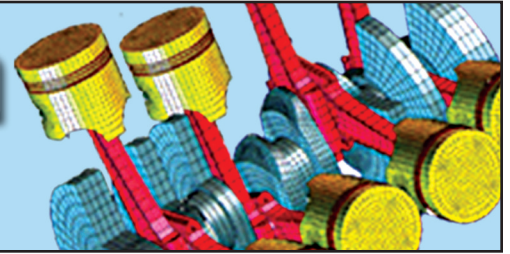


# Internal Combustion Engine



FALL 2010

## From the Editor's Desk **Suri Rajan, Editor**

**T**his Newsletter goes out just as the Fall Conference has concluded. It details all the highlights since the last epic Conference in Lucerne, including exciting pictures from Switzerland. In addition to presenting new officers at the Executive Committee, the Newsletter invites your participation in the upcoming Conference at West Virginia University. Please take a few moments to peruse the Fall 2010 Newsletter, and thank you for your continued participation in the ICED Division. ▶

## CHAIR'S MESSAGE

### Frank Aboujaoude



I have been an active member of the ASME - ICE Division for many years, and now I am honored and humbled to be the ICE Division Chair for 2010-2011. Fortunately, the Chair can rely on input from six other Executive Committee members, a secretary and a treasurer, several ASME staff members, as well as over 135 Associates (including the Senior associates) who bring a vast knowledge of information in both Technical and Administrative areas.

The Division also relies on the Long Range Planning (LRP) Committee to continuously evaluate our basic mission, strategy, and objectives. In the early to mid 1990's, the ICE Division had one conference per year which was the Fall Technical Conference (FTC) and participated in the Energy Technology Conference and Exhibition (ETCE) every Spring. The quality and quantity of technical papers kept increasing and they covered wide topics of interest in research and development, design, testing, maintenance and other related topics. About sixteen years ago, the LRP Committee decided

to make a major change to revamp the ICE Division's activity. The decision was to retain the FTC and to introduce a new Spring Technical Conference (STC) in lieu of the ETCE. The major advantages offered by the STC include a host company/

organization from within the ICE Associates to showcase their products/capabilities, an increased flexibility in scheduling, and a smaller more focused conference aimed at the Division's areas of interest, all at a reduced cost. This new conference meeting structure proved to be very effective and successful.

In 2000-2001, another major change to the ICE Division activity resulted from the LRP Committee Meetings. The decision was made to hold the STC conference outside North America every 3 years to encourage greater conference attendance with its growing membership outside the U.S. I attended all three conferences starting with the first conference held in Salzburg Austria in 2003, the second conference in Aachen, Germany in 2006 and the third conference in Lucerne, Switzerland in 2009. All three conferences were resounding successes in

## Table of Contents

Chair's Message	<b>1</b>
Outgoing Chair's Message	<b>2</b>
Future ICED Conferences	<b>2</b>
26th CIMAC World Conference Held in Norway	<b>3</b>
ICE Fall 2009 Conference in Lucerne, Switzerland	<b>3</b>
Call for Papers, FTC 2011	<b>5</b>
Call for Presentations, FTC 2011	<b>6</b>
Board of Associates	<b>7</b>
Executive Committee	<b>7</b>
Technical Committee	<b>8</b>
Administrative Committee	<b>8</b>

their technical content, social interaction, new membership participation and record attendance levels for the 2003 and 2006 events. The economic crisis caused a slight dip in attendance in 2009.

In 2007, the LRP Committee decided to make another significant change to the Division's activity. It became clear that being able to support two traditional conferences per year was becoming harder. Finding the organizations/companies to host conferences, the resources to chair sessions and solicit papers, and efforts required to handle local arrangement responsibilities was becoming very difficult. The new plan was shared with the Division Associates and based on their feedback in 2008, the final decision was made to maintain one conference per year and the fall time period proved to be optimum for Division participants. In addition to the annual Fall conferences, it was agreed that a conference would be held in the Spring of

continued on page two

## Outgoing Chair's Message

Tim Callahan

I have been told I look younger than my actual age. And it certainly helps perpetuate this view when the newsletter editor uses a photograph from 15 years ago. But I am old enough to remember the "good old days," or at least stories of the days when the ICED was composed of large bore engine people that didn't quite seem to fit with other organizations. When companies like Cooper Bessemer, Dresser Rand, Clark, Caterpillar, Waukesha, Fairbanks Morse, were the heart and soul of the ICE division. To be fair, there was an array of other companies which were represented. Many of those companies are still in existence, while others, unfortunately, are not. Still, the ICE division has grown and diversified to meet the needs of its members, and a new group of enthusiastic thinkers are in place to continue the future evolution of the Division. I can



assure you there are many "good old days" ahead. As I step away from the Executive Committee, I know I am leaving the ICE division

in the hands of a group of exceptional and inspired individuals.

