

# Manufacturing Engineering Division

## MED Mission

**To promote the art, science, and practice of mechanical engineering as applied to the field of manufacturing.**

- Concerned with the knowledge base of manufacturing sciences and technology and its applications for improved production performance that is economically viable and meets industrial health, safety, and resource conservation legislation.
- Promotes the art, science, and practice of mechanical engineering through manufacturing engineering and its entire scope where "product" is the desired end result.
- Covers the entire field of manufacturing engineering such as Machine Tools, Materials Processing, Sensors and Controllers, Computer Integrated Manufacturing and Robotics, Manufacturing Systems Management and Optimization, and Emerging Areas of Manufacturing Engineering.

## Organization and Structure

- Executive Committee (EC) responsible for guiding the Mechanical Engineering Division, within the framework of the Constitution, Bylaws, and Rules of the Society
  - 5 members with 5 year terms (1 new member appointed each year)
  - Monthly EC teleconferences + annual EC meeting at MSEC
  - Monthly teleconference with EC designates and other Manufacturing Technical Group leaders
- Division operations are also supported by several volunteer Administrative committees:
  - Advisory, Long Range Planning, Nominating, Web, Newsletter, Journal of Manufacturing Science and Engineering (JMSE/JEI), Student Contest, Honors, Merchant Manufacturing Medal Board of Award, and Technical Conferences
- The Division's technical guidance is developed through its volunteer Technical Committees:
  - Manufacturing Processes
  - Manufacturing Equipment
  - Manufacturing Systems
  - Quality/Reliability
  - Life Cycle Engineering
  - Nano/Micro/Meso Manufacturing
  - Bio-Manufacturing
  - Textiles and Composites Engineering

## Conferences

- International Conference on Manufacturing Science and Engineering (MSEC)
- International Conference on Micro-Manufacturing (ICOMM)
- Manufacturing Track at National Manufacturing Week
- Joint Sessions at IMECE

## MSEC Highlights

- Premier Manufacturing Technology Conference of ASME International
- Presents cutting edge manufacturing research and its best leading practices through keynote talks, panel discussions, technical paper sessions, and poster displays
- Annual attendance of between 300-500 from 15-30 countries
- Features national and international speakers/panelists from academia, business and industry, and government
- All symposia and sessions are jointly organized by academic and industrial volunteers and emphasize practical solutions to challenges in manufacturing processes and materials used in a variety of industrial settings
- Conference is designed to be highly interactive to foster collaborative thought, support technology transfer and promote professional networking

## MED Publications

- Journal of Manufacturing Science and Engineering
- MSEC Proceedings
- Online and print-version Newsletters (Fall and Spring)

## Honors and Awards

### • Society Level Awards

#### – Blackall Machine Tool and Gage Award

The Blackall Machine Tool and Gage Award is presented for the best current original paper or papers (not published elsewhere) which has/have been presented before ASME and/or published by ASME during the two calendar years immediately preceding the year of the award. The paper(s) should be clearly concerned with or related to the design or application of machine tools, gages, or dimensional measuring instruments, submitted to ASME for presentation and publication. Papers by multiple authors are eligible. The award shall be made annually if warranted. The award was established in 1954 by Frederick S. Blackall, Jr., Fellow and Seventy-second President of the Society



#### – M. Eugene Merchant Manufacturing Medal

The M. Eugene Merchant Manufacturing Medal of ASME/SME is awarded to an individual who has had significant influence and responsibility for improving the productivity and efficiency (either by research or by implementation of research) of the manufacturing operation(s). This award was established in 1986 in honor of M. Eugene Merchant



#### – William T. Ennor Manufacturing Technology Award

The William T. Ennor Manufacturing Technology Award is presented to an individual or team of individuals for developing or contributing significantly to an innovative manufacturing technology, the implementation of which has resulted in substantial economic and/or societal benefits. The award was established by the Production Engineering Division (now the Manufacturing Engineering Division) in conjunction with the Alcoa Company in 1990.



#### – Milton C. Shaw Award

The award recognizes significant fundamental contributions to the science and technology of manufacturing processes.



## Honors and Awards

### • Division Level Awards

#### – Best Organizer of Symposium & Sessions Award (BOSS Award)

Given to the best organizer of symposia and sessions in each given year, presented at MSEC, related to Manufacturing Engineering. Established 1996.

#### – Best Paper Award

Given to the author(s) of the most outstanding technical paper in each given year, presented at MSEC, related to Manufacturing Engineering. Established 1997.

#### – Outstanding Service Award

Given to the individual who performed outstanding sustained service work in the Manufacturing Engineering Division, presented at MSEC. Established 1996.

#### – Student Manufacturing Design Competition Award

Given to students for any design of a system, component or process that can be used to promote the science and practice of Manufacturing Engineering where "product is the desired end result". Each year division supports bringing numerous students groups to MSEC where they present their work. The student winners are presented their awards at MSEC