



# MGT

# E&TM



# GROUP

# T & S

## Engineering & Technology Management Group Newsletter

Michael Ambrose, Editor & Nathaniel Leon, Co-Editor

Winter 2002

### From the Chair of the Safety Engineering and Risk Analysis Division



Bryan Gore

I am proud to become the Chair of SERAD, and I thank Frank Elia for inviting me to join the Executive Board four years ago. I have learned much during this period, and I am still learning. I want to thank

Joe Balkey, our outgoing Chair, on behalf of all SERAD for his hard and dedicated work this past year.

My first activity after acceding to the Chair was to arrange the appointment of Dr. Bilal Ayyub, Professor of Civil and Environmental Engineering at the University of Maryland as incoming member of the Executive Board. I have worked with Bilal since the early '90s, starting with the Research Task Force on Risk-Based Inspections, and continuing on into the Research Committee on Risk Technologies. Bilal brings a needed academic perspective to the board, rounding out our intellectual credentials. Bilal will be

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E&TM Group Web Address:  
[www.asme.org/groups/etmg](http://www.asme.org/groups/etmg)

### From the Chair of the Management Division



John Bozewicz

The Management Division is continuing to evolve as we explore ways to be of the best service to you - our members. The Executive Committee held a very successful Strategic Retreat at the Summer Annual

Meeting in Minneapolis last June. The purpose was to review the state of the Division and initiate a strategic planning process. The main thrust of the initial effort was to develop ideas for increasing active membership and also to identify specific core areas to focus on to provide the best service in this limited resources environment. Our plan is to concentrate our efforts on a few primary areas and develop programs and events around those areas that will provide the most benefit to our members and the larger ASME community. Our vision is to be the source of conceptual and practical information and the innovation leader for mechanical engineers in the practice of:

- Engineering Management Processes & Skills
- Entrepreneurship
- Small Business Management

It is our intent to make the depth of knowledge within the Division available to other ASME operating units.

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### T&S Division Message



Kenneth Horne

The T&S Division is beginning a review of its bylaws, operating plan and three to five year strategic vision. The outcome of this review will be a refined, more focused direction to serve you, our divi-

sion members, as well as the greater ASME membership and the profession. Your contribution to our division's renewal is sought after and will be appreciated; whether that be a simple e-mail or phone call to share your views on where you think our division should be heading, or a higher level of commitment where you volunteer some of your valuable time to create a newsletter article covering a T&S subject related to your expertise and experience. If you are reading this newsletter, you have already been touched by the T&S Division. As such, you are also invited to contribute to the division's new direction. The T&S Division will be meeting in New Orleans at the 2002 Congress. Come join us, share your experience, meet new colleagues and learn about what's going on in your field- mechanical engineering.

Kenneth Horne, PE  
T&S Division Chair  
khorne@asme.org

## From the Chair of the Safety Engineering and Risk Analysis Division

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Secretary this year, with Bob Navarro picking up the duties of Treasurer.

An important aspect of Bilal's position is his relations with students, potential candidates for our Student Design Contest. We are proud of this ongoing contest, whose objective is to attract the interest and attention of students to the safety profession. This activity is right in tune with the recent ASME focus on the importance of attracting and retaining the membership of young professionals. Awards are presented at the SERAD dinner at Congress, along with brief presentations from the winners. We hope to expand this into presentation of a full paper during our formal meeting sessions next year. Brian Brady has advertised and run the contest for the last several years (Thank you Brian!), and he received a strong set of applications this year. I encourage anyone interested in working with students, who wants to expand his SERAD activities, to contact me (e-mail: Bryan.Gore@pnl.gov) or Brian (e-mail: bgbrady@compuserve.com) and offer to become involved in this important activity.

The second activity in which I became formally involved as Chair relates directly to a primary reason why I am proud to be a SERAD member. As you know (or should know) our papers presented at Congress each year are peer reviewed, and subsequently published as formal, referencable publications. In following the development of the program for this year's Congress I became aware of a paper presenting a good idea, but for which the technical development and application of the concept was incomplete. Following a couple of review/revision iterations it became clear that the author needed help to work out technical details of the application acceptably. We discussed this with the author, and he agreed. The ultimate result is that the author and the reviewer will collaborate to develop a strong, technically valid joint paper on the idea and application for next year's Congress. We hold to high standards, and we get involved personally as well as technically. Once again, if you want to get involved, let me know. We can find many interesting and useful things for you to do!

See you at Congress in New Orleans, November 17 - 22! SERAD's plans for Congress have evolved and expanded during the past year, with the number of sessions growing from six to seven due to the active involvement and recruitment activities of our program coordinator Ben Ale from the Netherlands and his support crew in the U.S. At the urging of Bob

Navarro from NASA, last year's new member of the executive board, we added a plenary session addressing NASA activities that will be addressed by an astronaut experienced in the wide variety of the safety-related activities of this important agency.

