

**The Peoria Chapter of ASM International
January 6, 2003 at the Mark Twain Hotel - Packard Plaza**

SPECIAL EVENT: SUSTAINING MEMBERS NIGHT

Joint with AFS

Presents

THIXOMOLDING® OF MAGNESIUM COMPONENTS

Dr. Stephen LeBeau, Thoxomat, Inc.

TECHNICAL CHAIRMAN:

William Sullins

Social Hour - 4:30pm • Dinner - 5:30pm

Technical Talk - 6:00pm

Prepaid Reservations Required by January 2, 2003!! Reservations are \$12.00.

Call at Jeff Jensen (309) 578-8153 jensen_jeff_a@cat.com or

Andrew Wagner (309) 578-4252 wagner_andrew_j@cat.com.

Please make all checks payable to Peoria Chapter of ASMÓ

About Our Speaker...



Dr. LeBeau has spent his entire career in the areas of manufacturing and materials processing development. He holds degrees in Metallurgical and Materials Engineering from Michigan Technological University, Rensselaer Polytechnic Institute and the University of Wisconsin-Madison. Dr. LeBeau has previously held positions with USX Steel, Caterpillar Tractor, Babcock & Wilcox and Peerless Metal Powders. He is currently Vice President, Sales & Marketing of Thixomat, Inc.

Dr. LeBeau is a member of ASM, TMS-AIME, SME, NADCA and SAE.

◆ ◆ CHANGE IN ADDRESS? CALL KELLY LANE (309) 578-1567 ◆ ◆



ELECTRONIC NEWSLETTERS

Would you like to "opt out" of receiving the ASM flyer by mail? Would you prefer to view it online? If so, go to www.asm-peoria.org Click on the link "Monthly Newsletter" and follow the instructions to send an email to our webmaster. You can also email directly to webmaster@asm-peoria.org. If you have any questions, contact Emily Rivera.

**ASM INTERNATIONAL
9639 Kinsman Rd.
Materials Park, OH 44073
January 6, 2003, Issue No. 5
Published Monthly**

PEORIA CHAPTER ASM INTERNATIONAL
2002-2003 OFFICERS

ChairRic Woldow
Vice-ChairMatt Kiser
TreasurerScott Wiseman
SecretaryRon Morgan

EXECUTIVE COMMITTEE

2002 - 2003	2003 - 2004	2004 - 2005
Russ Harrell	Sam Banerji	Tom Clements
Bud Harvey	Jackie Earle	Scott Kozinski
Steve Matthew	Fritz Gensing	Ron Streib
Dr. Iqbal Shareef	Tim Hoeft	Sheryl Tipton
Dick VanPelt	Erich Michelfelder	Tim Van Den Avond

COMMITTEE CHAIRS

FinanceTim Van Den Avond
MembershipAaron Barklage
Publicity - FlyersKelly Lane
Web PageEmily Rivera
ArrangementsScott Brown
ReceptionAndrew Wagner / Jeff Jensen
Student OutreachJohn Gerczak
EducationLute Blair / Mike Motyl
Long Range PlanningRich Little
MEIChad Siebenaler
Sustaining MembersSteve Matthew / Mike Johnson
Young MembersMike Pollard
YearbookDave Akers
AuditorLiz Heatwole
HistorianDick Van Pelt
NominatingRon Streib
ProgramKen Burris
Bradley StudentIqbal Shareef

ABSTRACT

Thixomat, Inc. holds the worldwide patents on the Thixomolding® process, a new one-step process for the production of near-net shape, injection molded, magnesium parts. The entire Thixomolding® process – from solid magnesium chips to finished molded parts – takes place in a single step. Thixomolding® eliminates the need for metal foundries and their associated safety and environmental issues. The process combines the lightweight, high strength, high ductility and EMI/RF shielding characteristics of magnesium with a safe, simple process that allows manufacturing of even thin-wall components (less than 1 mm.) to tight tolerances. Applications for Thixomolded® parts are in the automotive, consumer, and electronics/communications industries. There are currently over 200 machines in use worldwide processing magnesium alloys. An extensive development program is also currently underway on Thixomolding® aluminum alloys. A description of the process will be presented including an examination of structure-property relationships. Examples of current production parts, particularly the explosive growth in consumer electronics, are reviewed. A short videotape of an actual production machine in operation will also be presented as part of the discussion. Come see why companies such as Sony, Panasonic, Sharp, Compaq, Mitsubishi, NEC, Fuji Camera, Ford and Delphi Electronics are embracing this new technology.

SUSTAINING MEMBERS RECOGNITION

Peoria Chapter of ASM would like to thank the following Sustaining Members for sponsoring our Social Hour at the October Social Night.

Timken – Scott Lauschke
Ispat Inland – Linda Sarros
Macsteel – Steve Clancy

December Technical Meeting: Berg Engineering – Jerry Berg

MEI CLASSES BEING SCHEDULED-

These MEI classes are currently being scheduled and planned for next year: Metallurgy for the Non-Metallurgist, Principles of Failure Analysis, Heat Treatment of Steels, Aluminum and its Alloys, and Fundamentals and Applications of Powder Metallurgy.

The time and date will be set after evaluating the number and local of students. We can still offer a correspondence class for Metallurgy for the Non-Met. at any time. If interested, please contact Chad Siebenaler, MEI Course Chairman, (309) 675-2162, Siebenaler_Chad_W@cat.com