

ASME Technical Division Descriptions

Advanced Energy Systems

ASME's Advanced Energy Systems Division was founded in 1964, as the Energetics Division. In 1982, the Division's name was changed to the Advanced Energy Systems Division, reflecting its broader scope. Organized as one of four divisions within the Society's Energy Resources Board, the Division is concerned with non-conventional or emerging energy conversion processes, both direct and indirect. Emphasis is placed on conversion from chemical and thermal to electrical or mechanical forms of energy. Recent activities have included consideration of transportation energy requirements, thermal discharge disposition, advanced power cycles, pollution impacts and the demands on technology due to the energy crisis.

Aerospace

The ASME Aerospace Division's objective is to promote the development and dissemination of the mechanical, materials and systems engineering aspects of aircraft, spacecraft and missile design and operation.

Applied Mechanics

Applied Mechanics Division (AMD) strives to foster the intelligent use of mechanics by engineers and to develop this science to serve the needs of the engineering community.

Bioengineering

Bioengineering Division (BED) is focused on the application of mechanical engineering knowledge, skills and principles from conception to the design, development, analysis and operation of biomechanical systems.

Computers and Info in Engineering

Computers and Information in Engineering Division (CIE) is a forum for understanding the application of emerging technologies that impact critical engineering issues of representation, product design and product development.

Design Engineering

Design Engineering Division (DED) fosters understanding and research covering the art, science, and application of design engineering to the product realization process including conception, evolution and manufacturing of products.

Dynamic Systems & Control

Dynamic Systems & Control Division (DSCD) evaluate, discuss, analyze and publish new technical results; stimulate research and education innovations; enhance research and education in dynamic systems and control; setting directions for the field.

Electronic & Photonic Packaging

Electronic and Photonic Packaging Division (EPPD) objectives are international cooperation, understanding, and promotion of efforts and disciplines in Microelectronics, Photonics, Microwave and Microelectromechanical Systems Packaging Engineering

Environmental Systems

The ASME Environmental Systems Division (ESD) promotes the art, science and practice of engineering in all issues pertaining to the environment.

Fluid Power Systems & Technology

Fluid Power Systems & Technology Division (FPST) is concerned with advancing the design and analysis of fluid power components, such as hydraulic and pneumatic actuators, pumps, motors and modulating components, in various systems and applications.

Fluids Engineering

Fluids Engineering Division (FED) is involved in all areas of fluid mechanics, encompassing both fundamental as well as applications, to all types of devices, processes and machines involving fluid flow.

Heat Transfer

Heat Transfer Division (HTD) objective is to enhance the theory and application of heat transfer in equipment and thermodynamic processes in all fields of mechanical engineering and related technologies.

Information Storage & Processing Systems

Information Storage & Processing Systems Division (ISPS) of ASME serves the mechanical engineer engaged in the data storage and information processing systems industries, such as printers, scanners and digital cameras.

Internal Combustion Engine

The Internal Combustion Engine Division (ICED) has been promoting the art and science of mechanical engineering of engines, encouraging and fostering research and development for mobile, marine, rail, generation and stationary applications and summarizing

International Gas Turbine Institute

Dedicated to supporting the international exchange and development of information to improve the design, application, manufacture, operation and maintenance, and environmental impact of all types of gas turbines, turbomachinery and related equipment.

Management

The Management Division is concerned with the management of the engineering process at all its levels.

Manufacturing Engineering

Manufacturing Engineering Division (MED) is concerned with the knowledge base of manufacturing sciences and technology and its applications for improved production performance.

Materials Division

The goal of the Materials Division (MD) is to encourage and foster research and development, and the publication of significant technical information within the scope of the Division.

Materials and Energy Recovery

Materials and Energy Recovery Division (MER) encourages research and development that will advance the practice of sustainable waste management in the U.S. and abroad; and improve processes for maximum recovery of materials and energy from solid wastes.

Materials Handling

The Materials Handling Engineering Division (MHED) concentrates on systems engineering methods that integrate control technology, information technology, and material transport equipment to provide efficient, safe and economical material handling.

Microelectromechanical Engineering

MicroElectroMechanical Systems (MEMS) are defined as a miniature device or an array of devices combining electrical, mechanical, optical, chemical and/or biological components fabricated via integrated circuit or other similar manufacturing techniques.

Noise Control & Acoustics

The Noise Control and Acoustics Division (NCAD) objectives are to establish a program within ASME that will encourage, focus and further the development and application of noise control and acoustics principles to all engineering branches.

Nuclear Engineering

The ASME Nuclear Engineering Division focuses on the design, analysis, development, testing, operation and maintenance of reactor systems and components, nuclear fusion, heat transport, nuclear fuels technology and radioactive waste

Nondestructive Evaluation, Diagnosis, and Prognosis

Nondestructive Evaluation, Diagnosis, & Prognosis Division (NDPD) covers the evaluation of critical system components for material/defect/structure characterization through nondestructive methods, such as ultrasonics, radiography and other techniques.

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Ocean, Offshore, and Arctic Engineering

The Ocean, Offshore, and Arctic Engineering (OOAE) Division supports engineers, researchers, technical specialists, and students in progressing technological advancement in the fields of ocean, offshore and arctic engineering.

Petroleum Division

The Petroleum Division (PD) of ASME strives to be the essential resource for mechanical engineers and other technical professionals in the oil and gas industry.

Pipeline Systems Division

The PSD strives to promote technological progress and international co-operation in the area of Pipeline Systems engineering.

Plant Engineering & Maintenance

Plant Engineering & Maintenance Division (PEMD) serves through our membership by advancing, disseminating and implementing plant engineering and maintenance knowledge through the continuous improvement of production processes.

Power

The Power Division was organized in 1920, when ASME membership had grown to over 13,000 and it was decided to set up several divisions to better advance related professional activities.

Pressure Vessels & Piping

Pressure Vessels and Piping Division (PVP) of the ASME was organized as an ASME technical division in 1966 in response to the interest of members to the rapidly changing and expanding technology of pressure boundary containment.

Rail Transportation

Rail Transportation Division (RTD) promotes mechanical engineering applications to railroading and rail rapid transit as well as conventional intercity freight and passenger railroading.

Safety Engineering & Risk Analysis

The Safety Engineering and Risk Analysis Division (SERAD) function is to stimulate interest in and disseminate risk analysis and safety information as applied to the process of mechanical engineering.

Solar Energy

The ASME Solar Energy Division (SED) was established in 1966 from a group of ASME members interested in the application of solar energy to mechanical engineering systems

Technology & Society

The common issue that concerns members of the Technology & Society (T&S) division is how our actions – as engineers, technologists, teachers and leaders – impact greater society today and in the future.

Tribology Division

Tribology Division (TRIB) is established to serve the members and associate members of the ASME who have designated their interest in the science & technology of Tribology.