My brief term as chair was greatly facilitated by having a dedicated and ardent Executive Committee. Frank Aboujaoude and John Hedrick on the Administrative Committee have done a magnificent job planning productive conferences that we all enjoyed. Stuart Neil and Steve Ciatti have taken the technical leadership of the Division to a new level. They have revitalized the technical committees and reorganized the

technical aspect of the conferences and I wish to thank them and applaud their efforts. The newest members of the Executive Committee, Tim Jacobs and Steve McConnell, certainly have big shoes to fill. Fortunately, the shoes also come with some extraordinary mentors to help them along the way. Neil Blythe (Secretary) and Victor Wong (Treasurer) have been invaluable to the Executive Committee. The efforts of the ASME staff, particularly Vince Dillworth, LaShion Pettiford, and Stacey Cooper were also invaluable during my time as chair.

It is almost mind boggling to realize that there are so many people that contribute to the success of the division. Authors, paper reviewers, session chairs, technical committee chairs, website coordinator, etc, etc. There are obviously too many to mention by name, but I want to thank everyone involved in the growth and innovation of the Division and encourage you all to keep up the good work. ▶

## Future ICED Conferences

The Internal Combustion Engine Division (ICED) conference model consists of an annual Fall Technical Conference (FTC) and a Spring International Technical Conference (ITC) every three years. In addition, ICED participates with CIMAC in the organization of their World Congress on Combustion Engines, which is held every three years, typically in the spring or summer.

The next ICED Fall Technical Conference after the San Antonio conference will be hosted by West Virginia University in Morgantown, West Virginia. The tri-annual ITC follows in the spring of 2012 and will be held in Torino, Italy. Conference details for this international event are being developed. We are currently seeking venues for future Fall Technical Conferences and are in need of hosts that are willing to help with local arrangements and tours. This is a great opportunity for a company or organization to increase customer, industry and academia awareness of their products and capabilities. If this is something your organization would be interested in, please contact Frank Aboujaoude, or any member of the ICED Executive Committee.

### ASME-ICED CONFERENCE SCHEDULE

Year	Spring	Fall
2010	CIMAC, June 14-17 in Bergen, Norway	ICED FTC, Sept. 12-15, San Antonio, TX
2011	No Conference	ICED FTC, October 2- 5, Morgantown, WV
2012	ICED ITC, Date TBD in Torino, Italy	ICED FTC, Date and Location TBD
2013	CIMAC, Date TBD in Shanghai, China	ICED FTC, Date and Location TBD

## Chair's Message

continued from page one

every 3<sup>rd</sup> year outside of North America to maintain easier access and interest of off-shore membership. Future conferences are identified in another article in this newsletter. After the San Antonio conference, we will again have the opportunity to evaluate our progress based on the recent changes that were implemented using the LRP Committee and membership feedback as tools for continuous improvement.

I look forward to this upcoming year and the opportunity to serve as your Chairman. The success of the Division lies with the continued support and help from the Associates who are the active members that drive the Division goals and objectives. If you are reading this newsletter, you are one of almost 2,000 ASME members who have selected ICE as their primary ASME Division. I urge you to increase your participation in the ICE Division by attending our conferences, volunteering for numerous divisional activities and/or hosting a conference. ▶

## 26th CIMAC World Congress Held in Norway

Frank Aboujaoude and Neil Blythe

**W**ith the new conference model adopted a few years ago by the ICE Division, a Spring conference was not held this year. This gave several people who are active in the ICE Division the chance to attend the 26th CIMAC World Congress on Combustion Engines, which was held in Bergen, Norway on June 14th to the 17th, 2010.

The Congress is considered one the most important platforms for the exchange of technical information on engines. It covers papers and presentations in the fields of marine, power generation and locomotives showcasing state of the art technologies. The Congress also provides a unique opportunity to network with colleagues and industry leaders with common interests in engines.

