  
 Christopher M. Brenna (Dec. 2005)  
 Matthew R. Brophy  
 Jay R. Cleaves (Dec. 2005)  
 Jonathan C. Dunlap  
 Geoffrey W. Freeman (Dec. 2005, *Magna cum Laude*)  
 Bernard P. Gridley  
 Carolyn R. Hunter  
 Timothy A. Nedimyer *Magna cum Laude*  
 Shawn D. Schlee (Dec. 2005)  
 William J. Sorokes (Dec. 2005, dual degree BA)  
 Michael D. Wallace (Dec. 2005)

### Bachelor of Science in Electrical Engineering

Miguel A. Abud  
 Ronald W. Beck (Aug. 2005, *cum Laude*)  
 Melissa J. Berman  
 Laura M. Cavounis  
 Carlo R. DiRisio *cum Laude*  
 Paul Duclair  
 Emil J. Feig  
 George J. Ferrio III *cum Laude*  
 Martin L. Klingensmith  
 Patrick E. O'Neill (dual degree, BA)  
 Jason M. Reyes  
 Christopher J. Suozzo *Magna cum Laude* (dual degree, BA)  
 Ashley M. Taylor (Dec. 2005, *cum Laude*)  
 Michael W. Wanberg (dual degree, BA)  
 Natalie L. Westerman

### Bachelor of Science in Glass Engineering Science

Dominick Fiordimalva  
 Kathryn Goetschius *cum Laude*  
 Thoman J. Logan (Dec. 2005)  
 Brian F. Loncto  
 Daniel J. Radigan  
 Peter F. Wachtel II  
 Amanda L. Youchak (Dec. 2005, *Magna cum Laude*)

### Bachelor of Science in Materials Science and Engineering

Anthony J. DeMarco, Jr. (Dec. 2005)  
 Keegan J. Gay (Dec. 2005)  
 Erin S. Hendrick *cum Laude*  
 Lisa M. Noni (Dec. 2005)  
 Jeffrey W. Olin  
 Katherine A. Rider *cum Laude*  
 Stephen B. Sanford (Dec. 2005, *Summa cum Laude*)  
 Gary G. Squier  
 Daniel L. Steele *cum Laude*  
 Janelle Villone (Dec. 2005, *Summa cum Laude*)  
 Patrick D. Willson (Dec. 2005, *cum Laude*)

### Bachelor of Science in Mechanical Engineering

Jason W. Belt  
 William S. Brown *cum Laude*  
 Kevin J. Brucher  
 Michael J. Buchholz  
 Michael R. Costello  
 John M. Feenaughty *cum Laude*  
 Jonathan P. Ferguson  
 Travis R. Fisher  
 Peter d. Logar, Jr. (Dec. 2005)  
 Jeffrey P. Norton  
 James E. Palmer (Dec. 2005, *cum Laude*)  
 Rebecca S. Retherford (Dec. 2005)  
 Paul W. Runge  
 Luke E. Sturdevant (Dec. 2005)  
 Michael J. Vander Voort (Dec. 2005)

### Doctor of Philosophy in Ceramics

Brian M. Pinto  
 Trevor E. Wilantewicz (Dec. 2005)

### Doctor of Philosophy in Glass Science

John C. Mauro

### Master of Science in Biomedical Materials Engineering Science

Ashleigh Cooper (Aug. 2005)

### Master of Science in Biomedical Materials Engineering Science

Ajay R. Kashi (Dec. 2005)  
 Aaron M. Micetich (Dec. 2005)

### Master of Science in Ceramic Engineering

David W. Finkelburg  
 Everton I. Enriques (Aug. 2005)  
 Mukesh Kumar Jha (Aug. 2005)  
 Holly N. Moschiano  
 Gretchen I. Schwerzler (Aug. 2005)  
 Gayathri Sundaresan (Dec. 2005)

### Master of Science in Glass Science

Nicholas J. Coleman  
 Jason S. Frackenspohl  
 Jeffrey J. Miller (Dec. 2005)  
 Micheline Miller (Dec. 2005)  
 Melodie L. Schmitt (Dec. 2005)

