

# TECH UPDATE

## CONTACT INFORMATION

### Dean

Parmeshwar Coomar  
pcoomar@monroeccc.edu  
734-384-3409

### Automotive Engineering

Don Kehrer  
dkehrer@monroeccc.edu  
734-384-4117

### Construction Management

Alex Babycz  
ababycz@monroeccc.edu  
734-384-4116

### Electronics/Electricity

Tom Harrill  
tharrill@monroeccc.edu  
734-384-4115

### Mechanical Design

Dean Kerste  
dkerste@monroeccc.edu  
734-384-4121

### Mechanical Engineering

Martin Dubois  
mdubois@monroeccc.edu  
734-384-4120

### Nuclear Engineering Technology

Parmeshwar Coomar  
pcoomar@monroeccc.edu  
734-384-3409

### Mark Hall

mhall@monroeccc.edu  
734-384-4261

### Product and Process Technology

Bob Leonard  
bleonard@monroeccc.edu  
734-384-4114

### Quality Systems & Metrology

Parmeshwar Coomar  
pcoomar@monroeccc.edu  
734-384-4209

### Welding & Materials Technology

Roop Chandel  
rchandel@monroeccc.edu  
734-384-4165

### Apprentice Programming

Parmeshwar Coomar  
pcoomar@monroeccc.edu  
734-384-4209

### CAD Lab Technician/Perkins Technical Specialist

David Dowler  
ddowler@monroeccc.edu  
734-384-4467



MCCC trustees, administrators and Industrial Technology Division faculty help to break ground for the new Ventower wind tower manufacturing facility within the Port of Monroe.

## MCCC TO PROVIDE TRAINING FOR NEW WIND TOWER MANUFACTURING FACILITY EMPLOYEES

Monroe County Community College has formed a training partnership with Ventower Industries, which broke ground recently on a 115,000-square foot wind tower manufacturing facility within the Port of Monroe.

The facility will be located at 111 Borchert Park Dr. Ventower plans on building up to 250 towers per year and plans to take orders as early as 2011.

Parmeshwar (Peter) Coomar, dean of the Industrial Technology Division at MCCC, said the division would initially provide training for Ventower in areas such as welding, instrumentation control and hands-on manufacturing.

“This facility will open up many additional local opportunities for our graduates in these areas,” Coomar said. “In addition, we look forward to incorporating Ventower’s specific needs into our existing curriculum to further serve the company as our partnership grows.”

## STRONG COMES TO MCCC

The Industrial Technology Division hosted a tour last semester of approximately 25 female sophomore students from Monroe High School’s STRONG program. STRONG stands for Science, Technology and Related Occupations Need Girls. This is a grant-funded program for females in grades 10-12 that began in 2005 and has grown to include more than 125 young women.

The event began with a presentation by the Admissions Office. After the presentation, the students broke into groups and toured the Industrial Technology program areas. During each 20-minute session, there was a presentation by the faculty member, a presentation by a current MCCC female in that program or a female working in the industry, and a hands-on activity or demonstration.



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## **MANUFACTURING TECHNOLOGY STUDENTS VISIT WESTOOL**

Fifteen manufacturing technology students took a field trip to Westool and looked at composite molds for the Hummer vehicle. Students observed a job building part of a particle accelerator that will be two miles long when complete. The students were interested in the molds for the carbon fiber molds for the Hummer, which were very light and bullet-proof.

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## **NEW HIRES IN DIVISION DIVISION HIRES NEW CAD LAB TECHNICIAN/PERKINS TECHNICAL SPECIALIST**

David Dowler has joined the IT Division as CAD/PERKINS technical specialist. Dowler holds a bachelor of science degree in CAD from Eastern Michigan University. He has worked in the automotive and manufacturing design/drafting field for 22 years, most recently working in the automotive/aerospace testing field from 2007 to 2009.

