

CONNECTION

SUMMER 2015

Greetings from the Department Head

ChE enters a period of growth

Alumni and Friends: Greetings from Blacksburg. I hope this latest edition of the *ChE Connection* finds you well. Much activity has occurred in the past 12 months in the department as we adapted to our new location in Goodwin Hall. Our main office is up and running smoothly thanks to the efforts of our dedicated staff. Graduate students, postdocs, and faculty are benefitting from the new laboratory infrastructure after the enormous effort required to move the research facilities in Randolph to Goodwin Hall. The few "issues" we have had with the new building have all been minor. Needless to say, we are thrilled with our new facilities. If you have not yet seen our new digs, you should stop by for a visit when you are next in Blacksburg.

Demand remains high for the ChE major, and again this past year outpaced the target undergraduate enrollments called for by College



DAVID COX

of Engineering's enrollment management plan introduced two years ago. The plan aims to control the enrollment of sophomores entering a major based on the number of full time faculty in the department. The plan is not an absolute cap, as it allows that all students with a 3.0 GPA

or better to enter the major of their choice, regardless of numbers. We exceeded our target enrollment by more than 60 percent this past year, and we continue to have one of the highest student/teacher ratios in the College of Engineering.

As in previous years, the faculty and staff have worked hard to maintain the quality of our undergraduate program as our enrollments continue to climb. They all have my admiration and thanks for their dedication. The demand has been met with an enthusiastic investment of new faculty for the department by the College of Engineering. We have hired two new tenure-track faculty in each of the past two years, and we will again have multiple faculty openings for the coming year.

Our continuing success as a department owes a debt of gratitude to our alumni who provide unrestricted financial donations to the department that we use to support our

educational mission. Your contributions are important in helping us maintain the quality of our programs through direct support of our teaching mission, student travel and recruitment, outreach, and a host of other uses for which there is no state budget.

Thank you for your help!

We love to hear from our alumni, so please stay in touch. If you are in the area, I encourage you to stop by for a visit and see our new building. Even if you are unable to make it back to campus we would still very much like to hear from you. Please take a moment to complete the Alumni Information Form near the back of this newsletter, or the online form you can find through the "ChE Alumni" link on the right hand side of our departmental website (<http://www.che.vt.edu/>).

Best wishes,

Professor and Head



DR. AYMAN KARIM

ChE welcomes new faculty

The chemical engineering department welcomes two new faculty members who joined the department for the fall 2014 semester.

Ayman Karim joined the department as an associate professor of chemical engineering. Previously, Karim was a staff member at Pacific Northwest National Lab. His research interests are in heterogeneous catalysis and nucleation and growth of colloidal nanoparticles for catalytic applications. He has initiated research

See *New Faculty*, page 2



DR. HONGLIANG XIN

DEPARTMENT NEWS

ChEGSA graduate student symposium

The Chemical Engineering Graduate Student Association (ChEGSA) hosted another successful Graduate Student Symposium on April 3, 2015. The one-day event featured 13 contributed oral presentations by the graduate students covering all aspects of graduate research in the department, a poster session

and reception in the evening, followed by a banquet.

The program chair for the symposium was graduate student Margaret Cassin, assisted by co-chair Ami Jo. Highlighting the program was the plenary address given by Kaushal Rege, of Arizona State University's Chemical Engineering Department.



Symposium chair and graduate student Maggie Cassin presents her work on the design of antimicrobial and wound healing thin films.

El-Halwagi gives Doumas Lecture

The 2015 Bill and Ann Doumas / Dow Chemical Distinguished Lecture was presented by Mahmoud



El-Halwagi, the McFerrin Professor of Chemical Engineering at Texas A&M University, and the managing director of the Gas and Fuels Research Center in the Texas Engineering Experiment Station. The lecture, titled "Sustainable Process Design through Mass and Property Integration," was delivered on April 6, 2015.

ChE establishes new endowment

Recognizing the need for endowments to provide support for departmental priorities, Virginia Tech's chemical engineering department has established an endowed fund, the Chemical Engineering Excellence Fund, to provide unrestricted support to the department in perpetuity.

Donations to the endowment will be

applied to the principal of the fund, and will provide a lasting contribution to the financial resources of the department.