Over 900 delegates from 39 countries attended this year's Congress. The Congress had 12 Technical Sessions with approximately 180 technical papers pre-

sented in four parallel sessions. In addition, more than 66 papers were presented in the poster area located in the exhibit hall. The Congress also included an exhibition showcasing engines, engine components, engine applications and companies that supply fuels and lubricants.

The main theme of this Congress was the challenges facing the marine industry in complying with the new IMO emissions and fuel quality regulations. Worldwide, fuel suppliers are hesitant to reduce sulfur from residual fuels, leaving the maritime industry with the choice of operating on less available and more expensive low sulfur fuels or removing the sulfur from the engine exhaust with costly aftertreatment. There was a lot of discussion about LNG and natural gas for marine and other applications as a means to meet emission requirements. Many of the papers presented at the CIMAC Congress reported

results from the HERCULES-B program. The HERCULES-B is the Phase II of the HERCULES program, conceived in 2002 as a 7-year strategic R&D Plan, to develop future generation of optimally efficient and clean marine diesel power plants. It comprises 56 sub-projects and is funded by the European Commission's Framework Program 7 for R&D (FP7, Theme Transport). Funding for phase II of the HERCULES-B project has been finalized, MAN and Wartsila being the prime recipients with a host of suppliers, academia and consultants. Two-stage turbocharging, common rail electronic fuel injection, Miller timing, and EGR were common strategies discussed for meeting future emission requirements.

The CIMAC Congress is held once every three years and the next Congress will take place in 2013 in Shanghai, China. ▶

## ICE Fall 2009 Conference in Lucerne, Switzerland

Frank Aboujaoude and John Hedrick

**T**he Fall Technical conference was held on September 27-30, 2009 at the Grand Hotel Europe in Lucerne, Switzerland. The hotel was located approximately 10 minutes from the train station by taxi or train. Conference attendees were able to walk from the hotel to the city center along the shore of Lake Lucerne and enjoy the beautiful scenery. The weather during the entire conference was very nice with hardly any rain for an area that is known for rain during the fall season.

The conference officially kicked off on Monday with a Keynote Address by Andrei Ludu, Deputy Product Line Manager and Head of Product Management for Large Bore Engines, at AVL List in Graz, Austria. Mr. Ludu's presentation was titled "Ultra Low Emissions a Great Challenge for Large Bore Engines". He discussed several combustion technologies, exhaust after treatment, and alternative fuels that are being used to reduce emissions in large bore diesel engines. The presentation covered the

impact of using optimized combustion, Miller Cycle and variable valve timing, two stage turbocharging, high injection pressure, common rail injection, EGR (exhaust gas recirculation), DPF (diesel particulate filter), and SCR (selective catalytic reduction). Mr. Ludu also discussed that, in some cases, some emissions compliance may require a new engine design for high power density and EGR.

The conference had 55 technical papers presented in three parallel sessions and covered design, development, and application of internal combustion engines. All presented papers were published in the Conference Proceedings. The searchable CD was provided to all registrants and can be ordered from ASME for those unable to attend the conference.

A dinner cruise was held on beautiful Lake Lucerne on Monday September 28th. The

cruise was a two hour round trip from Lucerne to Vitznau. At the dinner cruise, the ICE Division Chairman Tim Callahan and the ICE Honors and Awards Committee Chairman Abnash Narula presented Dr. Ron Matthews from the University of Texas at Austin the Internal Combustion Engine Award.

The conference had several "Table Top" exhibits including those from

continued on page four



Hotel Europe, Venue of the Lucerne Conference.

DieselNet.com, Driven, Inc., Ganser CRS AG, and Heinzmann. Attendees were able to exchange information with exhibitors during meals and breaks.

The conference concluded on Wednesday September 30th with two technical tours of DUAP AG in Herzogenbuchsee and ABB Turbo Systems in Baden, both companies are located in Switzerland. Thanks again to DUAP and ABB for sharing their impressive facilities with us. ▶



*Andrei Ludu Delivering the Keynote Address.*



*Dr. Ron Mathews from University of Texas at Austin Receives the ICE Division Award from Chairman Tim Callahan and Awards Committee Chairman Abnash Narula.*



*Conference Attendees Enjoying a Discussion before Dinner.*



*Conference Participants Socializing at the Dinner Cruise on Beautiful Lake Lucerne.*



*Neil Blythe, Greg Gutoski and others enjoy the scenery.*



*Attendee Spouses Socializing on the Boat Deck.*



*Andrei Ludu of AVL List Receives a Plaque from Abnash Narula for the Conference Keynote Address Presentation.*

