



Winter 2006/2007

# The International Division Newsletter

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organizations/divisions/index.cfm](http://www.asee.org/activities/organizations/divisions/index.cfm)

## *From the Division Chair*

Over recent years, ASEE has moved toward increased international activity. Its current thrusts in the international arena include the following:

### **International Division**

Our technical/professional division in the ASEE structure is one of some 50 special interest groups within the society. The primary function of the International Division is the planning and management of technical and professional sessions at the annual meeting of ASEE. Currently, under the leadership of Program Chair Nick Safai, we receive over a hundred proposal for papers to be presented or sessions in the dozen or so time slots available during the annual meeting. In addition, we host an annual International Reception each year, for our international visitors and ASEE members interested in international activities. There is also an author's breakfast and an annual business meeting at each annual meeting.

The International Division also conducts an award program each year, culminating in a ceremony during the International Reception at the annual meeting of ASEE. The three Division awards are: Global Engineering and Engineering Technology Educator Award, Service Award, and Best Paper Award. Vice Chair Kurt Paterson orchestrates the annual award process. In addition, the Division publishes a newsletter for its members – produced by Newsletter Editor Gerry Johnson. The Division Secretary/Treasurer, Maria Larrondo Petrie, recently led the process of updating our bylaws.

### **Global Colloquia on Engineering Education**

For the past five years, ASEE has organized annual Colloquia in various parts of the World, in collaboration with local institutions. As described elsewhere in this newsletter, Colloquia to date have been held in Germany, China, the US, Australia and Brazil. Future conferences are scheduled for Turkey, South Africa and Hungary. Each Colloquium to date has focused on three tracks, with a keynote speaker for each, several focused sessions in each track, and reports back to the entire conference body by rapporteurs from each track.

### **International Federation of Engineering Education Societies**

ASEE has taken the lead in establishing an international body to provide liaison among the many engineering education organizations currently active in the World. IFEEES, which is described in more detail elsewhere in this

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newsletter, was formally launched in Rio during the 2006 Global Colloquium there last fall. Claudio Borri of Italy, current President of the European Society for Engineering Education (SEFI) has been elected as its first leader. The secretariat of IFEES is at ASEE headquarters in Washington.

### **Global Online Membership**

ASEE offers an electronic-based membership to interested persons outside of the US and Canada, for only \$39 per year. It gives access to Prism, the Journal of Engineering Education, and other items such as the proceedings of annual meetings.

### **International Engineering Education Digest**

ASEE distributes to all of its members a monthly digest of news items of interest to engineering educators and others interested in engineering education. The Digest covers some 40 articles from US and international sources each month, providing a brief summary of their content and providing clickable references to the base articles.

These several internationally oriented activities of ASEE reflect the globalization of engineering and engineering education, and the interest of ASEE members in increased international activities.

*Russ Jones*

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## *IFEES: A New Alliance to Shape Global Engineering Education for the 21st Century World*

By Hans J Hoyer, ASEE

We are all now part of a worldwide market economy involving billions of people. However, due to advances in inexpensive, powerful and omnipresent information technology, we communicate with the rest of the world in ways undreamed of a generation ago.

Since most of the technology we use is developed by engineers, the field of engineering is being drastically altered by these changes. Recognizing that the 21st century global economy requires well-trained and culturally-sensitive engineers who have a broad vision related to the domestic and international issues facing all of us globally, representatives of 31 organizations from six continents gathered in Rio de Janeiro, Brazil, October 9, 2006 to launch the International Federation of Engineering Education Societies (IFEES). This meeting was seen as the culmination of discussions that had been underway since the ASEE Global Colloquium in Sydney, Australia in 2005 and that involved leaders in engineering education who recognized that a global network of engineering education societies was needed.

In addition to electing in Rio de Janeiro a distinguished leadership team representing all the regions of the world and approving governing documents, the organization's members discussed their overarching goal of building a vibrant, virtual global community to foster collaboration and learning among the world's engineering-education societies and to building strong bridges to the corporate world, civil society and academia.

Through the collaboration of its member societies and their partnership with industry, university, government and non-governmental organizations, IFEES will work to establish effective engineering education processes of high quality around the world to assure a global supply of well-prepared engineering graduates. IFEES will strengthen member organizations and their capacity to support faculty and students. It will attract corporate participation, helping to connect engineering graduates with international corporations that have a pressing need for well-trained engineers who can work in a global environment. IFEES will also enhance the ability of engineering faculty, students and practitioners to understand the varied cultures of the world and work effectively in them.

