

## Letter from the Chair: Osama M. Et-

Greetings everyone and welcome again to your newsletter! Another exciting year is upon us and a busy and successful year has just passed by, since we met here last fall 07.

First of all, I hope you are all fairing well in the current economic situation and Wall Street's scary news! Most of us heard about the depression of the 1930s and we witnessed it only on TV and the movies (who has not seen *It is a Wonderful Life!*) – never thought we may go through it ourselves! Well, let us hope for the best! The interesting fact is that our graduates have been doing very well in finding jobs all over the country. As a matter of fact, the Career Fair that was held here, on Wednesday, September 24<sup>th</sup>, had a record number of companies, over 200, that were looking for graduates and over 70 of them were looking for engineers – none of those whom I met at the Fair said anything about recession or cutting jobs. On the contrary, everyone was talking about hiring more. And it was so good to see many of you at the Career Fair, coming back representing your new companies, interviewing our students. By the way, 97% of our May graduates, who were looking for jobs, found one already: either before they graduated or in the first few months of the summer! Wonderful news indeed!

Continuing on the theme of our graduates, last year we had some wonderful senior design projects as well as individual projects sponsored by our student run organizations or faculty research. You will be reading more about them in the newsletter and be sure also to check our web site for more details on those and other projects as well: <http://www.eas.muohio.edu/departments/mme/studentprojects/>.

Since 1987, we conducted over 240 senior design projects: about 41% within Miami, 36% with industry, 11% service to the community, 9% international related, and 8% National Competitions! The exciting thing is that we are getting more requests from graduates who went through the experience and now would like to do the same for our students with new projects. If you have any ideas or your company would like to try us, please let me know. This year, we have 5 projects sponsored by Honda, GE, Schneider Electric, Parsons, and Fischer-Backus, 3 of which are given to us by alumni – thank you as always for all the help and support!

We still love our new building and the new addition of Benton and the underground garage! If you have-not been back yet to see them, please come and see for yourself – let me know in advance and I will take you on a grand tour of the entire complex. You will love it!

*Osama*

## Mali Project Continues

A senior design team consisting of Asha Ananthu, Meaghan Geist, Christopher Hopkins, Ryan Reinke, Emily Yeager, and advised by Dr. Osama M. Ettouney spent the last academic year working on a project for implementation of a water pump system in Guelekoro, Mali West Africa. The students spent the year researching the problem, developing a system, purchasing materials, etc., with the culmination being a trip to Mali, accompanied by Dr. Carter Hamilton, after graduation to be on site as the well was drilled and to install the water pump system. The students



were very disappointed when the drilling did not find water. The system the students had developed included using a merry-go-round to operate the pump so they decided to go ahead and install the merry go round for the kids to play on. Contacts were made with a new drilling company and the project is continuing in this academic year with a new group of students. While the outcome was not as successful as the students would have liked, the project was a great learning experience and the trip to Mali was quite an experience—one that these students will not forget. The students and the department wish to thank everyone who contributed funds to make this project possible.



## Gifts to the Department

Our thanks to those listed below whom have contributed to our scholarship accounts, for the upgrade of our labs, for student projects or just generally to the department. Your generosity is greatly appreciated.

David Ahlers, 1998  
 Christine & Theodore Badley, Friends of the Department  
 Brad Balzer, 2007  
 John Batcha, 1987  
 Peter Beckwith, 1992  
 Steve & Nancy Brockman, 1972  
 Eric Campbell, 1998  
 Robert & Shelby Crain, Friends of the Department  
 Steve Faile, 1999  
 Robert Gardner, Friend of the Department  
 Carol Gorman, Friend of the Department  
 Jack Gorman, Friend of the Department  
 Errol & Nancy Gundler, 1964  
 Kevin Hartley, 1993  
 Joseph & Lois Hayden, 1951  
 Grover Henthorn, Friend of the Department  
 Roger Kipp, 1967  
 Joseph & Jayne Kotey, 1974  
 Ryan Kremser  
 Kristen & John Krol, 1995  
 Levin Family, Friends of the Department  
 Peter Lewis, 2007  
 Markle Family, Friends of the Department  
 Kay Martin, Friend of the Department  
 Carol & Lawrence Neff, 1968  
 Keith Petty, 1993  
 Thomas Peyton, Friend of the Department  
 Kevin & Jamie Devlin Schreck, 2003, 2004  
 Jay Severance, 1957  
 Ken & Joyce Shinn, Friends of the Department  
 Duane & Joan Sigmund, Friends of the Department  
 Robert & Andrea Simpson, 1982, 1982  
 Jeanne Straus, Friend of the Department  
 James Van Kuren, Friend of the Department  
 Walter & Marcia Wood, 1972, 1973  
 Kathleen & Jack Zouhary, 1973