You are invited to join us at our executive board meeting Sunday afternoon. Also, a few tickets are available for purchase for the official SERAD dinner Sunday evening. Our dinner speaker, Dr. Amos Holt, will discuss the many significant changes that are being implemented in the ASME structure and operations this year.

Bryan Gore

## Dr. Robert E. Hebner to Speak at the Joint MD/T&S Banquet

At the Joint Banquet of the Management and the Technology and Society Divisions, on Tuesday, November 19, 2002, Dr. Robert E. Hebner will discuss, "Management, Technology and Human Nature - Getting a Fair Deal as a Consumer May Be Harder than You Thought." This dinner and speech is a special event being held during the E&TM Group Symposium, which is being held in conjunction with the 2002 International Mechanical Engineering Congress and Exposition in New Orleans.

Dr. Hebner is currently the Director, Center for Electromechanics at the University of Texas at Austin and served in a number of positions at the National Institute of Standards and Technology, including Deputy Director and Director. He also worked in the Office of Management and Budget to help prepare the technology portions of the Administration's 1990 budget, at Sandia to help in the design of an accelerator for nuclear effects simulation, and at the Defense Advanced Research Projects Agency where he developed programs to stimulate technical advances in semiconductor manufacturing. He has served on a number of review teams to assess the management of technical programs in other organizations. Dr. Hebner has extensive experience in international technology programs particularly in the areas of modernization of the measurement systems needed to support global trade. He is a fellow of the Institute of Electrical and Electronics Engineers and a member of the American Physical Society and the American Association for the Advancement of Science.

Please make plans to join us for this special event in New Orleans to meet and listen to Dr. Hebner. It is sure to be an insightful evening.

## From the Chair of the Management Division

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A number of new volunteers have taken up the challenge to become actively involved in creating a "value-based" division for our members. A number of new ideas have been proposed but we need additional volunteers to help us see some of these ideas to fruition. Please consider actively joining us in this endeavor. The professional and personal rewards are great.

I want to call your attention to the upcoming 2002 International Mechanical Engineering Congress and Exhibition (IMECE) to be held in New Orleans. The Division's Executive Committee will be meeting on Sunday, November 17th, at the IMECE in New Orleans. Attendance is open so please stop by to meet us and hear first-hand what the Division is about and where we are going.

The Congress program will feature five sessions from the Management Division. The Division contributed 4 of the 11 sessions in the new Engineering Business Management Track. These sessions will focus on engineering entrepreneurship, project management (a tutorial), ethical issues faced by managers and the management challenges resulting from rapidly emerging technologies, standards and markets. The Division is also co-sponsoring a session on dealing with managing design for the life cycle. All these sessions have been developed to be of practical relevancy to practitioners of technology and management.

A highlight of the Division's activities at this year's Congress will be the delivery of the Towne Lecture on Monday, November 18th, by Mr. Stephen Lewis, Director of Strategic Planning at the Ford Motor Company. This is a prestigious lecture that has not been given since 1993. The Division will again be joining with the Technology & Society Division for a joint dinner event on Tuesday evening, November 19th, where Dr. Robert E. Hebner, Director of the Center for Electromechanics at the University of Texas at Austin and a former Director of the National Institute of Standards and Technology, will be the featured speaker. I would ask that you consider joining us in New Orleans. There is much to be gained not only from the sessions and special events, but also from interaction with your colleagues who share an interest in the management of technology.

But don't wait until November to get to know us or get involved. Drop me a line at bozewiczj@asme.org and let me know of your interest in becoming an active participant. Opportunities are endless and everyone has unique experience and perspective to offer to your fellow members. We'll work around your availability and schedule constraints. Get the full benefit of your membership by actively participating in the Division. I hope to see you in New Orleans or hear from you very soon!

John Bozewicz, Chair

## Vice-President's Message



Bob Simmons

The times they are a'changing and the Engineering and Technology Management (E&TM) Group is responding to the winds of change. As many of you may be aware, the entire Council of Engineering (COE) is undergoing a self-study process to reorganize COE and its divisions and groups into an organization that will be more responsive to COE member specific needs and the needs of ASME members in general. This reorganization presents numerous new avenues and opportunities for E&TM to share its expertise around ASME. A revised E&TM Group Strategic Plan is being developed as input to the COE reorganization implementation process.

I propose we adopt the slogan, "**ET&M is about the How.**" If you are interested in the "how" of engineering management topics such as entrepreneurship, the practice and science of engineering management, the ethics of engineering, intellectual property protection, safety engineering and risk analysis, accident analyses, and the societal impacts of technology, E&TM is the place to go in ASME. While other ASME technical groups may concentrate on the "what" of the engineering process, E&TM's focus remains on "how" we do our engineering processes in today's technological society.