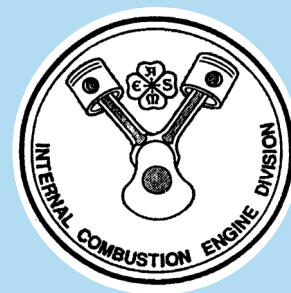
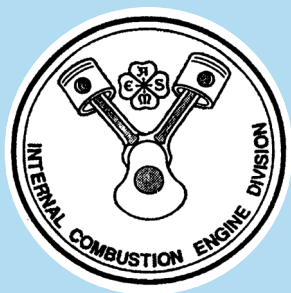
# Call For Papers

## Internal Combustion Engine Division ASME International

Invites Papers for the  
2011 Fall Technical Conference

October 2–5, 2011 • Morgantown, West Virginia, USA

Hosted by  
West Virginia University



Papers of high technical quality related to the development, advancement, and improved understanding of the **internal combustion engine** are sought for the ASME Internal Combustion Engine Division's 2011 Fall Technical Conference to be held October 2 – 5, 2011 in Morgantown, West Virginia and hosted by West Virginia University. In addition to two-days of technical presentation of accepted papers, the conference highlights networking activities among members of industry, government, and academia, keynote speakers, student presentations, industrial tours, a banquet, and an overall collegial atmosphere to advance the state of the art of the internal combustion engine.

All offers relating to the internal combustion engine, or interfaces with internal combustion engines, are accepted for rigorous review by experts in the field. Specifically, accepted papers are generally grouped into one of the following technical tracks (with corresponding track chairs listed for contact):

- Track 1: Large Bore Engines** (Mr. Dick Dunteman, [nrdun@aol.com](mailto:nrdun@aol.com))
- Track 2: Fuels** (Professor Scott Miers, [samiers@mtu.edu](mailto:samiers@mtu.edu))
- Track 3: Advanced Combustion** (Dr. Brad Zigler, [brad.zigler@nrel.gov](mailto:brad.zigler@nrel.gov))
- Track 4: Emissions Control Systems** (Mr. Steve Fritz, [sfritz@swri.org](mailto:sfritz@swri.org))
- Track 5: Instrumentation, Controls, and Hybrids** (Mr. David Gardiner, [dgardiner@nexumresearch.com](mailto:dgardiner@nexumresearch.com))
- Track 6: Numerical Simulation** (Professor Song-Charng Kong, [kong@iastate.edu](mailto:kong@iastate.edu))
- Track 7: Engine Design, Lubrication, and Applications** (Mr. Ronald Duta, [rduda@unlimiteddesigneng.com](mailto:rduda@unlimiteddesigneng.com))

Accepted papers that are presented at the conference will be archived on the conference proceedings CD and by Scopus. Presentation of papers at the conference requires payment of the registration fee (papers not presented at the conference are excluded from both the conference proceedings CD and Scopus). Accepted papers must transfer copyright to ASME, with certain exceptions noted. The ASME ICE Division's Presentation Policy and the ASME Copyright Policy are available at <https://www.asmeconferences.org/ICEF2011/PubPolicy.cfm> and <https://www.asmeconferences.org/ICEF2011/PubForms.cfm>, respectively.

Accepted papers of highest quality and with potential for long-lasting technical contribution will be approved for fast-track publication in ASME's *Journal of Engineering for Gas Turbines and Power*. All accepted papers, regardless of fast-track selection, are eligible for consideration by ASME's *Journal of Engineering for Gas Turbines and Power*. Those papers not selected for fast-track publication may be submitted to ASME's *Journal of Engineering for Gas Turbines and Power* after presentation at the conference, where standard review process will occur.

Please submit your 400-word or less paper offer / abstract by **Friday, January 28, 2011** at the conference website: [www.asmeconferences.org/ICEF2011](http://www.asmeconferences.org/ICEF2011), which will be activated soon.

