

# THE MAJOR WV

Department of Chemical Engineering  
West Virginia University  
P.O. Box 6102  
Morgantown, WV 26506-6102

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to help us stay in touch with our alumni and friends. Follow us to get information on student organizations, scholarships, student life, and the accomplishments of our students and graduates.

## ALUMNI UPDATE

PLEASE WRITE TO US!! We want to know where life has taken you since you left West Virginia University. Complete and return this form with your news and comments. Pass this newsletter on, or let us know any alumni who are not receiving *The Major*.

Send to:  
Department of Chemical Engineering • West Virginia University  
403 ESB, PO Box 6102 • Morgantown, WV 26506-6102

Or, email updates to [linda.rogers@mail.wvu.edu](mailto:linda.rogers@mail.wvu.edu).

Name: \_\_\_\_\_

Degree(s): \_\_\_\_\_ Year: \_\_\_\_\_

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## WINTER 2011-12

Brief News of Professional and Family Activities for Future

Newsletters: \_\_\_\_\_

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Suggestions/Comments: \_\_\_\_\_

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For more information, visit our Department web site at  
[www.che.cemr.wvu.edu](http://www.che.cemr.wvu.edu)

A newsletter for alumni and friends of Chemical Engineering

# THE MAJOR WV

DEPARTMENT OF CHEMICAL ENGINEERING

College of  
Engineering and  
Mineral Resources

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This newsletter is published twice yearly to keep our alumni and friends informed of departmental news and ongoing activities. For additional information, visit:

[www.che.cemr.wvu.edu](http://www.che.cemr.wvu.edu)

We continue to make it more informative and useful to our visitors. Let us know your thoughts and comments, and drop us a line.

## MESSAGE FROM THE CHAIR

Now that the biomedical certificate program has been established, and two classes have graduated with the certificate, the time has come to expand it into a degree program. In pursuit of this goal, we invited an engineering dean, who is a biomedical engineer and who had been a BMES/ABET accreditation visitor and was a former member of the Engineering Accreditation Commission of ABET, to visit us this past summer to help us plan the program. With his input in hand, a faculty committee headed by Dr. Robin Hissam, came up with a tentative curriculum, which was shared with the Department's Visiting Committee. Drs. Hissam and Yong Yang also attended the annual meeting of the Biomedical Engineering Society to meet and consult other educators. In the next few weeks, formal permission will be sought from the University to initiate the process of gaining approval for a B.S. degree in biomedical engineering within the Department of Chemical Engineering.

As in previous years, our students have continued to do well. This year, Matthew Thompson and Jennifer Wiegand were named "WVU Outstanding Senior Scholars" and were formally recognized during commencement weekend on May 13. In other successes, three undergraduates—Andrea Sakla, Sara Swanson, and Amanda Thorp—were selected by the NASA West Virginia Space Grant Consortium to be designated NASA Space Grant Scholars. This designation includes a monetary award of \$1,000 each. These students will conduct research, which they will present at the annual Undergraduate Research Day at the Capitol in Charleston, W.Va. Separately, eight students traveled to Minneapolis, Minn., in October and six participated in the poster competition at the AIChE annual meeting.

Currently, there are 34 seniors, 48 juniors, and 52 sophomores enrolled in the Department. These numbers are likely to rise since the College is experiencing a

boom in freshman enrollment. Early indications are that there may be as many as 60 sophomores next year. Given how many students are interested in graduate school, we have been attempting to offer a research experience to any undergraduate who would like to be involved in this activity.

We are thankful to alumnus William R. Hashinger, Jr., who created the Martha Hopkins Hashinger Research Scholarship in honor of his late wife. The new endowment will provide scholarships for undergraduate women participating in research projects.

