



Advanced Energy Systems Division

AESD Vision: To promote the art and science of mechanical engineering in advanced energy systems worldwide

AESD's Purpose and Scope

- Encourage, promote and coordinate the activities of the membership and technical committees of AESD to develop and disseminate educational and technical information related to advanced energy systems
- Represent the interests of the technical committees of the Division to the Energy Resources Board (ERB)

AESD's Technical Committees

- Heat Pumps
- Direct Thermal Power Conversion and Thermal Management
- Systems Analysis
- Energy Systems Miniaturization
- Fuel Cell Power Systems
- Hydrogen Technologies
- Superconductivity
- Stirling Engines

AESD Core Activities

- Technical Conferences
- Resources and Publications
- Member and Volunteer Services

Technical Conferences

- Developing, managing and conducting:
 - Technical sessions at the IMECE
 - Industry Discussion Panels
 - Energy Track sessions on current topics related to energy, power and fuels
 - Technical sessions at the new Fuel Cell Conference

Resources and Publications

- Coordinating and delivering technical publications
 - Journal of Energy Resources Technology (JERT)
 - The new International Journal of Fuel Cell Science and Technology
- Communicating industry and Division news through newsletter and web site

Member and Volunteer Services

- Coordinating the efforts of volunteers
- Established the Society-level Edward F. Obert Award for best paper in Thermodynamics area
- Recognizing individual accomplishments in the Heat Pumps and Systems Analysis technical areas
 - Best Paper Awards
 - Best Student Paper Awards

Areas that need Improvement

- Develop Educational Products
 - Short Courses and Workshops on current topics of interest (e.g., distributed generation technologies, hydrogen economy)
- Increase Primary membership
- Develop volunteer leadership groups
 - Council of Chairs
 - Task Forces for addressing issues such as global climate change