### Master of Science in Electrical Engineering

Chunqing Liu (Dec. 2005)  
 Yunqing Liu (Dec. 2005)  
 John R. Oshetski (Dec. 2005)  
 Aaron J. Shipman (Dec. 2005)

### Master of Science in Materials Science and Engineering

Melissann M. Ashton-Patton (Dec. 2005)  
 Marie-Lise C. Cazeneuve (Aug. 2005)  
 Hyun-Joon Kim (Dec. 2005)  
 Eric J. Nichols (Aug. 2005)  
 Nathan M. Zink

### Master of Science in Mechanical Engineering

Anthony C. Barnum  
 Thomas M. Tremper (Aug. 2005)

## FIRST Robotics

(Continued from page 6)

Strujo and Bryant plan on reaching out to corporate sponsors and local high schools in the coming months. "As financial funding is being sought, additional

resources, such as expertise and guidance, will also be enthusiastically accepted from our sponsors," Dr. Robert Holtzapple, assistant professor of physics and the team's advisor, said.

The 2006 FIRST competition will reach over 28,000 high-school-aged young people on



Dr. Holtzapple

over 1,125 teams in 33 regional events. The AU team would compete in the regional event held each year at Rochester Institute of Technology.

Any individual or corporation interested in being a part of this program is encouraged to contact Strujo at [ms7@alfred.edu](mailto:ms7@alfred.edu) or Bryant at [jsb10@alfred.edu](mailto:jsb10@alfred.edu).

## Hot Dog Day 2006: Engineering challenges for charity and fun!

### Spring Family Weekend, April 21-24, 2006

Alfred University engineers kicked off 2006 Hot Dog Day Festivities Friday evening with the **Pine Hill Derby**, racing uniquely student-designed, and student-constructed non-motorized vehicles down Pine Hill Drive.

Ken and Mary Bellows of Scio contributed two \$50 cash awards to be given this year to recognize the vehicle with the most "unique design" and the vehicle the "most environmentally friendly". ASME, IEEE, AU Destructors and SAE contributed to the purse and prizes for the 1<sup>st</sup>, 2<sup>nd</sup> and third place teams of the 2006 Pine Hill Derby.

Racers were first judged on handling agility and braking on a gentle grade slalom course before moving on to the challenging downhill run.

Thinking "outside the bun," The Society of Women Engineers (SWE) got more than just engineering students involved in their 1<sup>st</sup> annual **SWE Hot Dog Launch** on Saturday. King Alfred's court would have been entertained at the crossbows, catapults and trebuchets demonstrated by ambitious student teams. To make the competition fair, SWE supplied "standard AU hot dogs."

Hot dog weekend is also the occasion for awarding the **Annual "Alfie Awards"** – awarded to the people and campus organizations that make Alfred University so outstanding. Noted among the awardees for **outstanding actors in a comedy series** were Freshman CE Jarod Gagnon and senior MSE student Jeff Olin, both for their work in Pirate Theatre, and also Sanjae Duncan (freshman BMES) Lydia Kirkpatrick (Sophomore ME), for performance in FNL (Friday Night Live)

AU and neighbor Alfred State College are co-sponsors for Hot Dog Day weekend, one of the most popular events of the year for students and members of the local community. A portion of the money raised during the weekend is donated to area charities.

2005's Hot Dog Day raised \$8,000 for local charities.

At right, SWE Hot Dog Launch, clockwise from top 1<sup>st</sup> place team (127 feet)

Matt Williams soph CES, Stephen Peifer junior ME, Richard Chan, and Jeff Ohliger

Other competitors: "Team Triple S" (below right) and "Team VW" (below left).

Pine Hill Derby winners (clockwise from top):

1<sup>st</sup> place, President Abe Lincoln (J. Carpenter, B. Grillo, D. Vuono, K. Strong)

Most Unique Design, Blur III (Jason Karutz, Wade Pierce, Scott Wunsch, Kevin Manganni, Andy Urmann)

Most Environmentally Friendly, Bare Necessities (A. Iovich, L. Smith)



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