

**Executive Committee 2004-2005**

**Chairman**  
Krich Sawamiphakdi  
The Timken Co.  
[krich.sawamiphakdi@timken.com](mailto:krich.sawamiphakdi@timken.com)

**Vice Chairman**  
Kevin Reynolds  
NC Consulting  
[ktr@neo.rr.com](mailto:ktr@neo.rr.com)

**Treasurer**  
Steve Russell  
The Timken Co.  
[steve.russell@timken.com](mailto:steve.russell@timken.com)

**Secretary**  
Charles Parrish  
The Timken Co.  
[charles.parrish@timken.com](mailto:charles.parrish@timken.com)

**Directors**  
Jason Emperador  
Brian Werner  
Ramakant Rambhatla  
Noëlle Russell  
John Dougherty  
Tom Southards  
Alan Xiaolan  
Mike Childerson  
Greg Hollinger  
David Yakubek

**Committee Chairpersons**

**Advisory**  
Jason Emperador

**C.JEC**  
Brian Werner  
Chandra Jain

**House/Attendance**  
OPEN

**College Relations & Vocational Services**  
OPEN

**Electronic Communications**  
Jason Emperador

**Fellowship & Welfare**  
David Yakubek

**Finance & Budget**  
Greg Hollinger

**Government Relations/ Ohio Council**  
OPEN

**History & Heritage**  
OPEN

**Honors & Awards**  
OPEN

**Industry Relations**  
OPEN

**Member Initiative Sys.**  
Rick Borowski

**Member Interest / Membership Development**  
Brian Werner

**Minorities & Women**  
OPEN

**Newsletter Editor / Public Relations**  
Kevin Reynolds

**Nominating**  
Bill Prueter

**Professional Development**  
OPEN

**Program**  
OPEN

**Unemployed Members**  
Marty Nuetzel

The American Society **ASME** of Mechanical Engineers  
*SETTING THE STANDARD*  
1880 ————— 2005

Canton Alliance Massillon Section News 

Editor: Kevin T. Reynolds

October 2004

**PLEASE KEEP YOUR E-MAIL ADDRESS CURRENT**

*Newsletters are sent by e-mail in PDF format to all members with an e-mail address on file. Paper copies are sent by US mail only to those members without an e-mail address on file. Newsletters are also posted on the CAM section website.*

*Please take a moment to verify your e-mail address and keep it current at the "Members Only" tab at [www.asme.org](http://www.asme.org). You will need your member ID for access.*

**ATTENTION Members**

*In an effort to expand our members' area knowledge and interests, we strive to present some of the latest technologies and knowledge in Engineering in our area. If you or your company have some interesting topic that you're willing to share with your fellow CAM colleagues, please contact Krich S. (Chairman) or any Executive Committee Member (at the left).*

*Please Join Us at the Program Meetings. Your support and attendance is greatly appreciated.*

**NATIONAL INVENTORS HALL OF FAME TOUR, OCTOBER 23, 2004 (SATURDAY)**  
(SEE DETAILS PAGE 2)

The Akron & CAM Sections will have a joint dinner meeting on **November 10, 2004**.

**DINNER MEETING TOPIC:**

**America's Hobby House Beginning Winemaking Seminar**

The class will be taught by Matt "Pi" Pruszynski from the Akron ASME Board of Directors and his partner, Jacqui Milford. There will be a wine tasting after the class, which will feature homemade wines from the area. This is a great meeting to bring your spouses and learn a new enjoyable hobby together.  
(SEE DETAILS PAGE 4).

**Other Upcoming Events**  
Social Event, December 2004

**CAM Section Board Meeting**

Monday  
November 8, 2004  
6:00 PM at Bachelli's Resturant.  
Whipple Ave. & 12<sup>th</sup> Street, Canton, Oh

**In This Issue**

CAM Section News	1
The 'New Faces Of Engineering'	5
Partners In M.E. Grants Now Available	5
ASME Launches 'Communities of Practice'	6
Continuity & Change Update	7
Student Activity Calendar	7

Group Tour of the National Inventors Hall of Fame:

## **MEMBERS PLEASE JOIN US IN ATTENDING A TOUR OF INVENTURE PLACE.....**



The Inventors Hall of Fame, located in Akron, Ohio, was established in 1973 by the National Council of Patent Law Associations, now the National Council of Intellectual Property Law Associations, and the Patent and Trademark Office of the U.S. Department of Commerce.