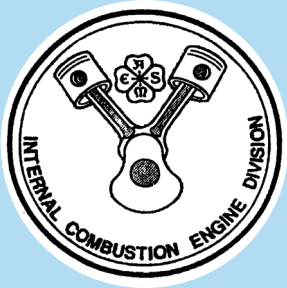
For additional information or questions, please contact the technical program chair:

**Timothy J. Jacobs**  
Texas A&M University  
[tjjacobs@tamu.edu](mailto:tjjacobs@tamu.edu)

### Important Dates

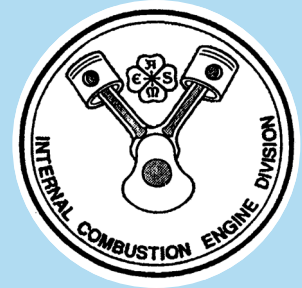
January 28, 2011	400-word paper offer / abstract due
April 1, 2011	Draft manuscript due for review
June 24, 2011	Final manuscript, copyright, and author registration due

# UNDERGRADUATE MECHANICAL ENGINEERING STUDENTS



## Call For Presentations

### Internal Combustion Engine Division ASME International



Invites Presentations for the  
2011 Fall Technical Conference  
October 2–5, 2011 • Morgantown, West Virginia, USA

Hosted by  
West Virginia University

Are you an undergraduate Mechanical Engineering student who is passionate about **internal combustion engines**? Would you like to participate in one of the world's leading internal combustion engine organizations **for free**? If so, then the Student Presentation Chair of the ASME Internal Combustion Engine Division invites you to submit a **1000-word extended abstract and 10-minute draft presentation** about your undergraduate work in internal combustion engines.

Maybe you:

- work in a laboratory at school that does internal combustion engine research.
- work on the engine of a collegiate race team or your own car.
- have innovative ideas for next generation advanced engines or alternative fuels.
- are an internal combustion engine enthusiast and would like to deliver a presentation on the subject.

**We would like to hear from you if you have an interest in internal combustion engines!**

To be considered, submit a 1000-word abstract and 10-minute draft presentation (e.g., in Powerpoint) to the Student Presentation Chair by **April 8, 2011**. The Student Presentation Chair and a selection committee will **choose the top two presentations**. Then, those two students will be **invited to Morgantown, West Virginia** to deliver their presentations to a group of leading experts in the internal combustion engine field at the ASME Internal Combustion Engine Division's Fall Technical Conference. As a participant of the conference, you'll get to attend other researcher's presentations and network with people working in this exciting and important field.

If your presentation is selected, your travel and lodging expenses are covered up to \$1000. You must be an ASME student member and be an undergraduate student on the date of submission to be selected.

**Send your 1000-word abstract and 10-minute draft presentation by April 8, 2011 to:**

Will Northrop  
Student Presentation Chair  
University of Michigan  
Email: [wnorthro@umich.edu](mailto:wnorthro@umich.edu)

**WE WOULD LIKE TO HEAR FROM YOU BY APRIL 8, 2011!**

## ICED Board of Associates 2010–2011

### ASSOCIATES

Dr. Duane L. Abata  
Dr. Frank W. Aboujaoude  
Dr. Wole C. Akinyemi  
Dr. Emad Amin  
Dr. Avinash Argawal  
Dr. Susumu Ariga  
Dr. Dennis N. Assanis  
Dr. Dennis L. Bachelder  
Dr. Eric N. Balles  
Dr. Reda M. Bata  
Dr. Stuart R. Bell  
Kelly J. Benson  
Dr. Avtar Bining  
Neil X. Blythe  
Dr. Stani Bohac  
Dr. Anatoli Borisov  
Dr. Karen Den Braven  
Theodore L. Bronson, III  
Keith Brooks  
Timothy J. Callahan  
Dr. A. Paolo Carlucci  
G. Richard Cataldi  
Andrea Emilio Catania  
Dr. Jerald A. Caton  
Dr. Kirby S. Chapman  
Dr. Gong Chen  
Cary M. Chenanda

Bruce Chrisman  
Dr. Stephen A. Ciatti  
William B. Clary  
James J. Cole  
Dr. Roger L. Cole  
John Dowell  
Kevin R. Downes  
Ronald J. Duda  
Richard Dunteman  
Dr. Mikhail A. Ejakov  
Dr. Robert L. Evans  
Dr. Zoran S. Filipi  
Dr. Paul L. Flynn  
Steven G. Fritz  
David Gardiner  
William C. Geary  
Michael Gron  
Gerald Grosshans  
Michael A. Gula  
Dr. Mahesh Gundappa  
Greg Gutoski  
Christian Haller  
Harold L. Harris  
John C. Hedrick  
Martin J. Heimrich  
Dr. Naeim A. Henein  
Dennis E. Hurst  
Tim Jacobs