The elected leadership team includes Professor Claudio Borri, IFEES' first elected president. A highly respected university professor at the University of Florence, Italy, Dr. Borri is also president of the European Society for Engineering Education (SEFI). There are eleven members on the executive board including vice presidents

representing four geographic regions of the globe: Americas, Africa/Middle East, Europe, and Asia/Pacific. Mervyn Jones, Qing Lei, James Melsa, Lueny Morell, and Nitte Shetty were elected as executive board members for the next two years. Kwang Sun Kim, Norbert Kraker, Maria Larrondo-Petrie, Siphon Madonsela, Yuri Pokholkov, and Javier Paez Saavedra were elected as executive board members for the next year.

IFEES' overarching mission is fostering collaboration and learning among the world's engineering education societies. This will require participating organizations to share with one another not only the sorts of issues and problems they face, but also to appraise possible solutions. The creation of a global marketplace of "best practices"----under the auspices of IFEES----will enable members not only jointly to address engineering-education challenges worldwide, but to strengthen their organizations and their capacity to support faculty and students. This cross-fertilization of ideas should be particularly useful to emerging engineering-education societies, and their equivalent organizations, in providing productive value-added services to their individual members. Indeed, IFEES is expected to become a virtual global community where people, courses and data are shared, as well as ideas. It must become a community that enhances the capacity of engineering faculty, students, and practitioners to understand the varied cultures of the world and work effectively in them. It must become a community of societies, faculty, students and companies with a shared goal of promoting the globalization of engineering, with all its promise for both the developed and so-called developing world. Finally, it must become a community that brings together talented individuals from the world's emerging societies and universities as well as the international corporations that have a pressing need for well-trained engineers who can work in a global environment. In short, IFEES must be a "flat-world facilitator."

As of January 2007, the organization is still very much in its formation. Following the recent Rio inauguration, the Executive Committee, led by Claudio Borri's, has just begun the process of articulating strategic directions. IFEES will hold its first, stand-alone annual meeting/forum on September 30, 2007 in Istanbul, Turkey, just prior to the ASEE Global Colloquium for Engineering Education. A planning committee has been formed and a delegation of its members will be meeting with ASEE staff on January 11/12, 2007 in Washington, DC to continue to define IFEES' direction. The four vice presidents have been asked to take the lead in conceptualizing four key strategic directions for the organization. This task will hopefully be completed in January, in time for the next meeting of the Executive Committee.

It is important to share the vision that Claudio Borri holds for IFEES. Claudio sees that IFEES' role is to "change the world and that science, technology and engineering can make powerful contributions to build overall prosperity for all and contribute to the survival of all mankind. IFEES needs to make a powerful social contribution." He further expressed his vision in terms of asking the fundamental question, "how does IFEES build real value?" He is concerned that "too often engineering is not seen as a profession that contributes positively to society" and that "IFEES must work positively to build a clear and new image of engineering." While Claudio is deeply committed to strengthening the issues related to quality, accreditation, curriculum development and other key issues in the profession, his broader vision is for "IFEES to make a real global impact that addresses the socio-economic issues faced locally and globally." The key question for him that is posed by the 21st century global economy to engineering educators and stake-holders is: "How can education in science and technology help to reduce poverty, boost socio-economic development, and take the right decisions for sustainable and environmental compatible development?"

According to Claudio, the creation of a global network of engineering educators and stake-holders will help address formidable basic questions, like the one above, and move beyond them as we raise the horizon and target of our ambitions: i.e. to pass from the day-by-day engineering education issues and problems to the "actual impact" on world-wide development and socio-economic growth. He further states that "IFEES was borne to change the world to the extent which its mission and competencies provide, i.e. as much as engineering education can contribute to these changes. I personally do not believe this to be a too ambitious a target: it is the only true reason why IFEES' birth makes sense!" It is important to build a network of high influential connections with "top personalities" around the world representing not only the engineering world but all sectors of society from economy to social sciences, from political sciences to peace keeping, from banking to financial investors. And a key method of accomplishing these goals is to always involve students and their organizations in the IFEES strategy definition and events. The archaic vision of students as 'customers' or even 'end products' of engineering education must be overturned. We need students on our side, as their visions will also be attracting attention and support from the corporate world."