The MME Department appreciates these donations. All donations are used in direct support of undergraduate education and in direct support of projects specified. Thank you for keeping the tradition going!

## Students Demonstrate Thermonuclear Fusion

Last fall, Mechanical Engineering Seniors Neal Birchfield, Hallee Deutchman, Joseph Stilla, and Heather Keever, designed and fabricated an Inertial Electrostatic Confinement (IEC) Thermonuclear Fusion Reactor for their Senior Design Capstone Project. Birchfield, Deutchman, and Stilla later showed their reactor to President and Mrs. Hodge, and Dean Dollár, where they demonstrated the fusion of Deuterium + Deuterium → Helium. All four students have recently graduated. Neal Birchfield and



Joseph Stilla both work for GE Energy, Hallee Deutchman is pursuing her Ph.D. in Materials Science and Engineering at the Ohio State University, and Heather Keever lives in Florida with her husband, Isaac, and their daughter Ava.



## New Faces in the Department

**Aimee Frame** graduated summa cum laude with his B.S. degree in mechanical engineering from the University of Cincinnati in June 2001. While attending UC, Aimee served as a co-op engineer at Nordson Corporation in northeast Ohio. After graduating from UC,



she moved to Atlanta, GA to pursue her master's at the Georgia Institute of Technology in the Intelligent Machine Dynamics Laboratory under the supervision of Dr. Wayne Book. During her studies, Aimee was awarded a National Science Foundation Fellowship. She completed her M.S. degree, which focused on the control of a non-collocated flexible system, in December of 2002. For her doctoral work, Aimee went back to

the University of Cincinnati and shifted her focus to the behavioral analysis of unmanned vehicles under the supervision of Dr. David Thompson. She completed her Ph.D. in mechanical engineering in June of 2008. During her last year, she was a graduate fellow for UC's project STEP program.

Aimee is currently living in the Cincinnati area with her husband Nick and their two daughters, Emily and Hannah. She enjoys swimming, scrapbooking, reading, and watching sports – especially baseball. Their love of baseball, led Aimee and her husband to spend their honeymoon traveling the country to watch a game at every major league ballpark. Aimee is serving as a Visiting Assistant Professor in the department this year.

## Other news from around the department includes:

Fall 2008—Program Review—Engineering Management  
 Fall 2010—ABET Review—Manufacturing Engineering & Mechanical Engineering

- preparation for Miami's academic program review of the EGM Program (these are conducted in 6 year cycles)
- preparation for the big ABET visit in the fall of 2010 – we already contacted many of you to fill out surveys and help us provide a complete and accurate profile of our alumni in our three majors – thank you again to all of you who returned the surveys and for your continuous help and support in making such essential evaluation experiences a great success!

Survey Responses:

**EGM**— 396 graduates, 84 responses, 21.21% response rate.

**MFG**—150 graduates (2000-2006), 47 responses, 31.33% response rate.

**MCH**—36 graduates (2003-2006) 10 responses, 27.78% response rate.

MFG and MCH alumni who graduated between 2000 and 2006 are still encouraged to complete the online survey available on our website.

More about our EGM Program Review in next year's newsletter and more about our ABET review as we get closer to the review date.

Do you receive our *Spring Updater*? It's all about you and what you are doing, it's you taking the opportunity to share with your fellow alumni what you are doing now. If you'd like to have something included in the next Updater, send it to Pam Messer at [messerpm@muohio.edu](mailto:messerpm@muohio.edu).