At the graduate level, as was mentioned in the previous newsletter, we will now offer the master's degree to those domestic students who enter the program without a Ch.E. degree. They will be required to take only three undergraduate chemical engineering courses—Reaction Engineering, Thermodynamics, and Transport. This will prolong their study by about one semester compared to those students who have an undergraduate chemical engineering degree. Similar to other graduate students, these students will now be offered financial aid from the time they enter the program. The stipend during their first semester of stay will not come from research grants, however. Members of the Academy of Chemical Engineers, who met in Morgantown in April, have come forward to help us by contributing money to establish a new endowment, which qualifies for a Research Trust Fund match. The new fund will provide support to two graduate students each year. Other alumni are also



Rakesh Gupta

»continued on page 2

**Chair's message continued from page 1...**

invited to contribute to this fund. I note with gratitude that, for more than 25 years, the Academy of Chemical Engineers has been helping the Department at crucial times—from the Galli Laboratory renovations to the James Kent Biomedical Engineering Endowment, which helped launch the biomedical certificate program.

The Claude Worthington Benedum Foundation recently made a grant to WVU to promote Linking Innovation, Industry and Commercialization. The first event to be arranged highlighted engineering graduate student research having the greatest potential for commercialization. At this inaugural dinner, held at the Waterfront Place Hotel on September 28, six graduate students and their dissertation supervisors were invited to present posters on their research; industry representatives who had an interest in the research on display were on hand to interact with the students. Of the six CEMR students who made presentations, two were from chemical engineering. Jeremy Hardinger was accompanied by Professor Emeritus Al Stiller and I accompanied Elliot Roth.

Last year, a select number of the nation's most innovative engineering educators were chosen to take part in the National Academy of Engineering's second Frontiers of Engineering Education symposium that was held in California in December. One of those who participated was Dr. Brian Anderson. This year, Dr. Cerasela Dinu was invited to participate in the third Frontiers of Engineering Education symposium in November. We are, indeed, fortunate to have these nationally recognized educators as members of our Department faculty.

I close with a recent noteworthy development concerning the help provided to the U.S. Department of Energy by Dr. Anderson to stem the flow of oil into the Gulf of Mexico from BP's Deepwater Horizon oil platform. On October 27, he was the recipient of an Achievement Honor Award given by Secretary Steven Chu of the D.O.E. for his work, along with other team members; this award is the highest internal non-monetary recognition given to D.O.E. employees and contractors for providing exceptional service to the department and the American people.

I wish you all happy holidays and a very happy new year!

**Rakesh Gupta, chair**

WVU Department of Chemical Engineering

## DEPARTMENT NEWS



Yong Yang

### Yong Yang Joins ChE Faculty

The Department of Chemical Engineering welcomed Dr. Yong Yang, who joined the Department as an assistant professor in August. Yang received his Ph.D. in chemical engineering from Ohio State University in 2005 and his M.S. and B.S. from Zhejiang University in China. Prior to coming to WVU, Yang was a postdoctoral associate in the Biomedical Engineering Department at Duke University. Yang's research interests are in stem cell technology, polymer micro/nanotechnology, and biomaterials. Yang will play an integral part as we develop the biomedical engineering degree program.



Brian Anderson

### D.O.E. Secretary's Achievement Honor Award

Dr. Brian J. Anderson, an assistant professor in Chemical Engineering, is the recipient of a D.O.E. Secretary's Achievement Honor Award. Anderson was selected for this award by Secretary Steven Chu. The Honor Awards represent the highest internal non-monetary recognition given to D.O.E. employees and contractors for providing exceptional service to the department and the American people. The award was presented at a ceremony on October 27, at D.O.E. Headquarters in Washington, DC.



Cerasela Dinu

### National Academy of Engineering

Dr. Cerasela Dinu was selected as one of 65 early-career educators to participate in the National Academy of Engineering's third Frontiers of Engineering Education symposium. Dinu was nominated by College Dean Gene Cilento for this prestigious symposium. Dinu earned both her bachelor's and master's degree from the University of Bucharest in Romania and completed her doctorate at the Max Planck Institute of Molecular Cell Biology and Genetics and Dresden University of Technology in Germany. Dinu joined the chemical engineering faculty in November 2009. Her research focuses on nano/micro devices and systems and biotechnology/bioengineering.