To begin, we propose a number of potential activities, and have divided them into three categories related to the amount of resources they would require. The first category proposes activities that IFEES can implement with limited additional resources. The second category's proposed activities would require additional moderate financial resources. Substantial extra resources----financial and human, will be needed to undertake the proposed activities in category three. Additional financial resources, other than those provided by member societies, will have to be raised from corporations, multi-and bi-lateral and regional organizations and foundations.

We will also be looking for volunteers from academia, government agencies, civil society organizations and the corporate world to help with these efforts. Sub-committees, comprising of members of engineering societies, universities, corporations and civil society organizations are in process of being formed to work on implementing these activities.

### **CATEGORY I**

- Creation of an international engineering education website. We envision a site that includes a message board for discussing issues in engineering education, and links to international engineering programs. A portion of the site will be dedicated to supporting initiatives of engineering students and young engineering professionals from throughout the world, where they can raise and discuss issues of mutual interest. ASEE will develop and maintain the website and has begun to work with a member of the Executive Committee to accomplish this task. Given IFEES' strategic interest to facilitate a global student movement thereby building on the successful Global Student Forum first held at the ASEE Global Colloquium in Rio de Janeiro in October 2006, several students have begun the task to develop a student website and link it to the emerging IFEES website.
- Coordination and maintenance of a conferences and meetings calendar. This on-line tool would post information about scheduled or planned engineering-education conferences around the world to reduce date conflicts and duplication. Efforts will be made to merge conferences where appropriate to increase their overall effectiveness and quality.
- Development of a high-quality international engineering-education newsletter. This publication, created with the assistance from member organizations, will include content from participating societies, as well as from other global sources.
- Development of an annual publication profiling engineering colleges from around the world. Like the successful ASEE U.S.-Canada publication "Profiles of Engineering and Engineering Technology Colleges," this publication would gather data and publish basic profiles of engineering schools worldwide. It would include such information as engineering degrees offered, faculty members, enrollments and graduation rates.

### **CATEGORY II**

- Institution of international forums to promote the globalization of engineering education. These forums would require the collaboration of engineering-education societies, universities, corporations, multi- and bi-lateral organizations and civil society groups. Not only are these forums expected to critically examine cutting-edge issues, they would advance the development of strong academic, corporate and government relationships.
- Consistent with the above formulation, IFEES will hold its first full day forum on September 30, 2007 just prior to the Global Colloquium in Istanbul. A planning committee has begun to define the objectives, expected outcomes and is in the process of identifying key global leaders as guest speakers. The central idea is for this IFEES forum to stand on its own and not compete but complement the ASEE GCEE and other international Engineering Education activities. There is close interaction between the IFEES planning committee and the GC program committee.
- Development of an Engineering for the World Initiative (EWI) network. This is expected to be a live and virtual network of engineering students worldwide who are already exchanging ideas and learn how engineers are educated in other countries and what it means to be a global engineer. The first Student Forum in Rio de Janeiro, where over 50 students met, represented an excellent opportunity for students from Latin America, North America, Europe, Africa and India to interact with one another, engineering and corporate professionals, government officials as well as representative from multi-lateral organizations such as the World Bank, Inter American Development Bank and the Organization of American States. Several students who participated in the Rio meeting are currently working with ASEE staff and volunteers as well as the IFEES president to plan the forthcoming Student Forum in Istanbul. One of the events that are currently being planned is a workshop offered by the World Bank for youth focusing on innovation, entrepreneurship and the knowledge economy.
- Discussions are under way leading toward the creation of a Global Engineering Deans Council that would build on the highly successful ASEE sponsored Deans Council and Engineering Deans Institute.
- Creation of a virtual engineering-education magazine that focuses on issues raised by globalization. This would be an advertising-supported magazine, initially published once a year.

### **CATEGORY III**

- Institution of a global outreach campaign. This would provide opportunities for engineering faculty, students and professionals from developed nations to provide technical assistance, curriculum support and other feedback to universities, institutions and communities of developing nations. Assistance would come from international non-governmental organizations, national socio-economic development organizations, corporations,

foundations and multi-and bi-lateral organizations.

- Establishment of mechanisms that enable collaboration among the worlds' engineering societies and also strengthen their abilities to respond to the needs of their constituents.
- Broker the development of multi-national design and research activities
- Development of continuing education activities, including virtual courses and workshops, using the most up-to-date software.