## December 2007, May & August 2008 Graduates

Asha Ananthu: EGM, Swagelok, Cleveland, OH  
 Steven Anderson: MCH, Bechtel, Monroeville, PA  
 Neal S Birchfield: MCH, General Electric  
 Jeffrey Bregitzer: MCH  
 Stephen Brodsky: EGM, Law School, Franklin Pierce, NH  
 Michael Capalbo: MCH  
 Stuart Cameron: MCH, BPMI, Pittsburgh, PA  
 Cynthia Chavez: MCH  
 Joe Chek: MCH & MFG, Parker Hannifin, Elyria, OH  
 Brett Cole: EGM & MFG  
 Brett Collins: MCH, International Truck & Engine Corp., IL  
 Mackenzie Crain: EGM, QTG-Indianapolis, Supply Chain Associate-  
 Engineering, IN  
 Hallee Deutchman: MCH, Grad. School, Material Science, OSU  
 John Randolph Elliott: MCH  
 Kevin Farrell: EGM  
 Robert Gardner: MCH, Caterpillar, IL  
 Meaghan Geist: EGM, Schneider Electric, Nashville, TN  
 Jonathan Green: EGM  
 Robert Green: EGM, International Paper, Louisiana  
 Brian Grindley: MCH,  
 Philip Guerrant: MCH, Lockheed Martin, NY  
 Gregory Haggy, MCH, Liebert Corp; Emerson Climate, Columbus, OH  
 Kenneth Heidel: MCH  
 Adam Helton: MCH  
 Chris Henderson, MCH & MFG  
 Sarah Hines: EGM  
 Matthew Hodak: MCH, Grad School, Mechanical Engineering, OSU  
 Christopher Hopkins: MCH, Graduate School  
 Levi Jones: MCH, NROTC  
 David Kemp: MCH, ASE Tech, Blue Ash, OH  
 Nick Knapmeyer, MCH & MFG  
 Michael Lang: EGM & MFG  
 Adam Larimer: MCH  
 Mark Lienhart: EGM, Schneider Electric, Palatine, IL

Devon Liles: EGM & MFG, Abercrombie & Fitch, Columbus, OH  
 Edmund Luggen,: MCH  
 Stephen Meador: MCH  
 Jonathan Mihnovets: MCH  
 Kyle Miller: MCH  
 Taylor Morawski: MCH  
 Jeremy Mounce: MCH, Navy, Flight School, Pensacola, FL  
 Chris Mulryan: EGM, Still Looking  
 Nicholas Paradis: EGM & MFG  
 John Plominski: MCH, Electric Boat, CT  
 Derek Podboy: MCH, NASA, Glenn Research Center, Cleveland, OH  
 Daniel Pratt: MCH  
 Roger Ramstad: MCH, Air Force, Edwards Air Force Base, CA  
 Joseph Reep: MCH  
 Ryan Reinke: MCH, Graduate School, UI Urbana Champaign, IL  
 Stefanie Ries: MCH, Nephron Pharmaceuticals, Orlando, FL  
 Tyler Robbins: MCH, Graduate School, Purdue, IN  
 Aimee Rodgers: MCH, US Gypsum Co  
 Charles Runtz: EGM  
 Trisikh Sanguanbun: EGM  
 Christopher Schafer: MCH, USAF, Laughlin Air Force Base, TX  
 Robert Schwinnen: EGM  
 Kevin Sigmund: MCH  
 Joseph Stilla: MCH, General Electric  
 John Swan: EGM & MFG  
 Jeremy Taylor: MCH  
 Henry Tran: MCH, PPG Aerospace, Huntsville, AL  
 Ryan Underwood: EGM & MCH, Graduate School, U of Kentucky  
 Zachary Walters: MCH  
 Heather White: EGM  
 Carl Wilkerson: EGM  
 Nolan Windholtz: MCH, Whirlpool Corp, Fort Smith, Arkansas  
 Cody Yarletts: MCH, Parker Hannifin, Cleveland, OH  
 Emily Yeager: EGM, Chep, Orlando, FL  
 Kathryn Zechman: EGM

### Degrees Awarded 2007-2008

23 - Engineering Management-Manufacturing Engineering  
 6 - Manufacturing Engineering  
 47 - Mechanical Engineering

### Current MME Majors

Mechanical Engineering - 264  
 Engineering Management - Manufacturing - 102  
 Manufacturing Engineering - 40  
 Total Majors - 406