## Dow/Union Carbide-WVU Chemical Engineering

### Seminar Series Honoring R. Richard Bannister

On October 14, Dr. Anthony Cugini presented the Dow/Union Carbide Reaction Engineering and Catalysis Seminar honoring R. Richard Bannister. The seminar was entitled, "Multi-scale Modeling for CO<sub>2</sub> Capture, Utilization, and Storage."

Cugini received his B.S., M.S., and Ph.D. degrees in chemical engineering from the University of Pittsburgh. Cugini is the director of the U.S. Department of Energy National Energy Technology Laboratory (NETL). He oversees major science and technology development programs at NETL to help solve the environmental, supply, and reliability issues of various energy resources.

Previously, Cugini served as director of the Office of Research and Development at NETL. Cugini has been at NETL since 1987. Prior to joining NETL, he worked at Procter and Gamble and Gulf Research.

### Inaugural DuPont Seminar

The inaugural DuPont Seminar speaker was Dr. Jonathan V. Caspar, DuPont Central Research and Development. The seminar was hosted on Friday, October 21. The title of Caspar's talk was, "Non-Vacuum Based Deposition Processes for the Preparation of Earth Abundant Semiconductors for Thin-Film Photovoltaics."

Caspar received a B.S. in chemistry from the Massachusetts Institute of Technology in 1978 and a Ph.D. in inorganic chemistry, with an emphasis on the photophysics of transition metal complexes, at the University of North Carolina-Chapel Hill in 1982. Following a postdoctoral tenure at the California Institute of Technology, Caspar joined DuPont Central Research and Development in 1983. He has published more than 50 scientific papers and is an inventor of 16 issued U.S. patents.

The DuPont Seminar is made possible by the financial support of the DuPont Company.



## Inaugural Mylan Seminar

The inaugural Mylan Seminar speaker was Dr. Jonathan S. Dordick, departments of Chemical and Biological

Engineering, Biomedical Engineering, and Biology at Rensselaer Polytechnic Institute (RPI). The seminar was hosted on Friday, November 18. The title of Dordick's seminar was, "Enzyme-Based Nanocomposites: From Topological Stabilization to Self-Decontaminating Surfaces."

Dordick joined the RPI faculty as the chair of the Department of Chemical Engineering in 1998. He has been the director of the Center for Biotechnology and Interdisciplinary studies since 2009, and a pacesetter for fundamental and applied research in biotechnology. He is co-founder of EnzyMed, Inc., a pharmaceutical and agrochemical company, and Solidus Biosciences, a company aiming to improve the process of new drug development by providing proprietary decision-enabling technology to enhance drug safety, efficiency and cost. Dordick has published more than 200 papers and holds more than 30 patents.

*The Mylan Seminar is made possible by the financial support of Mylan, Inc.*

## Fire Extinguisher Training Seminar



On October 7, representatives from Safety and Health Extension conducted a seminar on fire extinguishers. The training seminar covered all aspects of fire hazards, including how to safely use a fire extinguisher, the classes of fires, and how to match the right extinguisher to different types of fires. The audience also learned how to inspect an extinguisher and understand the importance of knowing the locations of extinguishers at different locations, as well as the steps to take if a fire should occur.

## ChE Industrial Visiting Committee

The Department's Industrial Visiting Committee held its annual meeting on October 5-6. The following members were present and provided valuable advice and counsel to the Department, especially as we progress with the biomedical engineering degree:

Dr. Steven Auvil, Air Products and Chemicals, Inc.  
 Dr. Kevin DiGregorio, Chemical Alliance Zone and WV TBED  
 Kevin Gilbert, E.I. du Pont de Nemours & Company  
 Dr. Sadhan Jana, The University of Akron, Polymer Engineering  
 Dr. George Keller, MATRIC  
 Dr. Kenneth Miller, Mylan Inc.  
 Dr. Valerie Patrick, Bayer Corporation  
 Dr. Geo Richards, U.S. Dept. of Energy/NETL  
 Vince Stricker, Dow Chemical Company  
 R. Ingrid Warren, Momentive Performance Materials

Steve Alford from Milliken and Ray Page from Worcester Polytechnic Institute were unable to attend the meeting due to scheduling conflicts. The committee welcomed new member Kevin Gilbert from du Pont. Ingrid Warren stepped down as chair of the committee after serving for three years. Kevin DiGregorio will be taking over the chair position for the committee. Our thanks go to Ingrid for a job well done and to Kevin for accepting the position.