Income earned by the fund will be available for use to enhance the educational experience and the learning environment for all of our students by supporting initiatives for which there is no state budget.

Where are the class composites from Randolph Hall?

Over the years it has been a common sight to see visitors in the hallways of Randolph looking at the composite photos of the ChE graduating classes to find photographs of themselves, their friends, or family members.

With the move to Goodwin Hall, there is insufficient wall space in a ChE common area to display all of the class pictures.

To preserve this aspect of Virginia Tech life, the department had a professional photographer digitize the

composites, and the plan is to post them electronically on an interactive flat screen so visitors can call up their graduating class of choice.

The department hopes to have this project completed soon.



Liu is candidate for professor of the year

The Virginia Tech honorifics committee selected ChE professor Y.A. Liu as Virginia Tech's candidate for the 2015 U.S. Professor of the Year Award competition.

The award is sponsored by the Council for Advancement and Support of Education and the Carnegie

Foundation for the Advancement of Teaching.

The award recognizes a candidate's extraordinary dedication to undergraduate teaching.

The results of the 2015 competition have not yet been announced.

New Faculty

Continued from page 1

projects to study nanoparticle growth mechanisms and the synthesis of fuels and chemicals from shale gas and biomass feedstocks.

Hongliang Xin joins the department as an assistant professor of chemical engineering. He comes to Virginia Tech following postdoctoral work at the SLAC National Accelerator Laboratory at Stanford University. Xin is a computational scientist with research interests in surface reactivity of transition-metal alloys and oxides, and in the understanding of dynamics of surface bond breaking and bond formation processes. He has started projects on photocatalytic water splitting, the understanding of metal-organic frameworks for catalytic applications, and sensitized solar cells.

FACULTY AND STAFF NEWS

Baird reappointed Giacco professor

Adapted from text written by Mark Owczarski and Steven D. Mackay

Donald G. Baird has been reappointed as the Alexander F. Giacco Professor of Chemical Engineering by the Virginia Tech Board of Visitors.

The Giacco professorship is funded through the Alexander F. Giacco Endowed Presidential Chair Fund, which was initiated by a donation from Hercules Inc., to honor the many contributions to business and education by Giacco, former president of Hercules and a 1942 alumnus of Virginia Tech's Department of Chemical Engineering.

A member of the Virginia Tech community since 1978,



BAIRD

Baird is internationally known for his expertise, research, and teaching in the field of polymer rheology and its application to polymer, biopolymer, and polymer composite processing. His research approach utilizes both theoretical and experimental tools, and he continues to find ways to apply these tools to new areas of research, including fuel cells and biomaterials.



Kiran recognized at Author's Day ceremony

Erdogan Kiran was recognized at the Virginia Tech Author's Day on February 24, 2015 for the books he has been editing as the series editor of the Elsevier Book Series on Supercritical Fluid Science and Technology. These are advanced monographs that provide pedagogical treatments of significant application areas of supercritical fluid science and technology in which Kiran is a world recognized leader.

Bortner wins Sporn award

Michael J. Bortner, ChE undergraduate academic advisor and instructor, has earned the highest college-wide award given to a professor by the engineering students, the 2015 Sporn Award for Teaching Excellence in Engineering.

The award is made by the Student Engineers' Council after choosing among candidates nominated for the award by the student body of the College of Engineering.



BORTNER

Karim and coworkers featured in Journal of Catalysis

A recent paper published in the Journal of Catalysis by Ayman Karim and his coworkers was chosen by the editors as a featured article for February 2015. This recognition is given for articles deemed "worthy of extra attention, be it for the quality of the research, the clarity of the exposition or the novelty of the findings." The paper describes the role of rhenium in enhancing the activity of Pt-Re catalysts in the steam reforming of glycerol to produce syngas or hydrogen. Glycerol is an abundant by-product from the biodiesel industry and is also a model molecule to study the conversion of biomass derived sugars.

Durrill nominated



DURRILL

the division of student affairs, recognizes these outstanding faculty members annually through the "Favorite Faculty" Program. For the second year in a row, Virginia Tech students have nominated Preston Durrill for this recognition.

Each year, students living on campus are allowed to recognize faculty "who have positively impacted their learning experiences at Virginia Tech." Housing and Residence Life, a department within

ChE staff member receives Dean's Award



VAUGHT

Michael Vaught of the chemical engineering department received the College of Engineering Dean's Award for Technical Staff.