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## *ASEE GLOBAL COLLOQUIA ON ENGINEERING EDUCATION*

by Russ Jones

In collaboration with institutions in a variety of countries, ASEE has conducted a series of Global Colloquia on Engineering Education since 2002. The first such conference was actually scheduled for Berlin in September 2001, but the fallout from the 9/11 attacks forced its postponement for a year.

The annual colloquia have evolved into a pattern, with three tracks of current relevance providing the structure for a several day meeting. Here are summaries of the five colloquia held to date, as covered in the International Engineering Education Digest each year.

**Rio in 2006** -- The 5th in a series of global colloquia on engineering education organized by the American Society for Engineering Education was held in Rio de Janeiro from 8-12 October 2006. The theme of the meeting was Engineering Education in the Americas and Beyond. Three tracks provide the structure of the meeting: development of curriculum for the global engineer, Engineering for the Americas, and primary and secondary education. A major highlight of the meeting was the establishment of the International Federation of Engineering Education Societies (IFEES), with over 30 engineering education organizations from around the world forming its initial membership. Claudio Bori, current President of the European Society for Engineering Education, was elected President of IFEES. Its secretariat will be at ASEE headquarters in the US.

**Sydney in 2005** - The Australasian Association for Engineering Education hosted a conference on engineering education in Sydney, Australia from 26-30 September 2005. Jointly sponsored by the American Society for Engineering Education, the meeting included papers in three tracks: globalization of engineering education, k-12 pipeline, and transformation of the disciplines. The meeting provided an opportunity for engineering educators to address the major challenges in the preparation of the next generation of engineers.

**Sydney in 2005** - The Australasian Association for Engineering Education hosted a conference on engineering education in Sydney, Australia from 26-30 September 2005. Jointly sponsored by the American Society for Engineering Education, the meeting included papers in three tracks: globalization of engineering education, k-12 pipeline, and transformation of the disciplines. The meeting provided an opportunity for engineering educators to address the major challenges in the preparation of the next generation of engineers.

**Beijing in 2004** – The third ASEE International Colloquium on Engineering Education was held at Tsinghua University in Beijing from September 6th to 10th. Keynote speakers were Wu Qidi, China's Vice Minister of Education, Jack Wilson, President of the University of Massachusetts System, and John Brighton, Assistant Director for Engineering of the US National Science Foundation. Qidi noted that engineering is the engine for economic development, and pointed out that China produces more engineers than any other country (3.7 million engineering students currently in the pipeline). Wilson described several major issues for engineering education, including globalism, nano-info-bio-cogno-enviro growing fields, women and minorities, liberal arts/humanities, entrepreneurship, interactive learning, and continuing education via online learning. Brighton noted that traditional engineering disciplines are giving way to cross-cutting areas, that career paths for engineers are shifting from domestic to global, that engineering education must change more rapidly in order to adequately prepare graduates for the dramatic developments in engineering practice, and that engineers of the future need to address the grand challenges of society. The colloquium was structured around three themes: continuing education and its delivery, engineering education reform, and international recognition of qualifications.

**Nashville in 2003** - The WFEO/ASEE International Colloquium was held from 20-23 June 2003 at Nashville, Tennessee. Planning committee chair Lyle Feisel opened the meeting with a plenary session featuring World Federation of Engineering Organizations President Jose Medem, who described several needs: continuous improvement in engineering education, lifelong learning for practitioners, public understanding of science and engineering, reversing the decline in engineering enrollments, international expertise for engineers, mutual recognition across borders, and consolidation of the many organizations concerned with engineering at the international level. This was followed by a presentation by Ernest Smerdon who dealt with global challenges for engineering education: how to broaden engineering education without losing technical strength, how to adapt

to the learning styles of students, the cost of an engineering education, benefits of and issues with virtual universities, practice oriented degrees, etc. The colloquium proceeded with keynote presentations and breakout sessions on three tracks: Continuing Education and Its Delivery, International Recognition of Qualifications, and Developments in Teaching and Learning. It concluded with summaries of papers that had been submitted to an electronic conference held prior to the colloquium, and a briefing for international participants on The Current Status and Future Directions of Engineering Education in the United States.

**Berlin in 2002** - An ASEE/SEFI/TUB Colloquium “Global Changes in Engineering Education” was held in Berlin on 1-4 October 2002. The program focused on three tracks: National Accreditation/Global Practices; Educating Engineering Students in Entrepreneurship; and Technology in Learning Systems. A plenary keynote address was presented in each track, followed by parallel breakout sessions with several speakers on each of the tracks. The colloquium ended with a session summarizing each of the tracks, and with a large number of poster papers presented briefly by authors as an introduction to poster-side discussions.