The 2004 Class of Inductees

**Frederick Banting**, 1891–1941, **Charles Best**, 1899–1978, **James Collip**, 1892–1965, *Purified Insulin*. Canadian scientists Banting, Best, and Collip determined that insulin injections would help keep diabetics alive and developed techniques for extracting, isolating, and injecting it. Although not a cure, insulin remains the most effective means for treating the disease.

**Vannevar Bush**, 1890–1974, *Differential Analyzer*. During WWII, Bush headed the Office of Scientific Research and Development, overseeing the work of 6,000 scientists developing over 200 military weapons and instruments. His most significant invention was the differential analyzer, an analog computer that solved differential equations with as many as 18 independent variables.

**Harry Coover**, 1919–, *Superglue*. Coover's invention of a new class of adhesives has influenced medicine, industry, and consumers. At Eastman Chemical, Coover discovered cyanoacrylate adhesives (CA), soon known as superglue. Early use of CA during the Vietnam War allowed for the quick closure of wounds.

**Wallace Coulter**, 1913–1998, *Coulter Principle*. A common diagnostic medical tool, the complete blood count would not be possible without Coulter's invention of the Coulter Counter. Coulter received numerous honors and was awarded 74 patents for his work in hematology.

**Ray Dolby**, 1933–, *Dolby Noise Reduction*. During the 1960s, Dolby discovered a way to dramatically reduce the “hiss” from analog tape sound recording and reproduction, revolutionizing the audio industry. As a result, the cassette became the most popular form of recorded music in the 1970s, and cinema audiences were able to enjoy surround sound from almost all movies.

**Edith Flanigen**, 1929–, *Molecular Sieves*. A pioneer in silicate and molecular sieve chemistry, Flanigen invented or co-invented over 200 synthetic materials. Her work with zeolite Y made oil refining more efficient, cleaner, and safer, and she also invented an emerald synthesizing process.

**Robert Gallo**, 1937–, **Luc Montagnier**, 1932–, *HIV Isolation and Identification*. Robert Gallo and Luc Montagnier both discovered HIV, determining that the virus was the cause of AIDS, and making it more possible to control the disease. Formerly a cancer researcher at the National Cancer Institute, Gallo now heads the Institute of Human Virology in Baltimore. Montagnier is the former director of the Centre National de la Recherche Scientifique (CNRS), and he is the co-founder of the World Foundation for AIDS Research and Prevention.

**Ivan Getting**, 1912–2003, **Bradford Parkinson**, 1935–, *Global Positioning System—GPS*. During the 1950s, Getting advanced the concept of using a system of satellites to allow the calculation of precise positioning data for rapidly moving vehicles. Parkinson created and ran the NAVSTAR GPS Joint Program Office from 1972–78. GPS is now routinely used for air traffic control systems, ships, trucks and cars, mechanized farming, search and rescue, tracking environmental changes, and more.

**John Gibbon**, 1903–1973, *Heart-Lung Machine*. Gibbon's development of the heart-lung machine made possible the first successful open-heart operation in 1953. Improved versions allow surgeons today to perform bypass surgery and heart transplants. A renowned surgeon and teacher, Gibbon authored the textbook *Surgery of the Chest*.

**Lloyd Hall**, 1894–1971, *Food Preservatives*. Hall made great strides in keeping food fresh and making it more flavorful. He created food preservatives, meat-curing products, seasonings, emulsions, bakery products, antioxidants, protein hydrolysates, and numerous other products. He also discovered and developed novel techniques for sterilizing spices, cereals, and other foods and pharmaceuticals.

**Elias Howe**, 1819–1867, *Sewing Machine*. Howe invented the first practical sewing machine after watching his wife sew. His machine's locked-stitch technique is still used today.

**C.A.M. SECTION WEBSITE:** <http://sections.asme.org/cam>

**Charles D. Kelman**, 1930–, *Cataract Surgery*. In 1963, Kelman designed the ultrasonic phacoemulsifier, which liquefies cataracts so they can be removed by suction. The pioneering procedure reduced the risk of complications and transformed a 10-day hospital stay to an outpatient procedure.

**Bernard Oliver**, 1916–1995, **Claude Shannon**, 1916–2001, *Pulse Code Modulation*. Oliver and Shannon developed the first high-speed digital transmission system based on coded electronic pulses, making digital telephone systems and compact discs possible. Oliver had a respected career at Bell Laboratories and also at Hewlett-Packard, where he was pivotal in developing the first hand-held calculator. Shannon, who also had a long and prolific Bell Labs career, is considered the father of information theory, which is considered the foundation of today's computer technology.