This is the second year in a row the award winner has been a member of the ChE shop.

FACULTY AND STAFF NEWS

Karim receives 3M Non-Tenured Faculty Award



KARIM

Ayman Karim, a new associate professor of chemical engineering has been selected to receive a 2015

3M Non-Tenured Faculty Award which recognizes outstanding new faculty based on their research, experience and academic leadership. Karim was recognized for his research on understanding the mechanisms of colloidal nanoparticles synthesis by combining microfluidics and in situ x-ray scattering and spectroscopy. The 3M Non-Tenured Faculty Award was created over 25 years ago by 3M's Technical Community in partnership with the 3M Giving Program to invest in outstanding young faculty.

Oyama wins American Chemical Society awards

The American Chemical Society Division of Energy and Fuels selected S.Ted Oyama as recipient of both the 2014 Distinguished Researcher Award and the 2014 Storch Award.

Oyama holds a dual position as a professor of the

Chemical Systems Engineering Department at the University of Tokyo and the Chemical Engineering Department at Virginia Tech.

For the 2014 Distinguished Researcher Award, Oyama is recognized for his substantial contributions to

the field of heterogeneous catalysis, in particular in the hydrodesulfurization and hydrodenitrogenation of petroleum and coal-derived feedstocks.

For the Storch Award, he is recognized for his broad contributions to the field of fuel science. This has included work on catalytic hydrogen production by reforming, selective oxidation of hydrocarbons, biomass conversion, and studies of inorganic membranes for gas separations.



OYAMA



Chang Lu received the Dean's Award for Research Excellence for 2015 from College of Engineering Dean Richard C. Benson during the annual College of Engineering reception and awards ceremony in May. Lu was recognized for his work in epigenomics.

Department notes changes in office personnel



Nora Bentley (left) retired from the department in February 2015 after 23 years of service to Virginia Tech with the past seven years as the business manager in chemical engineering. The department offers a special thank you to Nora for her years of dedicated service.

Following Nora's departure, Melanie Darden (right) took over the job of business manager. Melanie comes to us from computer science where she handled a wide range of fiscal responsibilities.



STUDENT NEWS

ChE undergrad wins Goldwater scholarship

*Written by Alison
Matthiessen*

Louis “Bobby” Hollingsworth, a chemical engineering undergraduate and University Honors student, has been active in undergraduate research, both at Virginia Tech and through internships and programs at other institutions. In the summer of 2014 he interned at the National Institutes of Health as a research intern in a structural biology

lab of the National Cancer Institute. He did additional research with the National Institutes of Health (NIH) over the winter, with some work continuing this spring. On campus, he works in the lab of Richard Gandour, professor of chemistry, as well as with the Chem-E-Car Team and TEK Robotics.

Hollingsworth plans to obtain a doctorate in biochemistry and molecular biology and

then conduct biomedical research at an institute like the NIH while mentoring graduate students. He wants to make positive contributions to biomedical sciences and



HOLLINGSWORTH

human health, particularly using molecular biochemistry to study cancer and HIV, both of which have impacted him personally through the deaths of family and friends, inspiring him to want to find a cure.

Goldwater scholarships are awarded through a national competition to students “who have outstanding potential and intend to pursue research careers in mathematics, the natural sciences, or engineering.”

Finishes 4th in vehicle competition

Car team wins video award

*Modified from text originally written
by Lynn Nystrom*

The Chem-E-Car team earned accolades in the national American Institute of Chemical Engineering (AIChE) student event held in Atlanta in November 2014. The six-member team, comprised of chemical engineering students, won the video competition and finished fourth out of 36 competitors in the vehicle competition. The vehicle competition tests the ability of the undergraduate team to design, build, and control a vehicle that is both powered and stopped by a chemical reaction. The video competition highlighted vehicle technology and creativity. Teams representing both national and international colleges and universities competed.

In the following spring (April 2015), the team finished third out of 15 teams in the Mid-Atlantic Regional Competition held at the University of Maryland, and for the third consecutive year qualified for the finals of the Chem-E-Car competition. The team will travel to Salt Lake City,

See Car Team, page 6



From left: Peter Rim, the Joseph Collie Chaired Professor of Chemical Engineering at Virginia Tech and adviser to the team, Coogan Thompson of Grundy, Virginia, Jessica Kersey of Glouster, Virginia, Tyler Reif of Reston, Virginia, Yining Hao of Chengdu, China, Rachel Crews of Chester, Virginia, and Bobby Hollingsworth of Springfield, Virginia.