Further information on each of these Global Colloquia can be found at:  
<http://www.asee.org/conferences/international.cfm>

Future Global Colloquia are scheduled for Turkey in 2007, South Africa in 2008, and Hungary in 2009.

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### *ASEE International Division By-laws*

#### **[A] NAME**

The name of this unit shall be the International Division.

#### **[B] OBJECTIVES**

The objectives of this unit are identical with the objectives of the Society as set out in the ASEE Constitution, with an emphasis on those objectives that pertain to promoting international understanding.

Specifically, the unit shall:

- [1] Provide a forum for the exchange of ideas for multicultural and multinational activities.
- [2] Publish a newsletter to inform its members of various international opportunities and activities.

#### **[C] MEMBERSHIP**

The members of this unit shall be those members of the American Society for Engineering Education (ASEE) who identify to ASEE their wish to be affiliated with the group each year and who pay the division dues of \$5.00 per year.

#### **[D] ORGANIZATION**

The unit shall be administered by an Executive Committee composed of the Chair, Vice Chair, Secretary/ Treasurer, Program Chair, Newsletter Editor, and Past Chair.

The Chair shall represent the unit on the Council Board of the Professional Interest Council to which the unit has been assigned by the Society.

#### **[E] OFFICERS**

[1] The unit's officers shall be:

Chair — serving a term of two years and succeeding to the position of Immediate Past Chair. The Chair is not eligible for any successive re-election.

Vice Chair, also known as the Chair-Elect — serving a term of two years and succeeding to the position of Chair

Secretary/Treasurer — serving a term of two years and is eligible to serve successive terms

Program Chair, also known as the Vice Chair for Annual Conference Program — serving a term of two years and is eligible to serve successive terms

Newsletter Editor, also known as Vice Chair for Newsletters — serving a term of two years and is eligible to serve successive terms

Immediate Past Chair — serving a term of two years

Nominating Committee Chair — appointed by the Chair

Awards Committee Chair — appointed by the Chair

Membership Chair — appointed by the Chair

Webmaster — appointed by the Chair

[2] The Chair and other elected officers shall assume their duties at the close of the unit's business meeting conducted at the annual meeting of the Society. Appointed officers shall assume their duties upon appointment.

[3] In the event of the resignation or death of one of the members of the Executive Committee, the vacated office shall be filled for the duration of the unexpired term by a person to be appointed by vote of the Executive Committee, except that:

- [a] in the event of the resignation or death of the Chair, the Chair-Elect shall take office as Chair immediately, serving out the duration of the unexpired term followed by the term to which he/she was elected;
- [b] in the event of the resignation or death of the Chair Elect, a special election shall be conducted within 30 days to elect a new Chair Elect and the Executive Committee may, at its discretion, appoint a person to fulfill the duties of the Chair Elect until the position is filled by election;
- [c] in the event of the resignation or death of the Immediate Past Chair, the vacated office shall not be filled for the duration of the unexpired term.

## **[F] DUTIES OF OFFICERS**

### **[1] The CHAIR shall:**

- Have administrative responsibility for the conduct of all functions of the unit in accordance with these by-laws and the policies and procedures established by the Executive Committee.
- Schedule, organize and conduct annual business meetings of the unit and all meetings of the Executive Committee.
- Appoint all standing committees authorized by these by-laws and special committees authorized by the Executive Committee.
- Compile an annual report of the activities of the unit as requested by the Secretary of the Society.
- Assure that official cash disbursement signatures are on file at Society headquarters and approve all expenditures of Society funds.
- Represent the Division on the Council Board of the Professional Interest Council IV

### **[2] The CHAIR-ELECT, also known as VICE CHAIR, shall:**

- Act for the Chair at business meetings and Executive Committee meetings in the event of the Chair's absence.
- Succeed the Chair upon completion of his/her term in office.
- Take office as Chair, as specified in [E-3-a] above, in the event of the resignation or death of the Chair before his/her term is completed.