**Norbert Rillieux**, 1806–1894, *Automated Sugar Refining*. Rillieux automated modern sugar production and made it dramatically more efficient, while producing a much higher quality of sugar. It transformed the lives of slaves who were previously forced to endure the dangerous and backbreaking task of boiling sugar cane in open cauldrons. His process elevated the U.S. from a minor role in the sugar industry to a major producer.

**John Roebling**, 1806–1869, *Suspension Bridge*. The age of the suspension bridge was ushered in by engineer and inventor Roebling. Roebling saw the potential of steel wire as a bridge building component and invented machinery to twist the wire into cables. He oversaw the construction of many bridges but died before his most famous bridge, the Brooklyn Bridge, was completed in 1883.

WHEN: Saturday October 23, 2004; 10:00 AM

COST: ASME-CAM will cover the admission. Members & Their Guests (no bus loads please)

WHERE: INVENTURE PLACE  
221 S. Broadway St.  
Akron, OH 44308-1505  
216-762-4463, 800-968-4332

CONTACT: Krich Sawamiphakdi, The Timken Co.

krich.sawamiphakdi@timken.com

330.471.2137



**PLEASE REMIT BY October 20, 2004 (Wednesday)**

Please park in the Morley Health Center parking deck, which is located on your right just past the museum on S. Broadway Street, and remember to bring your parking tickets with you so that they may validate them for 3 hours of free parking.

Driving directions from Canton

Take Rt. 77 North to Akron/Cleveland. Follow Rt. 77 North to Exit 22A (Main St. & Broadway). At the bottom of the ramp stay to the right and this will merge on to Broadway (one-way). We are located at 221. S. Broadway.

Directions for leaving the National Inventors Hall of Fame To Rt. 77 South :

Take Broadway to Bowery, turn left on Bowery to High St. turn left on High St. take High St. about 1 ½ miles to the entrance ramps for both 77 and 76.

Lunch after Tour at Jillian's (self pay).

Location: S. Main St, Akron, Oh.

### **America's Hobby House Beginning Winemaking Seminar**

Date: Wednesday, November 10, 2004

Dinner: 5:30 PM – 6:45 PM, Ristorante di Gianni, 4624 State Route 43, Brimfield (short distance north of I-76 on S.R. 43)

Seminar: 7:00 PM – 8:00 PM, America's Hobby House, 4220 State Route 43, Brimfield [just south of the intersection of I-76 and S.R. 43 (Exit #33)]

Cost: Seminar is free (Limit: first 26 people to reserve). However, everyone pays for his/her own dinner, ordered off the menu.

Reservations: Call (330/678-6400) or email ([akronasme@mail.com](mailto:akronasme@mail.com)) Matt "Pi" Pruszynski by Monday, November 8, 2004. PLEASE SPECIFY YOUR FROM THE CAM SECTION.

The class will begin with a discussion of the general winemaking process and applicable terminology. Immediately following will be a demonstration of the 4 stages involved in making wine from an ingredient package (wine kit). We will also put an emphasis on the essential equipment necessary for winemaking and how to use it. Those who attend will leave this class with the knowledge of how to make delicious wine in the comfort of their own home from all over the world and all year long.

The class will be taught by Matt "Pi" Pruszynski from the Akron ASME Board of Directors and his partner, Jacqui Milford. There will be a wine tasting after the class, which will feature homemade wines from the area. This is a great meeting to bring your spouses and learn a new enjoyable hobby together.

For a look around their store (pictures of it, goods sold, directions, hours, etc.), please go to their website, [www.americashobbyhouse.com](http://www.americashobbyhouse.com).

This is a joint CAM/Akron ASME meeting. As such, the 26 spaces will be shared equally between CAM and Akron. Those who do not reserve within the first 13 from their section, will be "wait listed", pending cancellations, so please leave a way for us to quickly get back to you after November 8 (reservations deadline) when making reservations. Those who do not make it (within the first 26) to this event will be on a list held by the store, and will be contacted about future winemaking seminar opportunities. NOTE to those who are "wait listed": if you would like to go to dinner with us, and take the chance that there will be some "no shows" at the store afterwards, you are most welcome to do so. But, please let us know of this intent as you make your reservations, so we can set up adequate seating at the restaurant. Thanks for your understanding that there is very limited (26) seating at the store.

## Engineers Provide Sustainable Solutions Through International Volunteerism

ASME members around the world have the chance to get involved in real-world engineering projects, gaining exposure and training in internationally responsible and sustainable engineering through ASME's partnership with Engineers Without Borders™ – USA (EWB-USA).

