A Message to ASM-Detroit Members
Greetings and I hope you are enjoying the summer!

As your new ASM Detroit Chapter Chair, the Executive Committee (EC) and I are honored to have the opportunity to serve your interests and assist in your professional development through the world’s premier materials information society. Coincidentally, 2014-15 also marks the 25th year of my membership in ASM!

First, I want to thank all outgoing members of the 2013-14 EC, especially Dr. Susan Hartfield-Wünsch for her strong leadership through trying times when we transitioned last summer to our new ASM Detroit Chapter Administrator. Supported by the EC, Administrator Julie Nimer and past Chapter Chair Jason Coryell, Sue has done an outstanding job of maintaining the Chapter infrastructure, while initiating efficient ways to reach our 1000+ members. In fact, ASM International recently recognized us with its top prize for innovation in communications with our members.

ASM Detroit (through our affiliation with the organization the visionary businessman/entrepreneur William Park Woodside founded) represents 101 years of excellence in serving the strongest materials and manufacturing community in the world. I truly believe that despite the ups and downs of our economy and region, ASM's legacy is growing, and there is much potential to attract and engage members through new program offerings, at the local, national and international levels.

Our top priority is to resolve our meeting location/facility challenges – we seek optimal ambience, affordability and accessibility. I appreciate the feedback received from members in recent months when we met at three SE Michigan venues last spring.

The new EC will build on the platform of administrative stability we now enjoy. We will strive to deliver exceptional programming and services, both through traditional and emerging tools, while offering you more choices in how you connect and receive value from us. We will continue to partner with AFS and ESD to feature thought leaders, from within our community and beyond, to share new insights and raise awareness of our members to new technologies.

In return, we ask for your confidence and regular attendance at monthly programs, to invite your colleagues to join and grow ASM, to network and volunteer (when asked) at upcoming student mixers and events focused on Science, Technology Engineering and Math (STEM) to help nurture the area’s future intellectual capital and workforce. Join our LinkedIn group, or at least visit our chapter website often to look for program updates and opportunities to network. Try and support our sponsors if you can.

This spring, by serving on the ASM Nominating Committee, I learned about the challenges, succession drivers and leadership requirements of ASM International. This week, I volunteered at the regional ASM Materials Camp for Teachers held at the UM campus, and found the experience highly gratifying. Big thanks to serial ever-energetic organizers, Dr. Kathy Hayrenen and Dr. Peggy Jones (Saginaw-Bay City Chapter), and all who volunteered. I am more enthusiastic than ever about this flagship event, which stresses new ways to ‘teach the teachers’ and pass key concepts to high-school students through hands-on experiments with materials.

Please let us know how we can add new value to your membership and affiliation with the ASM Detroit Chapter. Enjoy the rest of the summer, participate in the ASM-APS Golf Outing on August 9, which supports student and teacher awards/scholarships, or just come for some summer fun in the fellowship of your peers. Golf ON!

All the best! – Manish
IT’S NOT TOO LATE TO JOIN US!
ASM/AFS Joint Golf Outing
Saturday, August 9th

The Detroit Chapter of ASM International along with our friends at the Detroit-Windsor AFS Chapter invite you to join us for our 6th Annual Joint Golf Outing,

Registration: 7:30 am / Shotgun start: 8:00 am

Fellows Creek Golf Course in Canton

Cost: $100 per player. This price includes:

• 18 HOLES  
• CASH PRIZES  
• BUFFET DINNER  
• GOLF CART  
• BEVERAGES  
• DOOR PRIZES  
• COURSE CONTESTS  
• LUNCH  
• BASKET OF CHEER RAFFLE

This outing is a great opportunity to have some fun on the links and help support the future of engineering here in Michigan. Proceeds from this event directly fund student scholarships and ASM Teacher’s Camp, so we encourage you to come out and bring a friend, client or colleague for a great day.

For golf reservations, click on the link below to view the form. Please return the form by email to the ASM Detroit Chapter office at asm detroit chapter@gmail.com. Or call the chapter office at 586-944-5656.

http://detroit.asminternational.org/content/Chapters/detroit/2014%20Golf%20Sign%20Up%20FORM.pdf

2014-2015 ASM-Detroit Chapter

P.O. Box 1398
Warren, MI
48090-1398

OFFICERS
Chairman: Manish Mehta
Vice-Chairman: Eric McCarty
Secretary: J.P. Singh
Treasurer: Kac Trojanowski

EXECUTIVE COMMITTEE CHAIRS
Attendance/Publicity: James Boileau
Young Members/Student Affairs: James Boileau
Awards/Recognition & National Affairs: Jason Coryell
Education/MEI/Roundtable: Thomas Kozina
Entertainment: Mike Blazewski and Urban De Souza
Finance/Council of Fellows: Sue Hartfield-Wunsch
Membership/Sustaining Members: Roger Pryor
Papers/Programs: Bradley Hall

UoM MMS Representative: Elayne Thomas
ASM Teacher’s Camp: Kathy Hayrynen
Chapter Council Representative: Jason Coryell

Chapter Administrator: Julie Nimer
asminternational.org/portalsite/detroit
Meeting: Thursday, September 11th 6:00-9:00 PM  
Professional/Student Mixer  
Venue: Conor O’Neill’s -318 S Main St, Ann Arbor, MI 48104  
for reservations contact the Chapter Office at 586-944-5656 or email to asmDetroitchapter@gmail.com before Friday,  
September 5th. Cost: Member/Non-Member Fee: $25.00. Student Fee: $5.00  
Reservation includes 2 drink tickets and appetizers.