## Former Post-Doc Visits Department

On July 25, Dr. Kunio Kato visited the Department with Amy Wen. Kato was a post-doctoral fellow with Professor C.Y. Wen, performing research in the area of fluidization. After leaving WVU, Kato was a professor at Gunma University in Japan from 1980-2002; he is now professor emeritus. Current chemical engineering doctoral student, Adam Finnis, hosted Wen and Kato during their visit to the Department.



## COLLEGE NEWS

It is an exciting time for the College of Engineering and Mineral Resources as we begin to celebrate our 125th anniversary. To kick off the celebration, we will be breaking ground for a new Advanced Engineering Research Building adjacent to the Evansdale Library in early 2012. The new building will have 74,000 usable square feet. The majority of the space in the new building will be research laboratories; however there will be state-of-the-art classrooms, a learning center, and faculty and staff offices as well. The new building is needed, as our faculty count and student enrollment continues to increase (see University News for more information about changes to the Evansdale Campus).

## UNIVERSITY NEWS

### New Buildings to Transform Evansdale Campus

A multi-year, \$159.5 million building plan has been approved by the Board of Governors that will give the College of Physical Activity and Sports Science its own space, as well as a new advanced engineering research building, a new agricultural sciences building, and new greenhouse. Coupled with a Student Wellness center and upgraded recreation fields nearby, the Evansdale campus will change dramatically in the next few years.

The new buildings will feature state-of-the-art facilities and bigger classrooms, and enable more general education classes to be held on the Evansdale Campus. One of the goals of the project is to make the buildings and campus more aesthetically pleasing and accessible for pedestrians. The new buildings will be modeled after WVU's downtown historic buildings and will include stone, brick, and bigger entrance ways.

### WVU Ranked 164 of National Universities

WVU is ranked 164 in *U.S. News & World Report's* Best Colleges 2012, up 12 spots from last year. The rankings are based on admission standards, faculty salaries, student retention, graduation rates, financial resources, and peer surveys. The national university ranking groups WVU with Ivy League schools, private universities, and other public land-grant universities, but not necessarily peer institutions. The University was ranked 89 among public institutions in the U.S. WVU is definitely moving in the right direction!

## STUDENT NEWS



**Alan Campbell**, an M.S. student performing research under the direction of Dr. Cerasela Dinu, was awarded a travel stipend to attend the ASME-IMECE 2011 Conference. The conference was held in Denver, Col., in November.



**Chenbo Dong**, a Ph.D. student under the direction of Dr. Cerasela Dinu, participated in an art competition in the Directorate for Engineering at the National Science Foundation (NSF). Dong was one of the winners of the competition and his entry will be displayed at NSF. His entry was entitled, "Collagen Nano Kaleidoscope."



**Reem El Dawud** is the recipient of a WVNano Graduate Fellowship. The program supports Ph.D. graduate students from under-represented classes in science, technology, engineering, and math (STEM) disciplines to increase STEM diversity at WVU and to ensure lifetime career success through comprehensive career training. El Dawud is working under the direction of Dr. Cerasela Dinu.

## Recent Graduates

The Department has 134 undergraduate students enrolled for the fall 2011 semester in the sophomore through senior years. This past May, we graduated 30 students with a B.S. degree.

The BSChE graduates for 2010-2011 are shown below. Our congratulations and best wishes to all of them in their careers! Please keep in touch!

