

61st Annual H.R. Bergmann Memorial Seminar

Tuesday, April 09, 2019, 9am-4pm



Enhanced Productivity through Computational Modeling

The Bergmann Seminar is the ASM Milwaukee Chapter's capstone technical seminar of the year and has been an annual event for the Milwaukee Chapter for over 60 years. The seminar is designed to bring renowned experts together to educate engineers involved in the many materials related industries in Wisconsin.

The topic for this year's seminar is *Enhanced Productivity through Computational Modeling*. The seminar will highlight topics such as Integrated Computational Materials Engineering (ICME), materials processing simulation and other computational and data analytics topics related to materials design, development or production. The presentations by experts from industry and academia are aimed at demonstrating how computational tools can save time or improve efficiency in design and production either by illustrative examples or through real world case studies. The background fundamentals underlying the computational tools or methods will be introduced so that the audience can better appreciate their applications. The topics and presentations are geared towards engineers and technicians in design, product development, production, and quality control fields.

This year's seminar will be held on Tuesday, April 9, 2019, from 9am-4pm at the Alumni Partnership Center (APC) on the campus of The Milwaukee School of Engineering (MSOE).

John Perepezko
2019 Bergmann Seminar Chair

Event details

Date: Tuesday, April 9, 2019

Schedule: 9:00 - Registration
9:30 - Session begin
12:00 - Lunch
1:00 - Session resume
4:00 - Event ends (Happy Hour to follow)

Cost* \$45 Individual ASM Members
\$60 Nonmembers
\$30 Employees of Chapter Sustaining Member Companies
Free Full-time students & Gold Sustaining Member Representatives
**Cost includes all food (coffee, snacks, lunch and refreshments) as well as lot parking.*

Location: Milwaukee School of Engineering - Alumni Partnership Center
1120 N. Broadway
Milwaukee, WI 53202

Parking: Free parking is available for the seminar in the lot adjacent to the APC.

Speaker List (updated 3/25/2019)

Topic	Speaker	Organization
From Design to Production: Impact of Autonomous Engineering on the Casting Process – Productivity, Quality and Cost	Vadim Pikhovich	Magma Foundry Technologies
Some Uses of Machine Learning in Materials Science	Dane Morgan	University of Wisconsin - Madison
Accelerated Design of Metal Alloys by High-throughput CALPHAD Calculation	Fan Zhang	Computherm
Bridging Materials Science and Data Science - Materials Information to Concurrent manufacturing operations in the age of the 4th Industrial Revolution	Bill Mahoney	ASM International
Model-based definition of Materials and Processes	J.P. Thomas	Pratt & Whitney Aircraft Engines
Genomic Materials Design: Past and Future	Greg Olson	Questek Innovations
FEA modelling of Additive laser powder deposition	Marjan Nezafati	University of Wisconsin - Milwaukee
Digital Innovative Design for Reliable Casting Performance	David Poweleit	Steel Founders Society of America (SFSA)
Short Presentations on Senior Design and Capstone Projects by Current Materials Engineering Students	various	UW-Madison and UW-Milwaukee

History of the Annual H.R. Bergmann Memorial Seminar

The Bergmann Seminar is the ASM Milwaukee Chapter's capstone technical seminar of the year and has been an annual event for the Milwaukee Chapter for over 60 years. The seminar is designed to bring renowned experts together to educate engineers involved in the many materials related industries in Wisconsin. The namesake of the Bergmann Seminar is Bob Bergmann.

Bob Bergmann received a B.S. degree in Mechanical Engineering from the University of Wisconsin-Madison in 1951, after serving actively in the U.S. Army Infantry from 1943-1946. He later completed his thesis requirement and received his M.S. degree in Metallurgical Engineering from the University of Wisconsin while employed at the Falk Corporation. He became associated with the Falk Corporation in 1951 and was Supervisor-Materials Engineering for 18 years prior to his death.

His responsibilities at the Falk Corporation included material specifications, materials research and development, failure analysis, the Materials Laboratory, and ultrasonic and radiographic inspections. Bob also was the Radiation Safety Officer at the Falk Corporation.

Bob was very active in the American Society for Metals-Milwaukee Chapter for 21 years, being a past Vice Chairman and serving on many committees. He also was a voting member of both the American Gear Manufacturer's Association and the American Society for Testing and Materials. Bob presented many papers to groups such as the ASM, Steel Founders' Society of America as well as universities and colleges. Subjects included heat treatment of gears, designing for quality, machinability, quenching, and design of castings for weld fabrication.

In spite of his busy schedule, Bob found time to serve his community, being very active in his church and local school activities. In addition, he was the past President of the Brookfield Players, Inc., and served as a production worker and/or actor in 15 plays. Bob enjoyed the outdoors, camping with his wife and five daughters, gardening, and projects around the home.



H. Robert Bergmann
1925-1973