We are not waiting on the completion of the COE reorganization to begin several key initiatives to expand the number of active members in each division. During the recent Summer Annual Meeting, the Management Division conducted a well-attended retreat to brainstorm opportunities to expand the division's roles and active membership. Many innovative initiatives were identified and specific action items for follow-up assigned including ways for younger members to design and initiate events that are adapted to the changing times, while discovering insight and experience of members who have been with us for a while. The Technology and Society Division will soon organize a small focus group in the Washington, D.C. area to tap into specific interest areas. The Safety Engineering and Risk Analysis Division continues to encourage the submittal of refereed papers for presentation at the International Mechanical Engineering Conference and Exposition and to sponsor a very successful Safety Engineering Design Contest for student sections. Thus, our level of activity is increasing and the number of active members continues to grow. Good job to all divisions!

ASME in general and COE in particular are undergoing change. I believe that this situation provides us the opportunity to improve the visibility of what E&TM does to the benefit of all of ASME and what E&TM can offer in partnering relationships with many of our sister societies both in the U.S. and overseas. I am confident that, with an increasing number of new members becoming active, we will only be limited by the amount of time and effort we can devote to this challenge. There are many small, not overly time-consuming tasks to be done - which can add up to a lot of time if only done by a few people. Grab a small one, help lighten the load and see how you can help yourself while helping your fellow members. Bottom line - get involved! Please take the time to contact me at [bsimmons@pppl.gov](mailto:bsimmons@pppl.gov) or one of the division chairs to find out what opportunities exist to make your membership more meaningful.

For those of you that are within a reasonable commute to the IMECE in New Orleans, I would like to issue a special invitation to attend one of the E&TM Division Executive Committee Meetings or the E&TM Operating Board Meeting to get acquainted. The division meetings are all on Sunday, November 17th (Management 12-3:30 pm, SERAD 1-5 pm, and T&S 5:30-8:30 pm). The E&TM Operating Board Meeting will be Tuesday, November 19th 11 am - 2:00 pm). Hope to see you there!

Bob Simmons

## 2002 Congress Overview

Two years ago at the IMECE (Congress), the E&TM group initiated a group approach that capitalized on the synergism of the divisions to provide a more responsive program targeted at specific member interests. This program, initiated by Hiroshi Honda, Ken Horne, and Steve Nichols has continued to grow and expand. Our number of sessions grew at the 2001 Congress in New York City and this upcoming Congress will have 27 sessions sponsored by the E&TM Group. Of special importance regarding how successful our "message" is being received is the fact that E&TM contributed 10 of the 11 sessions being presented in the industrially-focused Engineering Business Track. Each of the Division Chairs have included a brief overview of their sessions, but special recognition and thanks go to the division organizers - Ted Aanstoos of the Management Division, Ben Ale of SERAD, and Susie Jones and Hiroshi Honda of T&S. Without their initiative, dedication, and follow-up, the steady growth and improvement in the number and quality of the IMECE sessions could not have continued to grow and improve.

## Mgt and T&S Divisions to Participate in 2003 National Manufacturing Week

In 2003, ASME will organize and manage the technical conference program at the 2003 National Manufacturing Week (NMW). The 2003 NMW will be held March 3-6 at the McCormick Place Complex, Chicago, Illinois. The event hosts North America's premier marketplace for buyers and sellers of products, services and technologies that support and integrate all the functions and activities of the design engineering and manufacturing process. NMW is sponsored by the National Association of Manufacturers and supported by more than 13 associations, societies and trade journals.

As a sponsor of the 2003 NMW technical conference program, ASME will present a series of industry-focused technical tracks and sessions on topics ranging from E-manufacturing to engineering management, micro-fabrication, plant engineering and management strategies, plus a number of technical short courses. Sessions will focus on manufacturing, design and automation, nano-technology, plant engineering and management, professional development, IT logistics and GD&T certification.

The Management and Technology & Society (T&S) Divisions will be contributing to the technical conference program at NMW. Management Division will be delivering 4 sessions:

- Effective Project Engineering - a Look at the Basics (T. Davis)
- Transition to ISO9000:2000 for the Small Business (T. Davis)
- Entrepreneurship & Technology Commercialization (S. Nichols)
- Lean Manufacturing & Mass Customization (R. Lebovitz)

T&S Division will be organizing 2 sessions:

- Managing Technology Transfer Partnering (S. T. Jone)
- Hydrogen Powered Vehicles: Strategic & Engineering Issues (J. Agarwal, Charles River Associates, Inc.)