STUDENT NEWS

Ngo receives 2015 Howe award

Mai Ngo was selected as the 2015 James Lewis Howe Award recipient for the Department of Chemical Engineering. This award from the Blue Ridge chapter of the American Chemi-



NGO

cal Society recognizes the outstanding achievements of graduating seniors in the chemical sciences.

In addition to receiving top marks in her courses at Virginia Tech, Ngo also conducted undergraduate research with faculty in materials science and engineering, chemistry, and chemical engineering. She participated in outreach programs to plan and present STEM activities to K-12

students, and mentored 12 high school junior and senior students interested in engineering.

Ngo is a member of Tau Beta Pi, and the Virginia Tech student chapter of $\Omega X \Sigma$, the chemical engineering honor society, where she served as president during her senior year.

Ngo will begin graduate studies in chemical engineering at the University of Illinois in the fall.

Graduate school selects Orbach as outstanding doctoral student



ORBACH

Virginia Tech's Office of the Vice President and Dean for Graduate Education announced that

Sophia M. Orbach, a graduate student in chemical engineering and a member of the computational tissue engineering interdisciplinary graduate program, has been chosen by the Virginia Tech Graduate School as the 2015 Outstanding Interdisciplinary Doctoral Student at Virginia Tech.

The goal of her research is to use a 3D multicellular liver culture and transcriptomic analysis (RNA-seq) to develop a model for predicting hepatotoxicity (chemical-driven liver damage) in humans.

She is co-advised by Padma Rajagopalan of chemical engineering and Marion Ehrich of biomedical sciences and pathobiology in the Virginia-Maryland College of Veterinary Medicine.

Car Team

Continued from page 5
Utah, in November 2015 for the national competition.

Virginia Tech's team consisted of two seniors: team leader Jessica Kersey, of Gloucester, Virginia, and technology leader Coogan Thompson of Grundy, Virginia; three juniors: Yining Hao, of Chengdu, China, Tyler Reif, of Reston, Virginia, and Rachel Crews of Chester, Virginia; and one sophomore: Bobby Hollingsworth, of Springfield, Virginia.

Their faculty advisor is Peter B. Rim, the Joseph H Collie Distinguished Visiting Professor of Chemical Engineering. The team acknowledges the alumni support of Steve Cope of Exxon-Mobil, who provided funding for the project, and of Joe Collie, who founded the Collie Professorship.



AICHE President Shashwat Sinha accepts the award from Dr. Clifford Henderson, Chair of the AICHE Student Chapters Committee (left). AICHE officers (right).

AICHE Student Chapter Receives National Recognition

By Lynn Nystrom

The Virginia Tech student chapter of the American Institute of Chemical Engineers (AICHE) has received an Outstanding Student Chapter Award for 2013-2014. This recognition is reserved for only 15 of the 208 student chapters from around the world. Shashwat Sinha, student chapter president, and Y.A. Liu, faculty advisor, received the award during the student conference portion of the AICHE annual meeting in Atlanta on November 16, 2014.

STUDENT NEWS

ChE students win two national competitions for safety in process design

Three Virginia Tech chemical engineering seniors from the class of 2014, Pratyush Agarwal, Brent Bostwick and Chris Brockman, have won two national competitions for safety in process design sponsored by the American Institute of Chemical Engineers. The student group participated in the 2014 AIChE national student design competition to develop an

inherently safe process for the manufacture of the next generation of influenza vaccines. The group won the Safety and Chemical Engineering Education (SACHE) Jack Wehman Design Award for Safety in Design, and the Safety and Health Division Award for Inherently Safer Design. This is the first time that a single university team has captured both top awards in safety in

process design sponsored by the national chemical engineering professional society, and the fourth time since 2006 that Virginia Tech student teams have won top national competitions for safety in process design. The awards were presented at the AIChE annual conference in Atlanta November 2014.