### CLASS OF 2011

#### MAY 2011

Zachary Baker  
 Jamie Barr  
 Jordan Beilhart  
 Sandra Bruce  
 Joshua Caldwell  
 Alan Campbell  
 Kristen Carpenter  
 Nathaniel Carr  
 Amanda DeFusco  
 Andrew Graves  
 Michael Grimlich  
 Kevin Gross  
 Nathaniel Guy  
 Alexandria Harris  
 Cory Hinerman  
 Paul Kast  
 Kristen Kief  
 William Kistler, Jr.  
 John Maxim  
 Zachary Mayes  
 Owen McGrath  
 Adam Miller  
 Molly Nagowski  
 Matthew Payne  
 Erik Rasky  
 Thomas Sobray  
 Matthew Thompson  
 Derek Walls  
 Jacob Weidman  
 Jennifer Wiegand

If your company is hiring, please let us know. We are always interested in providing more opportunities for our graduates.

In 2011-2012, the Department has 30 full-time graduate students enrolled, 19 of whom are in the Ph.D. program. We graduated 16 M.S. students and two Ph.D. students during the past academic year. Their names, research topics, and research advisors are as follows:

#### AUGUST 2010

**Santhoshi P. Dixit** (M.S.)  
 Research Advisor: David J. Klink  
*"Determination of Equilibrium Binding Constants for LPS Interaction With TLR4"*

**Ravinder K. Garlapalli** (M.S.)  
 Research Advisors: Eung H. Cho and Ray Y.K. Yang  
*"Leaching of Chalcopyrite with Sodium Hypochlorite"*

**Yuan Li** (M.S.)  
 Research Advisor: Lloyd Carroll, WVU Dept of Chemistry  
*"Aerogel Nanocomposites for Energy Applications"*

**Mayuri Mukka** (M.S.)  
 Research Advisors: Dady Dadyburjor and Edwin Kugler  
*"Parametric Study of the Partial Oxidation of Propane Over Ni and Pt Based Catalysts"*

**Lavanya Nyayapathi** (M.S.)  
 Research Advisor: Brian J. Anderson  
*"Performance and Economics of Methane Hydrate Reservoirs"*

**Avram Siegel** (M.S.)  
 Research Advisor: Robin S. Hissam  
*"Peptide Based Molecular Recognition Elements for Binding 2,4,6-Trinitrotoluene"*

#### DECEMBER 2010

**Vikas Agarwal** (M.S.)  
 Research Advisor: Brian Anderson  
*"An Integrated Model to Compare Net Electricity Generation for CO<sub>2</sub>- and Water-Based Geothermal Systems"*

**Poornima Chateker** (M.S.)  
 Research Advisors: Eung H. Cho and Ray Y.K. Yang  
*"Mercury Removal From Coal by Leaching With Sulfur Dioxide"*

**Vivian M.S. Delgado** (M.S.)  
 Research Advisor: David J. Klink  
*"Developing a Cellular Assay for Screening Inhibitors of STAT4 Phosphorylation"*

**Tobias Denig** (Ph.D.)  
 Research Advisor: Charter D. Stinespring  
*"Electrical Characterization of Buckled Graphene Films Derived From Plasma Etched SiC"*

**Huanling Liu** (M.S.)  
 Research Advisor: David J. Klink  
*"Mathematical Modeling in Understanding NFkB Signaling Pathway"*

**Joseph Stoffa** (Ph.D.)  
 Research Advisor: Alfred H. Stiller  
*"A Novel Global Pattern Recognition Algorithm"*

#### MAY 2011

**Vamsi K. Aluru** (M.S.)  
 Research Advisor: Robin S. Hissam  
*"Ferric Iron Nanoparticle Formation Mediated by Negatively Charged Polypeptides"*

**Kiran P. Chaudhari** (M.S.)  
 Research Advisor: Richard Turton  
*"Development of Advanced Coal Devolatilization and Secondary Pyrolysis Kinetics Models for CFD (and Process Simulation) Codes"*

**Dustin D. Jones** (M.S.)  
 Research Advisor: Richard Turton  
*"Steady State and Dynamic Modeling of the Modified Claus Process as Part of an IGCC Power Plant"*