### **[3] The SECRETARY/TREASURER shall:**

- Oversee and maintain the financial records of the unit and regularly report on financial status to the Executive Committee.
- Collect unit income, if any, and disburse monies authorized by the unit Chair.
- Keep records of all the unit's outstanding receivables and payables.
- Ensure that all the unit's financial activities conform to the standards and procedures set forth in the ASEE Financial Policy Manual, which is available from the ASEE Accounting department.
- Record the minutes of Executive Committee meetings and the annual business meeting, and distribute copies of the minutes to appropriate unit and Society officers.
- Be responsible for the official records of the Executive Committee and the unit, and ensure that the files of the unit are passed along to his/her successor.
- Tabulate, verify, and communicate the results of unit elections and other ballots.

### **[4] The PROGRAM CHAIR, also known as VICE CHAIR FOR ANNUAL CONFERENCE PROGRAMS, shall:**

- Arrange and coordinate the unit's activities at the Society's annual meeting.
- Work with the Executive Committee to develop technical programs in accordance with the unit's objectives.
- Coordinate sessions within the time frame set by ASEE headquarters for inviting speakers, notifying headquarters of logistical needs, etc., as set forth in the "Program Chair Guidelines" available from the ASEE Conferences department.
- Work with ASEE Conferences department staff in the on-site management of sessions

### **[5] The VICE CHAIR FOR NEWSLETTERS, shall:**

- Serve as the NEWSLETTER EDITOR
- Collect, evaluate, and edit material for periodic newsletters to the unit membership
- Be responsible under ASEE Guidelines for the editing, production and circulation of such Division publications as the Executive Committee may decide to produce, and shall be responsible for preliminary editing and submitting to the Society Editor any material to be printed in ENGINEERING EDUCATION or other Society organs as a publication sponsored by the Division.

### **[6] The IMMEDIATE PAST CHAIR shall:**

- Serve on the Executive Committee and, upon appointment, on such other standing and ad hoc committees as the unit may establish.

### **[7] The AWARDS COMMITTEE CHAIR shall:**

- Lead the Awards Selection Committee in selecting recipients of unit awards in accordance with the provisions of each award and the policies and procedures established for awards by the Executive Committee of the unit.
- Promptly communicate awardee selection and information to ASEE headquarters.
- Notify awardee and nominator of selection and of presentation details.

Plan the presentation ceremony.  
Notify nominators whose nominees were not selected.  
Keep the Executive Committee informed about the activities and progress of the Awards Committee.

**[8] The MEMBERSHIP CHAIR shall:**

Work with the ASEE Membership Department to maximize recruitment and retention of members affiliated with the unit.  
Develop methods for getting unit members involved in unit activities.  
Keep the Executive Committee informed about the activities and accomplishments of the Membership Committee.

**[9] The WEBMASTER shall:**

Develop and maintain the unit's web site.  
Ensure that the unit web site adheres to the policies and standards of the Society as to privacy and all other internet issues.

**[G] ELECTION OF OFFICERS**

- [1] The Nominating Committee shall annually nominate two or more candidates for each elected office for which the term is due to expire at the next annual business meeting. Officers to be elected by vote of the unit members are Chair-Elect, Program Chair, Secretary/Treasurer and Vice Chair for Newsletters.
- [2] Additional nominations for any elective office may be made by presentation of such nominations in writing with the signatures of at least 10 unit members. These additional nominees shall be voted on along with the nominees selected by the Nominating Committee.
- [3] Elections may be conducted by e-mail, providing that those members of the unit who do not have e-mail addresses on record have the opportunity to vote by either mail or fax.

**[H] COMMITTEES**

- [1] The Executive Committee shall establish such standing and ad hoc committees as it deems necessary to carry out the activities of the unit.
- [2] At least two standing committees shall be maintained: the Nominating Committee and Awards Committee
- [3] The Nominating Committee consists of members of the Executive Committee designated by the Chair. The Chair shall appoint one member of the committee to serve as Nominating Committee Chair.
- [4] The Awards Selection Committee consists of members of the Executive Committee designated by the Chair. The Chair shall appoint one member of the committee to serve as Awards Committee Chair.

**[I] MEETINGS & ACTIVITIES**

- [1] An annual business meeting of the unit shall be held during the annual conference of the Society. Those members present at the meeting shall constitute a quorum. The business meeting shall include at least:
  - [a] Reports from the incumbent officers on the unit's activities for the preceding year, membership, and finances.
  - [b] Presentation of unit awards, unless the unit schedules a separate function for that purpose.
- [2] The Executive Committee shall hold regular meetings during the annual conference of the Society and special meetings throughout the year as called by the Chair. Those members of the Executive Committee present at meetings of the Executive Committee shall constitute a quorum.
- [3] The Executive Committee may establish such other activities as deemed desirable to promote the objectives of the unit.
- [4] All meetings of the unit are open to all interested persons. Only members of the Executive Committee, however, are eligible to vote on Executive Committee matters and only members of the unit are eligible to vote on unit-wide matters, including the election of officers.