For more information on NMW, exhibition and ASME conference program, please visit: <http://www/asme.org/nmw/>

# E&TM Program at Congress 2002

Hiroshi Honda, E-Mail Address: Hondah9876@aol.com, Telephone/Facsimile Number: 81 + (0)47 453 6144

The 2002 International Mechanical Engineering Congress and Exposition (IMECE) 2002 will be held at New Orleans Hilton & Ernest Memorial Convention Center on November 17-22, 2002. The Engineering and Technology Management (E&TM) Group will host a symposium entitled "Industry, Technology, Society, and History". This symposium follows the success of the 2001 New York Congress Symposium "Partnering to Succeed: Keys to Managing Technology Development, Risk and Globalization" and the 2000 Orlando Congress Symposium "Successfully Managing the Risk and Development of Your Business and Technology."

Management is an art and science of incorporating your vision, initiative, skill, experience, resources, environment and enthusiasm into your planning, decision-making and implementation, reflecting

trends (and often history) of industry, economy, political environment, technology and society among others. Since the 2000 Congress, we have focused on the specific needs of industry, and strategically organized technical sessions in view of the symposium and Congress themes designated for each year.

Table 1 shows a list of the twenty-seven technical sessions, Henry Robinson Towne Lecture session, SERAD Dinner, and Management-T&S Division Joint Dinner, hosted by our Group. Of the twenty-seven technical and other sessions, eleven are categorized as the events for Engineering Business Management Track (Session Numbers TEBM-1 to -11), while the remaining eight, seven, and two sessions are, respectively, categorized as SERAD (SERAD-1 to -7), Technology & Society Division (T&S-1 to -7), and Management Division (MGMT-1

and Henry Robinson Towne Lecture) events.

The Engineering Business Management Track features engineering entrepreneurship, technology partnering, intellectual property issues, project management, ethics and cultural issues from a global perspective, management challenges, standards and markets, strategic role of information systems, and the history of manufacturing engineering. Management Division features design for the life cycle and diverse consumer focus and the educational process of future engineers.

SERAD features safety in NASA operations, next generation aerospace risk technologies, safety analysis and lessons learned after an accident, machine safety codes and design issues, design for safety, public's right to know and vulnerability, 3D: design, manufacturing and safety.

**Table 1 List of Technical Sessions and Events for IMECE 2002 Engineering & Technology Management Group Symposium**

Date	Time	Session No.	Program Title	Chair	Presentation Title and Presenter
17-Nov Sun.	6:30P.M.- 9:00P.M.	Special Event	<u>SERAD Dinner</u>	Bryan F. Gore	Dinner Speech by Amos Holt, Southwest Research Institute
18-Nov Mon.	7:45A.M.- 9:15A.M.	TEBM-1	Engineering Entrepreneurship-The Engineer as a Profit Center	Ted Aanstoos	Engineering Entrepreneurship by Steve P. Nichols, The University of Texas at Austin
18-Nov Mon.	7:45A.M.- 9:15A.M.	SERAD-1	Safety in NASA Operations	M. Stamatelatos W. W. Doerr	Aerospace Safety and Risk: A NASA Astronaut's Perspective by S. J. Horowitz, NASA
18-Nov Mon.	7:45A.M.- 9:15A.M.	T&S-1	Engineering and Technology Management in Academia	Hiroshi Honda	1. The Management of Technology: An Opportunity for Research Universities by W. M. Phillips, University of Florida 2. Managing Energy Engineering Education -The Introductory Course by J. R. Fanchi, Colorado School of Mines 3. Trends of Academic Management by H. Honda, Tokyo Metropolitan Institute of Technology
18-Nov Mon.	9:30A.M.- 11:00A.M	TEBM-2	Engineering Entrepreneurship-Raising Capital to Fund the Venture	David Belden	Panel Session by 1. D. Berglund, State Science and Technology Institute 2. K. Couhig, Source Capital Corporation 3. J. Raguso, California Technology, Trade and Commerce Agency
18-Nov Mon.	9:30A.M.- 11:00A.M	SERAD-2A	Next Generation Aerospace Risk Technologies	Robert Navarro & Alexis Flippen	1. How Risk Management is Evolving at NASA by R. M. Day and D. C. Hall, NASA 2. Alternative Techniques for Modeling Accident Progression in Aerospace Applications by C. J. Everline, Sciencetech, Inc. and T. Paulos, Todd Paulos, Inc.
18-Nov Mon.	9:30A.M.- 11:00A.M	SERAD-2B	Safety Analysis and Lessons Learned After an Accident Part I	W. W. Doerr J. Young	1. A Method for the Evaluation of the Direct Failure Causes and Lies of Defense of Installations with Dangerous Substances by G. M. Laheij, P. A. Uijt de Haag, and B. J. Ale, National Institute of Public Health and the Environment 2. Post Incident Safety Analysis of an Automatic Train Protection System by P. T. Katsumata, Booz Allen Hamilton 3. Simulation of Stand-up Rider Life Truck Accidents to Evaluate Design Implementations of an Osha Operator Training Requirement by M. Zoghi, C. B. Watkins, and A. Sadegh, The City College of the City of New York, and D. Dunlap, Crown Equipment Corporation 4. Arresting Vehicles Through Strain energy Absorption Using Annealed Steel by B. Kemper, Kemper Imageering