Offering a unique opportunity for professional engineers (active or retired) and engineering students, EWB-USA is a non-profit organization established in 2000 to help developing areas worldwide with their engineering needs. EWB-USA projects may involve the design and construction of water, waste-water, sanitation, energy, and shelter systems. Projects are initiated by, and completed with, contributions and support from the local, host community, which is trained to operate the systems without external assistance. In this way, projects are appropriate and self-sustaining. The projects are conducted by groups of students under the supervision of faculty and professional engineers from partnering engineering firms and professional Societies.

ASME members should contact Diedra Hackley ([hackleyd@asme.org](mailto:hackleyd@asme.org)) if they are interested in any of the above projects, or would like to propose a project of their own.

## Partners In Mechanical Engineering Grants Available

The Board on Diversity and Outreach is accepting applications for Partners in Mechanical Engineering grants. All ASME Sections are eligible to apply. Grants are made on a first-come, first-served basis. For more information, go to <http://www.asme.org/communities/diversities/bdo/partners.html>

## ASME's 125<sup>th</sup> Anniversary in Full Swing!

Log onto [www.asme.org/anniversary](http://www.asme.org/anniversary) for information on events to take place during 2005, as well as historical material and information on how you can get involved.

**Member 2 Member REFERRAL**  
Refer a friend or colleague to ASME!

Visit [www.asme.org/membershipdrive](http://www.asme.org/membershipdrive) for complete details.

## New Faces of Engineering Strives to Recognize Young Talent

The *New Faces of Engineering* strives to promote the accomplishments of young engineers by highlighting their engineering contributions and the resulting impact on society. The campaign is designed to enhance and improve the image of engineering by:

Putting faces to what has often been referred to as “the stealth profession.”

Showing a group of young, diverse and talented engineers, thereby portraying engineering as an exciting profession open to everyone.

Providing both stimulation and incentive for college engineering students to explore the variety of career options available to them with their engineering degrees as well as encouraging high school students to study engineering in college.

Help students understand they are part of a global profession.

This is an opportunity to represent the mechanical engineering profession and ASME as the top individual *New Faces*. The ASME finalist will be featured in a full-page ad in USA TODAY during Engineers Week, February 20-26, 2005. The finalist's photo will be captioned with the engineer's name and ASME affiliation, employer and a brief statement of that individual's accomplishments as they relate to the public welfare.

*New Faces* provides a unique opportunity to learn from new engineers. EWeek and the ASME staff will interview the top individuals regarding the experiences leading them to select engineering careers, the challenges in making the transition to the work force, and other key experiences that can be used with K-12 and college students.

The top candidates will participate in an e-mail and/or online Question and Answer discussion forum with engineering undergraduates globally at a future date to be determined. Candidates are asked to list languages in which they are fluent.

National Engineers Week will profile the top individuals. The profiles will be posted on the ASME web site, [www.asme.org](http://www.asme.org), National Engineers Week web site at [www.eweek.org](http://www.eweek.org) and at [www.discoverengineering.org](http://www.discoverengineering.org), the EWeek web site for middle school students.

The engineering trade press will be targeted for feature stories on the top individuals. The local media of all the nominees will be targeted to capture general press coverage.

Visit [http://www.asme.org/eng\\_week/](http://www.asme.org/eng_week/) to submit your application by the Oct. 22, 2004 deadline.

## ASME Launches 'Communities of Practice'

Want to talk to your peers about technical matters, career and personal interests? Do you need communicate with your peers without going to a meeting or even leaving your desk?

Now ASME offers you a new tool to communicate, get the information you need and meet others with similar interests and concerns at the new ASME Communities of Practice site.

On the CoP site, you can join a community, suggest a new community, participate in discussions and polls, and post your own message or request to be notified when messages are posted on the community. Its your choice what communities you participate in, and how you choose to participate.

The Communities of Practice pages also allow you to customize your own personal page to include your communities, your own links and calendar and to access an ASME event calendar.

You will need to register the first time that you use the page, and set your preferences for your home page. It only takes a few moments – then you are ready to participate, or just observe the discussions. To visit the site, and test the features for yourself, go to [www.cop.asme.org](http://www.cop.asme.org).

## Make Your Contribution to the FasTrack E-zine Today!

The FasTrack is emailed to early career members (previously known as the young engineer), and provides quick online access to what's new and current in professional & technical resources including highlighting featured member benefits and enhancements, etc.

The FasTrack e-zine features a special section called "Q&A with Experienced Engineers (Five Career Questions Asked)" and we invite you to share your experience. The idea is to feature an engineer each month responding to the same 5 questions. Among the questions posed are:

When you first started your career, what was the biggest lesson you learned on the job? What is the underlying foundation for career success today? How do you keep up-to-date within your industry? What advice would you give a recent engineering graduate looking for work? Has your involvement in ASME changed or influenced your career path?