Joseph M. Kane  
Dr. Ghazi Karim  
Edward P. Kelleher  
Dr. Allan T. Kirkpatrick  
Dr. Jacob Klimstra  
Domenico Laforgia  
Dr. Ming-Chia Lai  
Dr. Hailin Li  
Bill Liss  
James J. McCoy, Jr.  
Mark McNeely  
Dr. Mohamad Metghalchi  
Dr. Clark Midkiff  
B. L. Mikkelsen  
Robert L. Miller  
Dr. Razi Nalim  
Abnash C. Narula  
W. Stuart Neill  
Dustin Osborne  
Andreas Panayi  
Malcolm Payne  
Dr. Gordon R. Pennock  
Dr. Ramesh B. Poola  
Dr. Suri Rajan  
Ed O. Reinbold  
Dr. Dan E. Richardson  
Robert L. Rowan, Jr.  
Dr. Alexander Sappok

Raj Sekar  
J. Vincent Serve'  
Dr. Tariq Shamim  
Rameshwar Prashad Sharma  
Dr. Roger Sirens  
Thomas M. (Mac) Sine  
Dr. Hakan S. Soyhan  
Robert W. Stachowicz  
Dr. Rudolf Stanglmaier  
Ted E. Stewart  
Van T. Stonechocker  
Reza Tafreshi  
Jon K. Tice  
Ezio Treglia  
Dr. Ferdinand Trenc  
Dr. Basil Ubanwa  
Terry L. Ullman  
Dr. Teoman Uzkan  
Mathew Viele  
John C. Vronay  
James F. Wakenell  
Rick Walker  
L. Brian Wilcox  
Dr. Bryan Willson  
Robert P. Wilson  
Dr. Victor W. Wong  
Dr. Lisheng Yang  
Dr. Houshun Zhang

Dr. Bradley Zigler  
George Zitka III, PE

### SENIOR ASSOCIATES

Charles A. Ankrum  
John M. Bailey  
Joseph R. Barcroft  
John M. Clarke  
Paul R. Danyluk  
Stephen G. Dexter  
Dr. Samuel Doughty  
Peter C. Enslin  
David B. Field  
James H. Garrett  
Karl T. Geoca  
Dr. David L. Harrington  
Melvin J. Helmich  
Joseph W. Hibbard  
Dr. Phillip Hill  
Gaylord E. Hold  
J. Bruce Ingold  
Eugene Kasel  
Jochen E. Kindling  
Carl L. McClung  
Andrew J. Pope  
Karl J. Springer  
Dr. Michael P. Thompson  
Hugh A. Williams, Jr.

## Executive Committee 2010 - 2011

### CHAIR

**Dr. Frank W. Aboujaoude**  
Engineering Manager, Pielstick Engines  
Fairbanks Morse Engine  
701 White Avenue  
Beloit, WI 53511  
Ph. 608-364-8197  
E-Mail: frank.aboujaoude@fairbanksmorse.com

### VICE-CHAIR, TECH. PROGRAMS

**W. Stuart Neill**  
Research Officer  
National Research Council Canada  
Institute for Chemical Process &  
Environmental Technology, Bldg. M-9  
1200 Montreal Road  
Ottawa ON K1A 0R6 CANADA  
Ph. 613-990-2408  
E-Mail: stuart.neill@nrc-cnrc.gc.ca

### VICE-CHAIR, TECHNICAL

**Dr. Steve Ciatti**  
Staff Mechanical Engineer  
Argonne National Laboratory  
Center for Transportation Research  
9700 S. Cass Ave., Bldg. 362  
Argonne, IL 60439  
Ph. 630-252-5635  
E-Mail: sciatti@anl.gov

### VICE-CHAIR, ADMINISTRATION

**John C. Hedrick**  
Principle Engineer  
Southwest Research Institute  
6220 Culebra Rd.  
P. O. Drawer 28510  
San Antonio, TX 78228-0510  
Ph. 210-522-2336  
Email: jhedrick@swri.org

### ASSISTANT VICE-CHAIR, TECHNICAL PROGRAMS

**Dr. Timothy Jacobs**  
Assistant Professor  
Texas A&M University  
114 EPB, 3123 TAMU  
College Station, TX 77843-3123  
E-mail: tjacobs@tamu.edu