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Table 1 (continued)

18-Nov Mon.	9:30A.M.- 11:00A.M.	T&S-2	Ethics Across Boundaries: Decision Frameworks Applied to Real Engineering Management Situations	Mike J. Rabins Ken Horne	Panel Session by 1. P. J. Gnasso, United Technologies Corporation 2. C. E. Harris, Texas A&M University
18-Nov	11:15A.M.- 12:45P.M.	TEBM-3	Managing Strategic Technology Partnering	Susie Jones	Panel Session by M. A. Girts, Intellectual Property, A. Jarrett, Pennington Biomedical Research Center, and J. Lennon, III, Tulane University
18-Nov Mon.	1:00P.M.- 2:00P.M. (subject to change)	Special Event	<b>Henry Robinson Towne Lecture</b>	John Bozewicz	<b>How to Instill a Diverse Consumer Focus into the Educational Process of Future Engineers by Steve Lewis, Ford Motor Company</b>
18-Nov	2:00P.M.- 3:30P.M.	SERAD-3	Machine Safety Codes and Design Issues	Richard Wilson	1. Comparison of European and North American Safety Requirements for Industrial Machinery by T. W. Lueck, Underwrites Laboratories Inc, and G. Vertechy 2. Forensic Engineering Aspects of Machinery Product Design by R. J. Thornhill, C. N. Ramirez, and C. L. Long, Jr., Thornhill & Associates, Inc. 3. Critique: Drain Cover Standard ASME/ANSI – A112.19.8M-1987 (1986) Case Study: Steering Wheel Type Cover by R. L. Barnett and P. J. Poczynok, Triodyne, Inc. 4. NIOSH Auto ROPS Latch and Release Mechanism Second Generation by G. Coles, and J. Young, Pacific Northwest National Laboratory (PNNL)
18-Nov Mon.	2:00P.M.- 3:30P.M.	T&S-3	Sustainable Development: Can We Have a World without Waste?	R. J. Jacobsen C. Proctor	Panel Session by 1. P. Wichlacz, Idaho National Engineering and Environmental Laboratory 2. G. Varner, Texas A&M University 3. Vachon, VNA Systems, Inc. 4. P. Gaither, Bechtel Corporation
18-Nov	2:00P.M.- 3:30P.M.	TEBM-4	Protecting Your Company's Intellectual Property: Recent Trends and Strategies	J. C. Paul	A Tutorial on Do's and Don'ts to Assure Intellectual Property is Protected and at the Same Time Gives maximum Benefits to the Owner(s)
18-Nov Mon.	3:45P.M.- 5:15P.M.	TEBM-5	Project Management for Entrepreneurs and Engineering Managers	Dan T. Koenig Steve Long	A tutorial on pragmatic project management skills that are useful for abstract as well as "nuts and bolts" projects. Techniques for motivational success in teaching and getting the most out of subordinates in achieving project goals.
19-Nov Tue.	7:45A.M.- 9:15A.M.	TEBM-6	Ethics; World Engineering Ethical Autonomy	M. J. Rabins and K. Schmidt	1. Proximity Mines, Espionage, and an Engineer: A Cold War Conundrum by D. Anderson, E. Bristow, J. Coyle, M. Gavin, J. Prescott, and A. Tan, Texas A&M University, 2. Development of Web-Based Modules in Engineering Professionalism and Ethics by T. A. Austin and K. Schmidt, the University of Texas at Austin
19-Nov Tue.	7:45A.M.- 9:15A.M.	SERAD-4	Designing For Safety	G. M. Laheij	1. Stochastic Theory of Human Slipping by R. L. Barnett, S. A. Glowiak and P. J. Poczynok, Triodyne Inc. 2. The Advanced Risk Asimulation Model of the Offshore Operations of the Ekofisk Protective Barrier by H. A. de Ridder, Technische Universiteit Delft 3. The Use of Stochastic Safety Analysis Methods to Establish Control Strategies and Estimate Future Risk by G. W. Ryan, Fluor Federal Services and J. Young, PNNL 4. Use of Failure Modes Effects and Criticality Analysis to Improve Patient Safety by E. A. McKenzie, National Institute for Occupational Safety and Health
19-Nov Tue.	9:30A.M.- 11:00A.M.	TEBM-7	Ethics and Culture - Managing from a Global Perspective	Hiroshi Honda	1. U. S. Companies Dealing with European, African and Asian Customers and Vendors by D. T. Koenig, DTK Consulting, 2. U. S. Companies Dealing with African and Asian Companies in Their Countries by K. B. Thayer, Garuda U. S. Inc. 3. U. S. Companies Dealing with Middle Eastern Companies by G. Hetsroni, Technion – Israel Institute of Technology
19-Nov Tue.	11:15A.M.- 12:45P.M.	TEBM-8	Ethics: Corporate Leaders Viewpoint	J. F. Elter	1. Case Study by W. F. Mitchell, Environmental Tectonics Corporation 2. Aerospace Viewpoint by J. W. Booth Lockheed Martin 3. Heavy Apparatus Mfg. Viewpoint, G. Smith, BWX Technologies, Inc.
19-Nov Tue.	2:00P.M.- 3:30P.M.	TEBM-9	Management Challenges-Rapidly Emerging Technologies, Standards, and Markets	R. Hebner Ted Aanstoos	1. International Technical Standards – An Overview by R. Hebner, University of Texas at Austin 2. Recent Research Activity in International Standards by T. A. Aanstoos, University of Texas at Austin
19-Nov Tue.	2:00P.M.- 3:30P.M.	SERAD-5	Public's Right to Know and Vulnerability	Ben Ale	Panel Session by Co-Moderators G. M. Raheij, Rijks Instituut voor Volksgezondheid en Milieu, M. Stamatelatos, NASA, W. W. Doerr, Factory Mutual, R. Wilson, Health and Safety Executive, and S. Melvin

