

**Safety Engineering &
Risk Analysis Division**



OVERVIEW

SAFETY ENGINEERING & RISK ANALYSIS DIVISION [SERAD]

Part of "Engineering & Technology Management Group"



OVERVIEW

- ▶ 50 Year Legacy with History
 - Merged Divisions in 1991
 - ▶ Safety Division
 - ▶ Risk Analysis Task Force
- ▶ ~1,250 Primary Members
- ▶ <http://divisions.asme.org/SERAD>



MISSION

- ▶ The mission of the Safety Engineering and Risk Analysis Division of the ASME is to promote, advance, implement and promulgate related sciences and technologies. The division accomplishes its mission through facilitating communication and education, exchanging technology, and promoting applications and standardization.
- ▶ Through the operation of its committees, promulgation of papers and reports, and organization of presentations, the Division is the Society's primary vehicle for exchange and dissemination of safety, health and risk-related technologies.
- ▶ The Division promotes the application of safety, health and risk-related technologies with other society Divisions and external entities. This includes development and consistent application of analytical methods, measurement, terminology and designation, and participation in standards development and regulatory processes.



GOALS & OBJECTIVES

- ▶ To educate ASME members and others about the importance of risk analysis, safety engineering, reliability engineering, and environmental and occupational health;
- ▶ To encourage members to provide their expertise in the standards-setting process;
- ▶ To promote codes and standards for new areas in risk analysis, safety engineering and environmental and occupational health;
- ▶ To provide closer interface with other ASME Technical Divisions through joint efforts;
- ▶ To enhance the quality of technical papers on safety;
- ▶ To increase active participation by ASME members in Division affairs;
- ▶ To help members keep pace with the latest developments.



SERAD SERVICES

- ▶ Technical Programming
 - IMECE (Every November)
 - ▶ Peer-Review Papers; 6-9 Sessions
 - ▶ Corporate Sponsored Annual Dinner
- ▶ Student Safety Design Contest
 - Founded 1984
 - Industry Sponsored (NIOSH, FM Global, Packer Engineering, ARCCA & United Technologies Company, others) with Honorarium
- ▶ Professional Practice Curriculum
- ▶ Recognition Awards



SERAD AT IMECE

► Strong IMECE Program

- 6-9 Sessions per program; 20-39 papers per program
- Peer Reviewed
- University Involvement (UMD, UA, NCSU)
- Government Involvement (NASA; DOE; NIOSH)
- Industry Involvement (UTC Power; FM Global; Hamilton Sundstrand; Northrop Grumman, RCP Inc.)



IMECE-2010: SERAD TECHNICAL PROGRAM FOCUS

▶ TOPICAL AREAS

- 1) Safety Engineering
- 2) Risk Analysis
- 3) Reliability Methods and Applications
- 4) Product or Process Safety
- 5) Planetary/Panel Session

International cooperation, understanding and promotion of efforts and disciplines by presenting research results, new developments, and novel concepts in paper sessions, panel discussions, open forum, and posters.



STUDENT SAFETY DESIGN CONTEST

Each year, the Safety Engineering and Risk Analysis Division [SERAD] of the American Society of Mechanical Engineers Honors and Awards Committee manages the Student Safety Design Contest .

The 2010 winning project was: "Lifeboat Release System" by William Van Cleave, William Veilleux, and Benjamin Wiest. of the United States Coast Guard Academy. The Faculty Advisors were LT Jessica Rozzi-Ochs and Dr. Carla J. Egelhoff.

The second place winner was: " Spike Setting Mechanism Project" by Garrett Campbell, Jon Gomes, Jon Graham, Luke Petree , and Damaris Squires of North Carolina State University. The Faculty Advisor was Dr. Gracious Ngaile.

There were thirteen entries involved 55 students from six schools in the United States, one school in Singapore, one school in India, and one school in Egypt. The winning teams received a cash award at the 2010 SERAD Award Event at the International Mechanical Engineering Congress & Exposition in Vancouver, British Columbia, November 17, 2010.



2010 HONORABLE RECOGNITION AWARDS

The Safety Engineering & Risk Analysis Division [SERAD] has had several members and individuals who have provided outstanding service to the Division and ASME. These individuals were recognized and thanked for their support to SERAD and ASME at the SERAD Award Event held on November 17, 2010 at IMECE-2010.

The Program was presided by the 2010-2011 SERAD Chair, Dr. Chinh Bui

Those individuals who were recognized in this years program were:

- Dr. Enrique Susemihl , for his "Leadership as SERAD Chairperson from 2009-2010";
- Bill Byrd, President of RCP, Inc., for his "Service as SERAD Program Technical Chair for IMECE-2010".