### INCOMING MEMBER, ADMINISTRATION

**Steve McConnell**  
Lead Fuels Engineer  
Argonne National Laboratory  
Center for Transportation Research  
9700 S. Cass Ave., Bldg. 362  
Argonne, IL 60439  
Ph. 630-252-3080  
E-Mail: smcconnell@anl.gov

### SECRETARY

**Neil X. Blythe**  
Manager, Performance & Emissions  
GE Transportation  
2901 East Lake Road  
Erie, PA 16531  
Ph. 814-875-3983  
E-Mail: neil.blythe@ge.com

### TREASURER

**Dr. Victor W. Wong**  
Mgr., Sloan Automotive Laboratory  
Massachusetts Institute of Technology  
31-155, MIT  
Cambridge, MA 02139  
Ph. 617-253-5231  
E-Mail: vwong@mit.edu

### PAST CHAIR

**Timothy J. Callahan**  
Principal Engineer  
Southwest Research Institute  
P.O. Drawer 28510  
San Antonio, TX 78228-0510  
Ph. 210-522-6890  
E-Mail: tcallahan@swri.edu

## Technical Committees and Activities

### LARGE BORE ENGINES

**Chair: Richard Dunteman**  
NRDunteman, LLC  
342 Laurel Valley  
Shallotte, NC 28470  
E-mail: nrdun@aol.com

**Vice-Chair: James McCoy**  
E-mail: james.mccoy@hoerbiger.com

### ADVANCED COMBUSTION

**Chair: Dr. Bradley Zigler**  
Senior Engineer - Advanced  
Petroleum Based Fuels  
National Renewable Energy  
Laboratory  
1617 Cole Blvd., MS-1634  
Golden, CO 80401-3393  
Ph: 303-275-4267  
Fax: 303-275-3765  
E-Mail: brad.zigler@nrel.gov

**Vice-Chair: Open**

### ENGINE DESIGN, LUBRICATION AND APPLICATIONS

**Chair: Ronald J. Duda**  
President  
Unlimited Design International, Inc

4 Open Square Way, Suite 116  
Holyoke, MA 01040  
Cell Ph. 413-420-0025  
E-Mail: rduda@unlimited  
esigneng.com

**Vice-Chair: Dr. Dan Richardson**  
E-Mail: Dan.E.Richardson@  
cummins.com

### EMISSION CONTROL SYSTEMS

**Steven G. Fritz, PE**  
Manager Medium Speed Diesel  
Engines  
Dept. of Engine and Emissions  
Research  
Southwest Research Institute  
6220 Culebra Road  
P. O. Drawer 28510  
San Antonio, TX 78228-0510  
E-Mail: sfritz@swri.org

**Vice-Chair: Open**

### FUELS TECHNOLOGY

**Chair: Scott Miers**  
Assistant Professor  
Michigan Technological University  
1400 Townsend Drive,

Houghton, MI 49931-1295  
Ph: 906-487-2709  
E-mail: samiers@mtu.edu

**Vice-Chair: Dr. Apoorv Agarwal**  
Alternative Fuels TE & Dual Fuel  
Engine Project Leader  
Ford Motor Company  
3622.aa Research & Innovation  
Center, MD 3629  
2101 Village Road  
Dearborn, MI 48124  
Ph: (313) 717-0162  
E-Mail: aagarwa1@ford.com

### INSTRUMENTATION, CONTROLS & HYBRIDS

**Chair: David Gardiner**  
Director Automotive R&D  
NEXUM Research Corporation  
Ph. (613) 384-7894  
Fax: 630-252-3443  
E-Mail: dgardiner@  
nexumresearch.com

**Vice-Chair: Mathew Viele**

### NUMERICAL SIMULATION

**Chair: Song-Chang Kong**  
Assistant Professor  
Iowa State University  
3028 Black Engineering Building  
Ames, IA 50011  
E-mail: kong@iastate.edu

**Vice-Chair: Razi Nalim**

### ASSOCIATE EDITORS, JOURNAL OF ENGINEERING FOR GAS TURBINES & POWER

**Dr. Chris Rutland**  
University of Wisconsin

**Dr. Margaret S. Wooldridge**  
University of Michigan

**Dr. Thomas Ryan III**  
Southwest Research Institute

**Dr. James Wallace**  
University of Toronto

### TECHNICAL PAPERS COMMITTEE

Dr. Ramesh B. Poola

## Administrative Committees and Activities

### GROUP OPERATING BOARD REPRESENTATIVE

**Dr. Kirby Chapman**

### GROUP OPERATING BOARD ALTERNATE

**Tim Callahan**

### NEWSLETTER

**Prof. Suri Rajan**  
Dept. of Mechanical Engineering and En-  
ergy Processes  
Southern Illinois University  
Carbondale, IL 62901-6603  
Ph. 618-453-7010  
Fax: 618-453-7658  
E-Mail: rajan@siu.edu