**[J] PUBLICATIONS**

- [1] The unit shall produce and distribute such publications as the Executive Committee deems appropriate to promote the objectives of the unit.
- [2] In accordance with Article VIII of the ASEE Constitution, papers and discussions presented at meetings of ASEE and the councils or groups therein shall become the property of ASEE and may be published as ASEE series, miscellaneous or occasional publications if authorized by the Board of Directors or its delegated representative. The ASEE Board of Directors, through its delegated representative, may grant permission to publish such papers and discussions elsewhere on condition that ASEE receive proper credit or may waive any property right ASEE may have in the paper or discussion. Papers not accepted for publication shall be returned to the authors and shall no longer be considered the property of the Society.

**[K] AMENDMENTS**

- [1] Amendments to these by-laws may be made at the annual business meeting of the unit, or by mail or e-mail ballot at any time during the year, upon affirmative vote by two-thirds of the members who vote. If e-mail balloting is used, those members who do not have e-mail addresses on their membership records shall be provided the opportunity to cast their vote by mail or fax. Only members of the unit may vote on proposed amendments to the by-laws.
- [2] Proposed amendments to these by-laws shall be prepared by a committee of unit members appointed by



the unit Chair. Proposed amendments shall be sent to the full membership of the unit by letter or in the publications of the unit not less than 30 days before they are to be voted upon. Proposed amendments may also be sent to members by e-mail, providing that they are also sent by mail to those members who do not have an e-mail address on their membership records.

- [3] Amendments approved by the division membership shall be submitted through the PIC IV Chair for approval by majority vote of the ASEE Board of Directors and shall take effect only upon such approval.

#### [L] OTHER PROVISIONS

- [1] Any provision of these by-laws shall be deemed invalid if it contravenes the Constitution and By-Laws of the Society or of the Professional Interest Council (PIC) to which the unit belongs.
- [2] The rules contained in Robert's Rules of Order, latest edition, shall govern this unit in all matters of parliamentary authority to which they are applicable and in which they are consistent with the Constitution and By-Laws of the Society and the By-Laws of this unit. In all other matters, the Constitution of the Society shall govern.

These By-Laws were originally adopted in February 1985  
They were revised in April 2006

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### *From the Newsletter Editor*

I am once again hearing about engineering education reform. The National Academy of Engineering has recently published a couple of books dealing with engineering in 2020. Unfortunately, from my perspective, this is much to close in time to actually encourage faculty to make changes to the curriculum. A longer time-frame, say 2030 would seem more appropriate. Anyway, in my recent readings I ran across the following quote from thirty-five years ago

... Consider the manner of man who, seeks to become an engineer, and ... examine what happens to him when he goes through the 'dehumanizing training' that had become traditional. The diagnosis goes something like this: Engineering is attractive to young people whose mathematical and other skills in abstraction are high, and who have learned to obtain their satisfactions by turning away from people toward the mastery of "things and thing relations." When the "man-machine" relationship enters the picture, the engineer's disposition is to extend his customary ways of thinking about machines to his dealings with man. He tends to be impatient with the variability, independence and general willfulness of human beings. (Lasswell, 1971).

I find this a rather extreme statement but it still has a ring of truth to it. Many engineers do seem more at ease with things than people. For sure, it is necessary that any current and future modifications to curriculum must include more dealings with human understanding and interaction as well as societal impact. We need to keep in mind that six of the ABET criteria deal with human and societal issues, not science and technology.

Lasswell, H. D., A Pre-View of Policy Sciences, American Elsevier Publishing Co., New York, 1971.

## **ANNOUNCEMENTS**

### **Mark your calendar**

- |                                |  |
|--------------------------------|--|
| June 24 - 27, 2007             | 114 <sup>th</sup> Annual ASEE Conference and Exhibition, Honolulu, Hawaii                |
| September 29 - October 4, 2007 | 6 <sup>th</sup> Annual ASEE Global Colloquium on Engineering Education, Istanbul, Turkey |
| June 22 - 25, 2008             | 115 <sup>th</sup> Annual ASEE Conference and Exhibition, Pittsburgh, PA                  |

*Gerry Johnson*