Y. A. Liu, who taught these students their senior

design courses in chemical engineering, credits this success to the hard work and intelligence of the students, and to the strong support of Bill Barnett, general manager of the BAE Systems, Radford, Virginia, which has an experienced process safety team and gives annual guest lectures on process safety to Virginia Tech chemical engineering seniors.

Bachelors, Masters, and Ph.D. degrees awarded

The department awarded 106 bachelors degrees during the spring 2015 commencement. The department also awarded the following masters and Ph.D. degrees over the past year.

HERMAN, DAVID (Ph.D.)

Controlling Colloidal Stability Using Highly Charged Nanoparticles

Co-advisors: John Walz and Richey Davis

JAIN, ISHAN (MEng)

A Review of Polymer-Based Particles and Amorphous Solid Dispersions for Oral Drug Delivery

Advisor: Richey Davis

LOUFAKIS, DESPINA (NELIE) (Ph.D.)

Microfluidics for Cell Manipulation and Analysis

Advisor: Chang Lu

RADIOM, MILAD (Ph.D.)

Correlation Force Spectroscopy for Single Molecule Measurements

Advisor: William Ducker

SEO, DONG JIN (Ph.D.)

Microfluidic Gas Flow Near Functionalized Solid Surfaces

Advisor: William Ducker

VAIDYA, PRASAD (M.S.)

Alternative Strategies to Incorporate Biomolecules within Electrospun Meshes for Tissue Engineering

Advisor: Aaron Goldstein



TAYLOR and SNODGRASS

ChE students represent Virginia Tech in the 2015 GM Innovation Challenge

ChE senior Shane Taylor and junior Alex Snodgrass were chosen as the only team from Virginia Tech to participate in the national 2015 GM Innovation Challenge at GM Global Headquarters in Detroit, Michigan in April.

The team presented an idea to improve quality control in manufacturing by using 3D scanning technology to rep-

resent a manufactured part for direct comparison to the design drawings.

While in Detroit, they also participated in a challenge in which they were given a specific idea and were required to develop a business model within four hours.

The pair did not win the competition, but came away excited about the experience.

ALUMNI NEWS

Price serves on International Alumni Planning Board

Alumna Lisa Price is serving on the Virginia Tech College of Engineering International Programs Alumni Planning Board.

Price is general manager of business development for GE Energy Management where she is responsible for leading global business development activities for Energy Management, including for power conversion, industrial solutions, digital energy and intelligent platforms businesses. Price is also responsible for leading the energy man-



PRICE

agement integration planning team.

Price earned a B.S. in chemical engineering from Virginia Tech and an MBA from Tulane University. In addition to her service on the College of Engineering International Programs Alumni Planning Board, she also

serves on the Virginia Tech Chemical Engineering Advisory Board and as a director for the non-profit organization,

Hope Imaging. *(Editor's Note: Text adapted from the Bio summary of all IAB members 2014 4-8-2015.)*

Online Alumni Information System

The department welcomes updates from its alumni about your lives and careers. The easiest way to send updates is to use the online alumni update system, which can be accessed via the department's homepage, www.che.vt.edu, and clicking on "ChE Alumni" link on the right side of the page. On this form, you can specifically state what level of privacy we should use with your information. This information will be published in our *Connection* newsletter.

As always, if you are more comfortable with paper and pen, feel free to complete the form at the end of the newsletter and mail it back to us. Again, this form allows you to specify exactly how much of the information you want published.

Giving to Chemical Engineering

One of the primary reasons for the department's continued success is the generous support of our alumni. Your contributions not only provide funds for the day-to-day operations of the department, but also support scholarships and travel for our undergraduate students, fellowships for our graduate students, and even support for activities such as our external seminar program that brings outstanding researchers from other institutions here to Virginia Tech to interact with our faculty and students. Your continued support is vital to our goal of becoming one of the top chemical engineering programs in the country.

To make it as easy as

possible for you to support our department, a link has been added on our homepage (www.che.vt.edu) that will direct you to a form for making a gift online. The link is entitled "Giving to ChE" and can be found on the upper right hand side of the page. The page describes the method for designating your gift for the chemical engineering department using the "Enter your own" button. If you type in "Department of Chemical Engineering" in the form, you can be assured that your support will come directly to us and that it will be used wisely. If you would like to contribute to our new endowment fund, specify "Chemical Engineering Excellence Fund."

