



“New Materials and Processing Technologies” Symposium

Wednesday, February 20th, 2019

Hennepin Technical College, Brooklyn Park, MN

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SYMPOSIUM SCHEDULE

8:00 AM	Registration and display table set-up	
8:30 AM	Welcome and introduction	
	MN ASM Chapter Chair, Joe Hirvela, CPP Minneapolis Operation	
8:40 AM	Session 1	Deb Newberry, Newberry Technologies
	<i>Emerging Technologies: Challenges and Opportunities</i>	
9:15 AM	Session 2	Bernard Li, PhD, Medtronic
	<i>Titanium Alloys Application on Rechargeable Medical Devices</i>	
9:50 AM	Morning Break and Exhibits	
10:10 AM	Session 3	John Pepler, ASM International
	<i>Training, Solutions, and Capabilities for Additive Manufacturing</i>	
10:50 AM	Session 4	Michael Renn, PhD, Optomec
	<i>Advances in 3D Printed Electronic for Embedded Sensors</i>	
11:30 AM	Lunch (Prepared by the HTC Culinary Arts Program) and exhibits	
1:00 PM	Session 5	Daniel McHugh, Liquidmetal Technologies
	<i>An Introduction to Amorphous Alloys: Characteristics and Applications</i>	
1:35 PM	Session 6	Rebecca Tissot, PhD, Ebatco
	<i>Process Development of Advanced Electronic Materials Facilitated by X-Ray Diffraction</i>	
2:10 PM	Afternoon Break and Exhibits	
2:30 PM	Session 7	David Bell, Phygen
	<i>Physical Vapor Deposition to Optimize Surface Preparation</i>	
3:05 PM	Session 8	Beckry Abdel-Magid, Winona St University
	<i>Polymer Matrix Composites for Corrosive Environments</i>	
3:40 PM	Conclusion	

Register by
February 13th

Professional Development Hours (5) Certificates Available at 3:45 PM

REGISTER at www.mnasm.org

MEETING INFORMATION

More on the Symposium...

Please join us as the Minnesota Chapter of ASM International presents its annual symposium on "New Materials and Processing Technologies" at Hennepin Technical College in Brooklyn Park, MN on February 20th, 2019. This informative symposium offers you an excellent opportunity to learn more about new materials and processes that can be used to solve the increasingly complex problems that are encountered in today's ever-changing world. For example, you will learn how titanium alloys can be used to make medical devices rechargeable and therefore last longer, explore how new X-Ray scattering techniques can be used to optimize process variables, understand the unique performance advantages of amorphous alloys, see how 3D

printed electronics facilitate sensors to be embedded into complex mechanical devices, and more. The symposium takes place from 8:30 AM to approximately 3:40 PM, with breaks featuring exhibits by our sponsors and the always popular lunch prepared by the culinary students at the college.

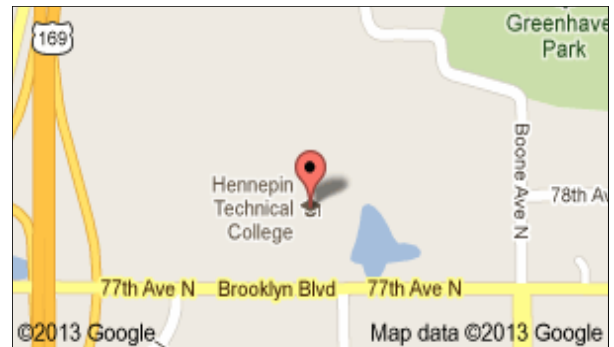
The cost to attend for ASM members is **\$135**. Members from other technical associations and non-members are welcome to attend at the Non ASM Member price of **\$160**. Spread the word by forwarding this meeting notice or going to www.mnasm.org.

Advertisers and vendors are welcome to purchase display tables to market their services or products during check-in, breaks, and lunch. Vendor display tables are **\$180** for sustaining member companies and **\$200** for non-sustaining member companies. The cost includes table rental, seminar admission for one employee of the company purchasing the table, and lunch provided by the HTC culinary students. Registrations for the seminar and vendor display tables must be completed with payment by Wednesday, February 13. The number of vendor tables is limited to the space available, and the space fills quickly. Please register today at www.mnasm.org.

Location

Hennepin Technical College
Auditorium
9000 Brooklyn Blvd
Brooklyn Park, MN 55445

Parking: Please follow signs, and park in Student Lot #4 in back. Do not park in Visitor or Staff parking lots.



Save the Date

Reserve Thursday, March 7, 2019 for the annual Minnesota Technical Symposium at Ecolab beginning with tours at 5:00 p.m. This year's topic is "Advances in 3D Printing" and the two speakers are Dr. Michael McAlpine of the University of Minnesota and Amy Sissala of Stratasys. Dr. McAlpine is the Benjamin Mayhugh Associate Professor at the UM and will be presenting a talk on "3D Printing Functional Materials and Devices" weaving biological and functional materials. Amy Sissala is R&D Senior Print Engineer at Stratasys and is responsible for motion and extrusion subsystems for 3D printers. Final details - abstracts and biographical information - as well as registration will be posted on www.MinnTS.org.

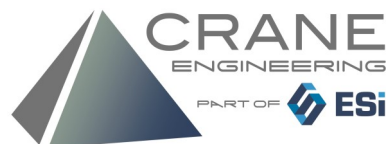
2018-2019 MN Chapter Program Schedule

Meeting Date	Topic	Speaker	Meeting Location
Wednesday September 19th	Tour of MTS	Kevin Jones MTS Systems	14000 Technology Dr Eden Prairie, MN 55344
Wednesday October 10th	Student - Industry Networking Event	Assoc Prof Nathan Mara U of M	U of M Amundson Hall Minneapolis, MN
Wednesday November 14th	“Electrochromic Glass for Energy Efficient Windows”	Dr. Jean-Christophe Giron SageGlass	Green Mill Plymouth, MN
Wednesday December 5th	Annual December Social “Fire Investigation & Fire Safety”	Robert Whitmore Whitmore Fire Consultants	Green Mill Plymouth, MN
Wednesday January 16th	“Chemical Analysis of Materials Using Confocal Raman Microscopy and Microspectroscopy.”	Dr. Eric Smolensky Ebatco	Green Mill Plymouth, MN
Wednesday February 20th	Annual Full Day Symposium “New Materials and Processing Technologies”	Various Speakers Prof. Dev. Hours Cert. (5)	Hennepin Tech Brooklyn Park, MN
Thursday March 7th	Annual MinnTS (Technical Symposium)	www.MinnTS.org	Ecolab Campus Eagan, MN
Wednesday April 17th	Past Chair Night/Scholarship Membership Awards, ASM Trustee	Dr. John Wolodko University of Alberta	Green Mill Plymouth, MN
Wednesday May 15th	Brewery Tour	N/A	TBD

Scholarship Applications Available

The MN Chapter ASM 2019 scholarship applications are now available. Scholarships will be awarded at the April 17th, 2019 chapter meeting in amounts up to \$1,000. Applicants must meet one of the following qualifications: Minnesota resident; MN Chapter ASM member; or child of member. Applicants must have an intended or declared major in metallurgy or materials science and engineering, having completed 2 years of a 4-year BS degree or 1 year of an Associates degree. Information on application procedure and application is at www.mnasm.org. Students may also contact their college’s Metallurgy, Manufacturing, and/or Material Science & Engineering professor. Completed application form and attachments must be postmarked by **March 1st, 2019** and sent to the MN Chapter ASM address to be considered.

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