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## **FACULTY CONFERENCES AND TRAINING**

### **SOLIDWORKS CONFERENCE**

Dean Kerste, associate professor of mechanical design technology, recently attended a week-long international design conference in Anaheim, Calif. sponsored by the SolidWorks Corporation. SolidWorks is a CAD (computer aided design) software platform utilized in the creation of 3D parametric models. At the event, which featured more than 150 technical training sessions, he networked with SolidWorks users from around the world. He also made contact with several resellers and SolidWorks employees. The techniques and tools presented in the training sessions will be incorporated into existing and future curriculum in the mechanical design technology program. Kerste believes the future of 3D parametric modeling can be seen in the recent advancements of virtual-holographic computing platforms. Virtual-holographic computing is an intuitive way to experience information using virtual-holographic imagery and a multi-purpose stylus to directly explore, examine, explain and exemplify new concepts and designs.

## **PHOTONICS TRAINING**

Last semester, Tom Harrill, assistant professor of electronics and computer technology, participated in a seminar in Rochester, NY, regarding the field of photonics. Photonics involves cutting-edge uses of lasers, optics, fiber-optics, and electro-optical devices in numerous and diverse fields of technology, including manufacturing, health care, telecommunication, environmental monitoring, homeland security and aerospace.

Rapid growth in the number and complexity of photonics and photonics-enabled technologies has caused the demand for technicians to exceed supply. There is fierce competition for the relatively small pool of qualified optics technicians and engineers. A 2009 survey of employers has indentified more than 2,100 jobs for photonics technicians that need to be filled this year. This need will increase by 5,900 more new jobs over the next five years. Clearly, the current supply of qualified graduates of two-year postsecondary programs falls far short of industry demand. MCCC is looking into incorporating photonics training as part of its existing electronics technology program at MCCC.

The seminar was sponsored by "OP-TEC," the National Center for Optics and Photonics Education. OP-TEC is a consortium of two-year colleges, high schools, universities, national laboratories, industry partners and professional societies funded by the National Science Foundation's Advanced Technological Education program.

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## **WELDING GRANT UPDATE**

The welding grant staff is pleased to announce the offering of two entry-level welding classes for spring 2010. The grant team is actively recruiting in Monroe County and the surrounding area of Michigan and Northwest Ohio for participants interested in this fast-track program to become a certified welder. For more information, please visit [www.mcccweldcoe.org](http://www.mcccweldcoe.org)

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## **WELDING AT SUMMER CAMPS A HIT**

High schools students explored the exciting field of welding at the welding summer camp. Campers learned the basics of welding technology with an emphasis on Shielded Metal Arc welding and Gas Metal Arc wire welding on low carbon steel. Conducted at Monroe High School's welding lab, they gained hands-on experience with welding equipment, including the opportunity to complete a welding-art project to take home.



Technology campers.

## ITD SUMMER CAMP

The Industrial Technology Division once again hosted a technology summer camp. This gave students in grades 5-10 an opportunity to explore the world of technology with a different MCCC professor each day of the week.

## MONRE HIGH SCHOOL CAREER DAY

Faculty from the Industrial Technology Division recently attended Career Day at Monroe High School. Students got first-hand experience with an industrial robot, computer game programming, animatronics and CNC programming. Several hundred students toured the facility and learned about the opportunities that exist at MCCC.



From left, MCCC President Dr. David Nixon, MCCC Vice President of Instruction Dr. Grace Yackee, Chief Nuclear Officer for DTE Energy's Fermi II Jack Davis, and U.S. Rep. John D. Dingell (D-Dearborn) celebrate the \$200,000 earmark to expand MCCC's nuclear engineering technology program.

## FISPE 2 GRANT – NUET EARMARK

Monroe County Community College received a \$200,000 federal earmark to begin the process of starting its own nuclear engineering technology program. U.S. Rep. John D. Dingell (D-Dearborn) announced the earmark at a recent news conference at the college's La-Z-Boy Center.

Presently, a nuclear engineering technology program is available to MCCC students in conjunction with Kirtland, Ohio's Lakeland Community College, where the program is housed, and DTE Energy, which provides the internship component. Students complete the initial two-thirds of their course work at MCCC and the remaining course work at LCC via distance learning equipment donated by DTE Energy.

Parmeshwar (Peter) Coomar, dean of MCCC's Industrial Technology Division, said that the earmarked funds will allow the college to begin work to expand the existing program — which prepares students to become highly-adaptable energy technicians skilled in the generation, transmission and distribution of power — and provide continuing education and training for the upgrading of worker skills and certification.