Virginia Tech Chemical Engineering Department **CONNECTION**

- David Cox**..... Department Head
- Jane Price**..... Coordinator
- David Simpkins**..... Designer

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ALUMNI NEWS

Sinha to head alumni mentoring program

Shashwat Sinha, a 2015 B.S. graduate of chemical engineering, has agreed to serve as the first alumni liaison for the department.

During his time at Virginia Tech, Sinha served two terms (May 2013 - May 2015) as the president of the AIChE student chapter.

During his service with the student chapter, he worked to increase student interconnectedness, and to increase the organization's national involvement and professional outreach. During his second term as president, he started the organization's first-ever student mentoring program to connect groups of seniors, juniors, and sophomore chemical engineering students into mentoring groups, and expanded the effort to include graduate students as his Virginia Tech career came to a close.

The work the organization did during this time led to a national AIChE Out-



SINHA

standing Student Chapter Award for the department for the first time. As the ChE alumni liaison, his aim is to develop and

build strong relationships between the alumni and the college, and specifically to facilitate alumni mentoring of current students and recent graduates.

If you have an interest in sharing your knowledge and experience to benefit the professional growth of our students and alumni, please contact him by email at shashwat@vt.edu. Also,

please consider updating your entry in the Virginia Tech Online Alumni Directory (secure.hosting.vt.edu/alumni.vt.edu/Directory/auth/login.php) available to all Virginia Tech alumni who have a valid VT PID and password. Update your entry by logging into my.vt.edu, selecting the Personal Info tab at the top of the page, and then clicking on "Manage Your Profile."

Wagner inducted into Academy of Engineering Excellence

Adapted from text written by Lynn Nystrom

In a ceremony held at the Inn at Virginia Tech on April 16, 2015, Virginia Tech's College of Engineering inducted eight new members into its Academy of Engineering Excellence, including Lori Wagner, an alumna of chemical engineering and a member of the department's external advisory board. The academy is an elite group of engineering alumni who have achieved multiple honors



WAGNER

throughout their careers.

Wagner is the special projects leader for advanced fibers and composites for Honeywell International. She holds more than 20 patents, and in her first management position she supervised

the process development group for the well-known and registered Spectra fiber and Spectra Shield materials. As her positions evolved she became a recognized expert in her field of supplying high-performance fibers that make bulletproof fabrics. The various forms of body armor have saved hundreds of lives in recent wars including Afghanistan and Iraq, and are also now being used by first responders and civilian defense team members.

CLASS NOTES

The information below was taken from the mail-in response cards that the department received during the past year, or through the on-line alumni feedback form. The on-line form can be accessed via the Alumni Feedback tab on the left-hand side of the department's home page (www.che.vt.edu). Our goal is to continue to publish all such information that we receive so that our alums can stay connected both to the department and to each other.

1960

Robert R. Moore (B.S.)

Robert has retired from chemical engineering, and has published two books of fiction: "The Neighbor" and "The Foundation." He also contributes technical articles to Paperitalo Publications. Robert can be

reached at rmoore4291@att.net.

1961

Richard G. Rice (B.S.)

Other degrees: M.S., Penn State; Ph.D., Univ. of Pennsylvania

Richard (Dick) is an emeritus professor from LSU, and

in 2012 published the second edition of the textbook "Applied Mathematics and Modeling for Chemical Engineers," Rice, R.G. & D.D. Do, John Wiley. He can be reached at rice007@century.net.

1964

Stuart Robert Levin (B.S.)

Other degree: M.S., Univ. of Cincinnati

Stuart reports he is retired from the Pennsylvania Department of Environmental Protection.

See Class Notes, page 10

CLASS NOTES

Continued from page 9

1968

William H. Wingate III (B.S.)

Bill is a senior director of business development at IHI E&C International Corp. He can be reached at billwingate@att.net. He lives in Texas.

1969

Thomas Fuller (B.S.)

Other degree: M.S., Virginia Tech

Thomas is a project manager for Kar Oil and Gas Ltd., Erbil, Kurdistan, Iraq. His contact information is thomas.fuller231@yahoo.com.

1970

James Gideon (B.S.)

Other degrees: M.S., Virginia Tech; Ph.D., Univ. of Cincinnati; MD, Ohio State Univ.