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## E&TM Program at Congress 2002

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T&S Division features trends of management in academia, ethics across boundaries, sustainable development, symposium lectures: industry, technology, society and history, the histories of energy engineering and technology, bio-engineering, and heat transfer. These sessions focus on the interaction between industry, technology and society, and its history.

ASME Past Presidents Arthur E. Bergles (1990-91), Nathan H. Hurt (1991-92), Daniel T. Koenig (1995-96), Keith B. Thayer (1997-98), and Winfred M. Phillips (1998-99) will join our symposium as chairs and speakers for Session T&S-7 "The History of Heat Transfer," Session

TENER-8 "The Future of Nuclear" (Energy Track), Session TEBM-11 "The History of Manufacturing Engineering and Technology" among others, Session TEBM-7 "Ethics and Culture: Managing from a Global Perspective," and Sessions T&S-1 and -6 "Engineering and Technology Management in Academia" and "The History of Bioengineering," respectively. ASME Past Executive Director David L. Belden (1987-2002) will serve as chair for Session TEBM-2 "Engineering Entrepreneurship -Raising Capital to Fund the Venture."

To name a few other speakers, Professor and Director R. Hebner, the University of Texas at Austin, NASA Astronaut S. J. Horowitz, Dean and Professor Cliff Brubaker, School of Rehabilitation and Health Sciences at the University of Pittsburgh, Professor Robert Latorre, the former Chairman of Department of Naval Archi-

ecture and Marine Engineering at the University of New Orleans, and Roberta S. Brown, Vice President of Transmission, Pepco & Conectiv, will respectively speak on "International Technical Standards - An Overview," "Aerospace Safety and Risk: A NASA Astronaut's Perspective," "Engineering in Rehabilitation: A Brief History of Engineering Contribution to the Science, Art and Practice of Rehabilitation," "Joint Role of Industry, Technology and Society in Modal Shift," and "An Evolution of A Modern Energy Company."

We welcome your active participation in our sessions and discussion, and would appreciate your feedback to make our future congress sessions better serve your needs. Please feel free to contact session chairs and/or myself if you have any inquiries.

Table 1 (continued)