**Ramanjaneyulu Katta** (M.S.)  
 Research Advisors: Dady Dadyburjor and Edwin Kugler  
*"Water Gas Shift Reaction Catalysis Promoted by Selective Sorption of Carbon Dioxide: Microreactor Experiments"*

**Deepankar V. Sharma** (M.S.)  
 Research Advisor: John W. Zondlo  
*"Ash Removal from Low Rank Coal"*

**Joshua B. Welshans** (M.S.)  
 Research Advisors: Dady Dadyburjor and Edwin Kugler  
*"Tailoring Multi-component Catalysts on Carbon Supports for Fischer-Tropsch Products in the Kerosene Range"*

## Scholarships Announced

In addition to the Academy scholarships that were identified in the summer 2011 edition of *The Chemical Engineering Major*, the following scholarships were awarded for the 2011-2012 academic year.

**Noah Brak**, '12, William W. Hodge Chemical Engineering Scholarship

**Sarah Caprio**, '12, W.J. Fitzgerald Chemical Engineering Scholarship, Lester Kincaid Memorial Scholarship

**Angela Carey**, '12, B.G. McGuire Scholarship

**Holden Carroll**, '13, Candelaria Jacques Memorial Scholarship

**Michael Castle**, '12, W.J. Fitzgerald Chemical Engineering Scholarship

**Robert Guy**, '13, Georgia Nash Memorial Scholarship

**Jordan Holiday**, '13, Williard W. Hodge Chemical Engineering Scholarship

**Nicholas Horvath**, '13, Chemical Engineering Scholarship, Dow Chemical Scholarship

**Catherine Kelly**, '14, Lester Kincaid Memorial Scholarship

**Sarah Lazur**, '13, Camden Coberly Memorial Scholarship

**Eugene Lewis**, '12, James Wimer Memorial Scholarship

**Nathaniel Littleton**, '14, Camden Coberly Memorial Scholarship, Candelaria Jacques Memorial Scholarship

**Joshua Long**, '13, Williard W. Hodge Chemical Engineering Scholarship

**Garrett Maner**, '12, John M. Summerfield Chemical Engineering Scholarship

**Justin Marcinizyn**, '14, Williard W. Hodge Chemical Engineering Scholarship

**Patrick McBurney**, '12, Lester Kincaid Memorial Scholarship, Williard W. Hodge Chemical Engineering Scholarship

**McKenzie Mills**, '14, Lester Kincaid Memorial Scholarship

**Audrey Romberger**, '12, Chemical Engineering Scholarship, Lester Kincaid Memorial Scholarship, James Wimer Memorial Scholarship, Albert J. Monack Scholarship

**Lindsay Roe**, '13, William W. Hodge Chemical Engineering Scholarship

**Nicholas Rotz**, '13, W.J. Fitzgerald Chemical Engineering Scholarship, George A & Sylvia B Crago Scholarship

**Alysia Salva**, '12, Williard W. Hodge Chemical Engineering Scholarship

**Lincoln Schaefer**, '12, Camden Coberly Memorial Scholarship

**Robert Severt**, '14, W.J. Fitzgerald Chemical Engineering Scholarship, Georgia Nash Memorial Scholarship, Albert J. Monack Scholarship

**Carl Shaffer**, '13, Inaugural DuPont Scholarship

**Kyle Taylor**, '14, John M. Summerfield Chemical Engineering Scholarship

**Benjamin Waldron**, '12, Georgia Nash Memorial Scholarship, Williard W. Hodge Chemical Engineering Scholarship

**Jason Ware**, '12, Inaugural William M. Smith Scholarship in Memory of William Smith

**David Webb**, '13, John M. Summerfield Chemical Engineering Scholarship

## SPORTS

By the time you receive this newsletter, basketball season will be well underway. Both the men's and women's basketball teams will be comprised of several young players. It should be an exciting year.