If you are interested in contributing, please send your responses to Cheryl Hasan at [hasanc@asme.org](mailto:hasanc@asme.org). Please include your name and job title, as it will be included in the section. To view the latest FasTrack Ezine, click on: <http://www.asme.org/youngengineers/fastrack>

## EQUAL ACCESS FOR ALL 2004 FIRST LEGO League (FLL)

The playing field has NO LIMITS. The challenge is to address specific needs of individuals, who face physical challenges in today's society and build a modern society that is one of equal access for all. FIRST-LEGO League (FLL) mesmerizes thousands of 9-14 year-olds and their adult partners through the beginning months of each school year.

Using the LEGO MINDSTORMS Technology, LEGO bricks and other elements such as sensors, motors and gears, teams of 9-14 year old children, a coach, and a mentor, research, design, build and test a fully autonomous robot. The 8-week design and build period begins mid September and the local and state tournaments are from November to January.

ASME is a supporter of FIRST Robotics Competition and the middle school-level FIRST/Lego League. Over 46,000 students worldwide participated in FLL last year. ASME members – as individuals, student groups, or sections – help in many ways – and more are always needed. ASME Sections and Student Sections can sponsor or start teams or individuals can volunteer to help at tournaments or to be coaches or mentors for local schools. Those wishing to get involved with kids and invest in the future of the profession are always well rewarded!

For more information on how to get involved, please contact Dawna Schultz at [schultzd@asme.org](mailto:schultzd@asme.org) or visit: <http://www.asme.org/education/precollege/partner.htm>.

## International Mechanical Engineering Congress & Exposition and RD&D Expo.



Log onto <http://www.asme.org/congress> for valuable information on 500 technical sessions and 9 industry tracks. Various special events and tours are also scheduled to take place during Congress. The conference will take place at the Anaheim Hilton in Anaheim, Calif. from Nov. 13-19.

ASME Congress is once again teamed with the Research, Development & Design Expo, the only event dedicated to presenting the latest developments and tools in the world of engineering.

To register for the 2004 IMECE & RD&D expo, click [here](#).

## Student Activity Calendar

### October

Oct. 1 [Renewal](#) deadline for 2004-05 ASME Student Membership

Oct. 15 [Application deadline](#) for Winter/Spring student loans

Oct. 21 2004-05 [Graduate Teaching Fellowship](#) – application deadline.

Oct. 29-30 Fundamentals of Engineering Exam

\* Attend your [Regional Student Leadership Seminar](#)

### November

Nov. 1 Preliminary reports due for [Ingersoll-Rand Contest](#)

Nov. 1 Deadline for [Diversity Action Grant](#) applications

Nov. 13 [Young Engineers Forum](#) – held at Congress

Nov. 14 [Student Design Contest](#) finals held at Congress

Nov. 14-19 [Congress](#) – Anaheim California

Nov. 15 [Old Guard Oral Competition](#) finals held at Congress

## New Mortgage Benefit for ASME Members!

Wachovia makes the mortgage process easy by providing competitive rates, quick approvals, and accurate closings. Members also receive friendly, personal attention through an ASME-dedicated mortgage team.

For details, visit

<http://www.wachovia.com/misc/0,,507,00.html>

### Diversity Action Grants Now Available!

The Board on Diversity and Outreach (BDO) will be accepting applications for Diversity Action Grants (DAG) for the 2004-2005 academic year. Encourage the ASME Student Section in your area to apply for these competitive grants. Deadline for applications is Nov. 1, 2004.

For more information, go to

<http://www.asme.org/communities/diversities/bdo/dag.html>

## Continuity & Change Update

The Codes & Standards Project Team has developed their organizational structure recommendations: <http://www.asme.org/change/PHASE%20II/C&SOrgChart-TG5-8-11.pdf>

A new Transition Rules Project team template is available on the web. The purpose of the Rules Transition team is to take a proactive position ensure that ASME's governance documents adequately define the reorganized ASME. Click [here](#) for the complete template.

### Project Team Progress Reports:

The Centers Project team is in the midst of reviewing draft vision and mission statements. Program units that the Centers group have interest in are also being reviewed.

The Knowledge and Community Groups Project team is currently developing their mission and vision statements, which will represent the society as a whole.

More information providing the latest on Continuity & Change initiative can be found on the C&C Newsletter: <http://www.asme.org/change/IINEWSLTR0904.htm>. For a complete list of project teams, click [here](#).