After beginning his career at Proctor and Gamble as a research engineer, James went on to work with the Center for Disease Control doing environmental health research on reducing occupational disease. During this time he completed his Ph.D. at the University of Cincinnati, before moving on to medical school. James completed a fellowship in rheumatology at the Cleveland Clinic, and plans to practice rheumatology for 20 more years. He works with Northwest Ohio Rheumatology, and believes chemical engineering is an amazing background for medicine.

Thomas H. Shelton (B.S.)

Thomas is retired from Mead-Westvaco and lives in Roanoke, Virginia. His contact information is tsportslin@aol.com.

1978

Ben Macbeth (B.S.)

Ben reports he worked for about thirty years in crude oil

refining holding many different positions. Currently he is a senior technical services engineer with the refinery equipment company STRATCO.

Last year Ben and his oldest son attended the homecoming football game at Virginia Tech and he states his son "loved it." Ben says his VT professors would be proud to know he actually has applied his education in all his working career.

1980

Cynthia Bazakas Rustin (B.S.)

Cynthia can be reached at cbrustin79@gmail.com.

1981

Doug Baryliski (B.S.)

Doug reports he has retired from the Navy Department after 33 years in fire protection.

1982

Alton L. Moore (B.S.)

Other degrees: M.S., Univ. of Virginia; M.S., Southern Methodist Univ.

Alton is a senior principal engineer with Raytheon Space and Airborne Systems and works in printed wiring board and circuit card assembly manufacturing. He also has worked in advanced materials manufacturing in the fiber optic industry. He lives in Texas and can be reached at altonmoore8@yahoo.com.

1983

Linda J. McAdam (B.S.)

Linda is a commodity manager for Manitowoc Cranes.

1984

Michael Tran (B.S.)

Michael can be reached at mtranarlington@aol.com.

1985

A.J. Misiti (B.S.)

A.J. works as a regional sales director for Rockwater Energy Solutions. He can be reached at ajmisiti@gmail.com

William Roller (B.S.)

Other degree: MBA, Darden School, UVA

William is the CEO and President of Swanson Industries. His contact information is william.roller327@gmail.com

1987

Ann Johnson Perry (B.S.)

Ann is the Director of Regulatory Compliance at Johnson & Johnson in Georgia.

1989

Robert M. Walker (B.S.)

Robert is a senior engineering programmer at Honeywell.

1995

Eric Parr (B.S.)

Eric is a technical manager at Canandaigua Manufacturing Plant in New York.

1997

Dan Dunhem (B.S.)

Dan reports he is a field engineer at Facility Dynamics Engineering. He lives in Cary, North Carolina and his contact information is dan.dunhem@gmail.com.

1999

Gino Venditti (B.S.)

Other degree: MBA, William and Mary

Gino reports he is now retired.

2000

James Dietrich (B.S.)

Other degree: MBA, Penn State Univ.

Jim mentions he worked for

National Starch & Chemical Company as a sales supervisor from 2000-2008 and then went to Henkel Corporation as the key account manager in 2008, moving on to senior key account manager in 2009 and finally to market segment director until 2014.

2001

Travis A. Smith (B.S.)

Other degrees: M.S. and Ph.D., Florida State Univ.

Travis is an oceanographer with the Naval Research Laboratory in Slidell, Louisiana. He can be reached at travis.smith@nrlssc.navy.mil.

2009

Julie Cushen (B.S.)

Other degree: Ph.D., Univ. of Texas

Julie received her Ph.D. from University of Texas at Austin in December 2013. Her dissertation was titled "Silicon-Containing Block Copolymers for Sub-20 nm Pitch Patterning." She now is on the research staff at HGST, a Western Digital Company in California. Julie can be reached at cushenj@gmail.com.

2010

Bailee Roach (B.S.)

Bailee is a graduate student at University of Texas, Austin. She can be reached at bailee.roach@gmail.com.

2011

Taylor Keating (B.S.)

Taylor works as a product engineer at Materion Barr Precision Optics in Illinois. His contact information is tcbkeating@gmail.com

CONNECTION

DONORS

The department gratefully acknowledges the following individuals, corporations, foundations and trusts for their support during 2014-15.

INDIVIDUALS

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 Mr. Steven R. Cope and Mrs. Jeanne H. Cope (L)
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