At least 16 regular season games for the men will be on national television (ESPN/ESPN2/ESPNU). The first Big East game will be against Villanova on December 28 at the Coliseum. Big East tournament play starts on March 6 and will be televised on ESPN. Let's see if we can make it back to the NCAA tournament!

The Lady Mountaineers opened the regular season on November 11, hosting Youngstown State. Big East tournament play for the women starts March 2.

**Go Mountaineers!!**

## CLASS NOTES

Please write to us and let us know how and what you are doing. We appreciate your input.

### 1961

**Dr. Samuel J. Kasley** (B.S.) received his law degree from WVU in 2009. Kasley has accepted a position as an attorney with the Beckley Office of Legal Aid of W.Va. He and his family will be residing in Alderson, W.Va.

their combined eight breweries. Edgar and his family relocated to California in October.

### 2003

**Greg Miller** (B.S.) is a post-doctoral fellow at St. Jude Children's Research Hospital in Memphis, Tenn.

### 2006

**Yue Huang** (Ph.D.) is employed by Afton Chemical Corporation in Richmond, Va. He resides in Midlothian, Va.

### 2008

**James Cooper** (B.S.) is a systems engineer for the Department of Navy in Dahlgren, Va. Cooper and his wife, Lauren, reside in Fredericksburg, Va.

### 2010

**Vikas Agarwal** (M.S.) is a process engineer for eTeam, Inc., a private consulting company. He resides in Sacramento, Ca.

**Kevin Gross** accepted a position with Jacobs Engineering at the DOW Tech Site in Charleston, W.Va. He resides in Dunbar, W.Va.

### 2000

**Joshua Edgar** (B.S.) recently accepted a position with MillerCoors as Brewing Unit Manager for their Irwindale, Ca., brewery. He is responsible for daily brewhouse, fermentation, and cold filtering operations. Aside from brewing world class beers, he will be focusing on implementing autonomous work teams and world-class manufacturing principles. MillerCoors was formed in 2008 when SABMiller and MolsonCoors merged their U.S. Operations to gain synergies from

# REMINDER

For those who have sent contributions to the Department this past year, **OUR MANY THANKS!!** These funds are used to support many undergraduate and graduate activities, and to help enhance the overall academic and learning environments in the Department. Your support is greatly appreciated.

Please remember to designate your tax deductible gifts for use by the Department. The best way for contributing to support of WVU Chemical Engineering is to write your check out to the WVU Foundation and designate it for use by Chemical Engineering on the memo line. Also, please check with your company; many provide matching gifts.



LEAVE A LEGACY®

## MAKE A DIFFERENCE IN THE LIVES THAT FOLLOW

Planning ahead is a smart way to make retirement an easier option. Engineers are great planners and live better as a result.

One retirement option that can benefit you and the Department of Chemical Engineering is a gift that pays income whether you're already retired or planning for it now. The gift can be established with the WVU Foundation by making a gift of cash, stocks, mutual funds, real estate, or corporate bonds. It's especially advantageous to use assets that have gone up in value.

A gift arrangement can be set up that will pay either fixed income or variable income for life. The fixed income version requires a gift of \$25,000 or more (but is not available in all states). The option that

pays variable income with growth potential is a charitable trust and the minimum needed is \$50,000. An immediate income tax deduction sweetens the pot, of course.

After you no longer receive the income, the remaining funds can be used to benefit the Department for undergraduate scholarships, research support for non-traditional graduate students, or undergraduate conference or travel funds, as you specify.

To assist you with all of the aspects of setting up such a supportive gift, such as an income illustration, sample gift contracts, and other helpful guidance, contact Robert Bragg, director of development, at **Robert.Bragg@mail.wvu.edu** or **304-293-4036**. Your planning will be much easier that way.

Place  
Stamp  
Here

Please complete the "Alumni Update" side, **cut, fold, tape** and return with your news and comments or let us know of any alumni who are not receiving THE MAJOR **WV**. **Thank you.**

**Fold**

From \_\_\_\_\_  
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\_\_\_\_\_  
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