19-Nov Tue.	2:00P.M.- 3:30P.M.	T&S-4	Symposium Lectures: Industry, Technology Society and History	Hiroshi Honda	<ol style="list-style-type: none"> <li>1. Evolution of A Modern Energy Company by Roberta S. Brown, Conectiv</li> <li>2. The original "Silken Valley": How and When the Derwent Valley Became the Birthplace of the Industrial Revolution by J. G. Crofts, Midland Services, Inc.</li> <li>3. Joint Role of Industry, Technology and Society in Modal Shift by Robert Latorre, University of New Orleans</li> </ol>
19-Nov Tue.	3:45P.M.- 5:15P.M.	TEBM-10	Strategic Role of Information Systems for Industry, Society and Management	Hiroshi Honda	<ol style="list-style-type: none"> <li>1. Strategic Alignment, Planning and Operations in the Supply Chain: A Case Study by N. S Gurdjar, National Institute of Industrial Engineering, India, and S. D. Jog, Indian Institute of Technology</li> <li>2. Trends of Industry and Information Systems by H. Honda, Tokyo Metropolitan Institute of Technology</li> </ol>
19-Nov Tue.	3:45P.M.- 5:15P.M.	MGMT-1	Managing Design for the Life Cycle	J. W. Wesner Steve Long	<ol style="list-style-type: none"> <li>1. What is DFX? by J. Wesner, Carnegie Mellon University</li> <li>2. Managing Design Information for Rapid Prototyping in an R&amp;D Environment by T. A. Aanstoos and R. J. Hayes, the University of Texas at Austin,</li> <li>3. Life Extension</li> <li>4. Through Retrofit Design of Capital Equipment by S. Long, GDS Engineers</li> </ol>
19-Nov Tue.	3:45P.M.- 5:15P.M.	SERAD-6	3D: Design, Manufacturing and Safety	Paul Glasgow	Panel Session on the three factor design, manufacturing and safety addressed concurrently during the initial conceptual and design phase of a product
19-Nov Tue.	5:30P.M.- 6:45P.M.	TEBM-11	The History of Manufacturing Engineering and Technology	Dan Koenig Hiroshi Honda	<ol style="list-style-type: none"> <li>1. Production Paradigms and Paradoxes by K. M. Gardiner, Lehigh University,</li> <li>2. The Impact of Sheet Metal Stamping on Manufacturing and Economic Growth of the United States in the Early 20<sup>th</sup> Centyr by V. J. Vohnout Consultant in ME and IE</li> <li>3. Paradigm Shifts in Manufacturing: Observing from the Sides of Technological Evolution and Demand of the Society by H. Honda, Honda International, Ltd.</li> <li>4. The Relationship between Design of Manufacturing Systems and the Industrial Revolution by J. T. Black, Auburn University</li> </ol>
19-Nov Tue.	5:30P.M.- 6:45P.M.	SERAD-7	Safety Analysis and Lessons Learned After an Accident Part II	Bill Doerr J. Young	<ol style="list-style-type: none"> <li>1. Commercial Tree Chipper: The Leg Pull-in Hypothesis by D. B. Brickman, Triodyne, Inc.</li> <li>2. Child Shake Testing of an Infant Crib by D. B. Brickman, Triodyne, Inc.</li> <li>3. Forklift Mounted Self Dumping Hoppers Counter Lath Invention by R. L. Barnett and C. W. Ferrone, Triodyne, Inc.</li> <li>4. Promoting Accident Prevention by Combating Fatigue by M. Cohen, Booz Allen Hamilton</li> </ol>
19-Nov Tue.	7:00P.M.- 9:30P.M.	Special Event	Joint Management and Technology & Society Dinner	T. A. Aanstoos Ken Horne	<b>Dinner Speech by R. Hebner, The University of Texas at Austin</b>
20-Nov Wed.	7:45A.M.- 9:15A.M.	T&S -5	History of Energy Engineering and Technology	Hiroshi Honda Roberta S. Brown	<ol style="list-style-type: none"> <li>1. An Assessment of the 107<sup>th</sup> US Congress Energy Policy Debate in the History of Energy Use and Development in the United States by R. M. Reinecke, Silverado Resources,</li> <li>2. 100 Years of Oil and Gas Development: From the Marshes to Deepwater, Louisiana Has Played a Major Role in Water-Oriented Exploration and Development by D. W. Davis, Louisiana State University,</li> <li>3. History and Evolution of the Offshore Oil and Gas Industry in Southern Louisiana: Worker Perspectives by D. Austin and T. McGuire, the University of Arizona</li> <li>4. Cogeneration: History, Current Status and Future Challenges by K. Aung, Lamar University,</li> <li>5. Crises to Crises: A 30-year Retrospective on the Electric Utilit Industry and Energy Efficient Lighting Technology by K. Anderson, Northwest Energy Efficiency Alliance</li> </ol>
20-Nov Wed.	9:30A.M.- 11:00A.M.	T&S-6	History of Bioengineering	Hiroshi Honda Gerald Miller	<ol style="list-style-type: none"> <li>1. Bioengineering : A History with A Future by W. M. Phillips, University of Florida,</li> <li>2. Engineering in Rehabilitation : A Brief History of Engineering Contribution to the Science, Art and Practice of Rehabilitation</li> </ol>
20-Nov Wed.	11:15A.M.- 12:45P.M.	T&S -7	History of Heat Transfer	Arthur E. Bergles Hiroshi Honda	<ol style="list-style-type: none"> <li>1. Evolution of Microchannel Flow Passages -Thermohydraulic Performance and Fabrication Technology by S. G. Kandlikar and W. J. Grande, Rochester Institute of Technology,</li> <li>2. The Development of Engineering Radiative Heat Transfer by J. R. Howell, the University of Texas at Austin,</li> <li>3. Air Pollution Caused by Scented Candles by J. Kepko, C. Barufaldi and K. V. Wong, the University of Miami</li> </ol>

Constructed by H. H.