### PAPER PRESENTATION RATING

**Steven G. Fritz, PE**  
Manager Medium Speed Diesel  
Engines  
Dept. of Engine and Emissions  
Research  
Southwest Research Institute  
6220 Culebra Road  
P. O. Drawer 28510  
San Antonio, TX 78228-0510  
Ph. 210-522-3645  
Fax: 210-522-3950  
E-Mail: sfritz@swri.org

### CIMAC U.S. NATIONAL MEMBER GROUP

**Tim Callahan, Chair**

### MEMBERSHIP DEVELOPMENT AND MEMBER INTERESTS

**Dr. Frank W. Aboujaoude**  
Engineering Manager, Pielstick  
Engines  
Fairbanks Morse Engine  
701 White Avenue

Beloit, WI 53511  
Ph. 608-364-8197  
Fax: 608-364-8233  
E-Mail: frank.aboujaoude@  
fairbanksmorse.com

### NOMINATING

**Terry L. Ullman**  
Southwest Research Institute (Ret)  
27540 Riata Ranch  
San Antonio, TX 78261  
Ph. 210-408-0830  
E-Mail: tullman27@gmail.com

### HONORS & AWARDS

**Abnash C. Narula, PE**  
Manager of Engineering  
Wm. W. Nugent & Co.  
3440 Cleveland St.  
Skokie, IL 60076-0948  
Ph. 847-674-7782  
Fax: 847-674-0379  
E-Mail: a.narula@wwnugent.com

### MEETINGS COORDINATING

**Frank Aboujaoude**

### PUBLICITY

**Open**

### OPERATING GUIDE & BY-LAWS

**John Hedrick**  
Principal Engineer  
Southwest Research Institute  
6220 Culebra Road  
P. O. Drawer 28510  
San Antonio, TX 78228-0510  
Ph. 210-522-2336  
Fax: 210-222-2710  
E-Mail: jhedrick@swri.org

### GOVERNMENT RELATIONS

**Greg Gutoski**  
Manager, R&D  
Fairbanks Morse Engine  
701 White Avenue  
Beloit, WI 53511  
Ph. 608-364-8009  
Fax: 608-364-8233  
E-Mail: greg.gutoski@  
fairbanksmorse.com

### ENERGY CONVERSION COMMITTEE

**Greg Gutoski**

### LECTURES

**Dr. Kirby S. Chapman**  
Professor and Director  
National Gas Machinery Lab.  
Kansas State University  
245 Levee Drive  
Manhattan, KS 66502  
Ph. 785-532-2319  
E-Mail: chapman@ksu.edu

### INTERNAL COMBUSTION ENGINE AWARD

**Open**

### HONDA MEDAL

**Committee Representative**  
Steven G. Fritz, PE

### WESTINGHOUSE MEDALS

**Committee Rep.**  
Abnash Narula

### LONG RANGE PLANNING

**Frank Aboujaoude**

### HISTORY AND HERITAGE LIAISON

**Melvin J. Helmich**  
Technical Director  
HELMAR'K  
P. O. Box 493  
Mount Vernon, OH 43050-0493  
Ph. 740-397-5323  
Fax 740-397-5323  
EMail:mhelmich@columbus.rr.com

### STUDENT ACTIVITIES

**Dr. Stani Bohac**  
Assistant Research Scientist  
Mechanical Engineering, Univ.  
of Michigan  
2045 W. E. Lay Automotive  
Laboratory  
Ann Arbor, MI 48109-2121

### STAFF

**Vince Dilworth**  
Senior Manager,  
Engineering Programs  
30 Rainbow Bridge Ct.  
San Ramon, CA  
94582-4534 USA  
Ph. 925-244-1360  
Fax 925-244-1359  
Email: diworthv@asme.org

### TECHNICAL AWARDS COMMITTEE

**Dr. Jerald A. Caton**  
Prof., Mechanical Engineering Dept.  
Texas A&M University  
College Station, TX 77843-3123  
Ph. 979-845-4705  
Fax 979-862-2418  
E-Mail: jcaton@tamu.edu