### Engineers Design & Build a Remote Control Easel



Miami University's student section of the American Society of Mechanical Engineers (ASME) is proud to be a part of a community service project to design and build a Remote Control Easel for a local artist. The effort took almost two years of hard work, dedication and persistence. Matt Addison is a talented artist who has not been able to produce his paintings very easily since suffering a stroke that left him paralyzed on the left side of his body, and partially immobilized on the right side. The goal of this project was to design and fabricate a remote control easel that would allow Matt to create his artworks with greater ease and convenience by allowing him to reach all areas of his art medium while still sitting comfortably in his chair. The team worked very hard and now with the easel completed and installed at Matt's art studio, everyone hopes they have made life a little easier for Matt. Former ASME President Asha Ananthu took the lead and formed a team to design and construct the Easel. Zak Dziczkowski was the lead Electrical Engineer and Mike Lang was the lead Mechanical Engineer, and both followed this project from inception through completion. Also helping were Spencer Birchfield, Natalie Carne, Cynthia Chavez, Brett Collins, Sarah Day, Mike Eilers, Adam Flesch, Bob Green, Greg Haggy, Jake Mayer, Joe Reep, Andrew Reynolds, Stefanie Ries, Eddie Rivera, Kevin Sigmund, and Joe Stilla. Most of the components to make the easel were donated by various organizations. ASME would like to thank Automation Direct, Flexlink, Brighton Steel, the School of Engineering and Applied Science and the Department of Mechanical and Manufacturing Engineering at Miami University, and last but not least the Miami Associated Student Government for all of their generous contributions and support of this project.



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**Congratulations to Osama Ettouney recipient of the 2008/09 Effective Educator Award.** The Award will be presented during the Homecoming Football Game on Saturday, October 25th. In 1983 the Miami University Alumni Association established the Effective Educator Award as a way for alumni to recognize and reward those individuals who do an outstanding job in their role as educators. The title of Effective Educator is given annually to one faculty or staff member who stands out based on the number and quality of nominations submitted by alumni who graduated five years previously. Osama was chosen from a pool of 31 nominees! Faculty and Staff in the MME Department congratulate Osama on this well deserved honor!

### Mechanical and Manufacturing Engineering Faculty/Staff for 2008-2009

**Osama M. Ettouney**, Ph.D., Minnesota, Department Chair, ettounom@muohio.edu  
**Robert Setlock**, MS, Ohio University, Assistant Chair, setlocrj@muohio.edu  
**Pam Messer**, Administrative Assistant, messerpm@muohio.edu

**Michael Bailey-Van Kuren**, Ph.D., Georgia Institute of Technology, Associate Professor, baileym@muohio.edu  
**Anna Dollár**, Ph.D., Krakow University of Technology, Associate Professor, dollara@muohio.edu  
**Aimee Frame**, Ph.D., University of Cincinnati, Visiting Assistant Professor, framea@muohio.edu  
**Errol A. Gundler**, MBA, Miami University, Instructor, gundleea@muohio.edu  
**B. Carter Hamilton**, Ph.D., Georgia Institute of Technology, Assistant Professor, hamiltbc@muohio.edu  
**Fazeel Khan**, Ph.D., Rensselaer Polytechnic Institute, Assistant Professor, khanfj@muohio.edu  
**Jeong-Hoi Koo**, Ph.D., Virginia Tech, Assistant Professor, kooj@muohio.edu  
**James Moller**, Ph.D., Rensselaer Polytechnic Institute, Associate Professor, mollerjc@muohio.edu  
**Christine Noble**, Ph.D., University of Cincinnati, Associate Dean, noblecd@muohio.edu  
**Karl Reiff**, B.S., Miami University, Lab Technician and Coordinator, reiffkr@muohio.edu  
**Amit Shukla**, Ph.D., University of Cincinnati, Assistant Professor, shuklaa@muohio.edu  
**Kumar Singh**, Ph.D., Louisiana State University, Assistant Professor, singhkv@muohio.edu  
**Andrew Sommers**, Ph.D., University of Illinois at Urbana-Champaign, Assistant Professor, sommerad@muohio.edu  
**James Van Kuren**, Ph.D., Ohio State University, Visiting Professor, vankurjt@muohio.edu



If you haven't already done so, please send us two of your updated business cards - one that we will post on our alumni bulletin board and one for the notebook we keep that we share with our prospective students when they inquire about what our graduates do and where our graduates are employed.