## FORD's Stephen Lewis to Present Towne Lecture at 2002 IMECE



Stephen Lewis

Stephen C. Lewis, Director of Strategic Planning at the Ford Motor Company has been selected by the Management Division to present the Henry Robinson Towne Lecture at the International

Mechanical Engineering Congress and Exposition in New Orleans. This prestigious lecture, which is co-sponsored by the Board on Minorities and Women, will take place on **Monday, November 18, 2002 at 4:00pm.**

Mr. Lewis will deliver the first Towne Lecture since 1993. His topic will be: **"How To Instill Diverse Consumer Focus Into Future Engineers Educational Process"**

The Henry Robinson Towne Lecture was established in 1925 in honor of Henry Robinson Towne, President of the Society in 1889. In 1886, Mr. Towne presented a paper titled: "The Engineer as an Economist". This paper was the beginning of many valuable ASME contributions on the subject of scientific management. Towne's landmark lecture and his other writings reflected the eclectic nature of his thinking in that he projected visions of managerial practices that are commonplace today such as profit sharing, data processing, management information systems and metric conversion.

The Towne Lecture provides an opportunity for outstanding leaders in the field

of management, economics or business to share their experience with members of the Society. Some very distinguished engineers/managers have been Towne Lecturers in the past, including Charles E. Wilson, James M. Gavin, Peter Drucker, Robert C. Seamans, Jr., and an individual destined to be the president of the United States - Herbert Hoover.

Henry Robinson Towne was a giant of his time. He studied at the University of Pennsylvania and at the Sorbonne in Paris. He served a 4-year shop apprenticeship, studied engineering practices (notably power transmission) in Europe for a year, and then worked as an engineer for a year before founding (with Linus Yale, Jr.) in 1868 what was to become the Yale and Towne Manufacturing Company. Towne was active in diverse areas: president of the Merchants' Association of New York; a president of the Morris Plan Company of New York; a director of the Federal Reserve Bank of New York; and treasurer of the National Tariff Commission Association.

The Towne lecturers and their subjects have reflected Towne's prescience and diversity. Lecturers have come from as far away as Australia, England and Switzerland. The topics that the lecturers have chosen to discuss have typically mirrored their times while looking ahead to the future.

Members interested in learning more about the Management Division should contact John Bozewicz, Chair of the Division, at [bozewiczj@asme.org](mailto:bozewiczj@asme.org) or (215) 897-7603.

## Gantt Medal Board-2002

As the next to most recent member of the Board, I thought you may be interested in some of its recent activity. The award's formal name is the Henry Laurence Gantt Medal. It is given to an industry leader for distinguished achievement in management and for service to the community. It is awarded by the Board, which is sponsored by the Management Division but in the name of the Society's Honors Committee. It is one of the leading awards to industry managers in the country and boasts a very distinguished list of recipients since it was established in 1929. Gantt was one of the first leaders of the scientific management movement. He left an enduring legacy of concern for the human element of productivity. His message is particularly pertinent now in that he sought to turn the potential of industry into a broad contribution of service to society.

The recipient is nominated by the Society at large through the Gantt Board. The five-member board of staggered terms is made up of two Management Division representatives, a Past Society President, a representative of the Society's Industrial Advisory Board (IAB), and one member-at-large. John Elter of the IAB is the current Chair of the Board. The Society President generally makes the award at the annual Congress (IMECE). It consists of the specially designed medal, a cash stipend, and the honor of addressing a special meeting of members on a topic of the honoree's choosing. The honoree is not known by the membership-at-large until the award is made. This year the award will be made at the President's Luncheon and the recipient will address the joint Management/Technology and Society Dinner at the Congress. Any questions? I'll be glad to answer as I can, Arnold Rothstein [a.rothstein@alum.mit.edu](mailto:a.rothstein@alum.mit.edu).

### Calling all mechanical engineers who would like to:

- Influence the career and academic choices of student engineers;
- Help young engineers find their way in the profession
- Contribute to the future of mechanical engineering
- Participate in a program that fits into your busy schedule

How can you do all these things, plus derive the satisfaction of passing on your experience?

By becoming a mentor to an ASME student member or young engineer.

Young engineers eligible for ementoring have been out of school for 5 years or less. To learn more about ementoring or to become a mentor visit: [www.asme.org/ementoring](http://www.asme.org/ementoring).

### Help ME Students, and Help Your Division Grow. Recruit a new ASME member.

When You Recruit a New Member, 50% of their first year dues will be used to fund scholarships for ME students.

To get more information on this program, including tips on recruiting, and ways to contact prospective members, visit <http://www.asme.org/membershipdrive/> or contact Cheryl Hasan at [hasanc@asme.org](mailto:hasanc@asme.org) or 212-591-8239.

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