Thank You!  
To Our Student Mixer Sponsors

Joyworks Studio in Ann Arbor, Michigan was founded in 2005 by its proprietor, John R. (Chip) Keough, PE, as a creative outlet for his passion for metals, and particularly, for metal castings.

The original 1,000 ft² (93 m²) brick and timber studio, in rural Ann Arbor Township, was designed in classic industrial style with a ventilated clear story, metal framed, glazed windows and functional carriage doors. It is serviced by a ½ ton crane for lifting. A 65kw Inductotherm, medium-frequency power source provides the power for separate ferrous and non-ferrous furnaces with capacities of 100kg heats of steel or bronze respectively. Induction furnace power is provided by an on-site, 80-kw Kohler, natural gas powered generator. A portable mold furnace can be fired up to 1800°F (1,000°C). Welding, falling, cut-off and machining tools round out the capabilities of the facility.

2013 saw a lot of change for Joyworks. An 800 ft² (74 m²) addition provided the space for an office and additional storage. A seat of SolidWorks Premium, SolidWorks Simulation Premium, an Objet 3-D printer, and wood lathe have added design, verification, and patternmaking capabilities. Mechanical Engineer, Justin Lefevre, also joined the team at the studio as Principal Engineer-Casting Innovation. With a degree in mechanical engineering and a background in metallurgy and heat treatment, he is passionate about ductile iron casting design and prototype development. Justin now manages the day-to-day operations at Joyworks. These additions will help us in keeping with our mission, vision, and values.

Joyworks Studio provides a platform for research, teaching and creative endeavors relating to metals. Everything from alloy development, to casting prototypes, to sculpture can be, and are, created at Joyworks. Joyworks puts a new spin on the continuing development of one of man’s oldest professions. It provides an outlet for Mr. Keough to share his passion for the art and science of metal casting.

To find out more about Joyworks Studio, visit http://joyworksstudio.com/

AFC-Holcroft, headquartered in Wixom, Michigan, is one of the largest suppliers of industrial furnace equipment and systems in the world. We design, sell, manufacture and service heat treating equipment for the thermal processing of ferrous and non-ferrous metals. AFC-Holcroft has a global reach, with offices in Europe and Asia, as well as a network of strategic partners - many with manufacturing capability.

A privately held company, AFC-Holcroft maintains its competitive advantage through ongoing investment in advanced technology such as 3D modeling. Our engineering expertise includes air/oil flow simulations as well as stress and thermal analysis.

We are proud of our many decades as Sustaining Members of ASM International and the ASM Detroit Chapter. We are active in ASM International’s affiliated society ASM HTS, which focuses specifically on heat treating. We are also members of MTI (Metal Treating Institute), a trade association dedicated to the heat treatment industry.

We invite you to visit our website, www.afcholcroft.com to learn more about us. We enjoy meeting other ASM Detroit Chapter members and look forward to talking with you at member events. Ph. (248) 624-8191.

SMDI For the last century the steel industry has served its automotive customers. When corrosion warranty became an issue in the 1980s, the steel industry responded with two-sided exposed surface quality galvanized steel. When improved crashworthiness was required from 1990 through 2012, the steel industry was there with high energy absorbing AHSS grades like dual phase and TRIP to improved frontal crash energy management and with ultra-high-strength AHSS steels to prevent intrusion into the passenger compartment from side impact and rollover load cases.

Now that the automotive industry is looking to nearly double the fuel economy of light vehicles by 2025 as required by the new CAFE (Corporate Average Fuel Economy) Law, the steel industry has again moved the needle towards new steel grades with higher strength and more formability. The new AHSS products have strengths in many cases above one giga-pascal in strength, ranging from three to five times stronger than mild steels.

Research on new metallurgical approaches is driving to a third generation of these steels with greater formability that can enable many more parts to be made lighter with AHSS. Plus, new design optimization software and steel manufacturing processes like tailor rolling or tailor welding of coils is putting steel’s strength exactly where it needs to be vehicles without redundant mass. So, while everyone appears to be searching for new materials to solve the carmakers lightweighting challenges, don’t forget that steel has answered all challenges in the past, and will answer the CAFE challenge too, and do it cost effectively as well.

The Steel Market Development Institute (SMDI), a business unit of the American Iron and Steel Institute, grows and maintains the use of steel through strategies that promote cost-effective solutions in the automotive, construction and container markets, as well as for new growth opportunities in emerging steel markets. For more news or information, visit www.autosteel.org.
Chapter Program

2014-2015 Season Venue Locations

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 9, 2014</td>
<td>Golf Outing - Fellows Creek Golf Course - Canton</td>
</tr>
<tr>
<td>September 11, 2014</td>
<td>ASM Professional/Student Mixer Night</td>
</tr>
<tr>
<td></td>
<td>Conor O’Niell’s - Ann Arbor</td>
</tr>
<tr>
<td>October 6, 2014</td>
<td>Gazebo, Warren</td>
</tr>
<tr>
<td>November 10, 2014</td>
<td>Farina’s Banquet Center, Berkley</td>
</tr>
<tr>
<td>February 9, 2015</td>
<td>Livonia Marriott</td>
</tr>
<tr>
<td>March 9, 2015</td>
<td>Gazebo, Warren</td>
</tr>
<tr>
<td>April 13, 2015</td>
<td>AFS/ASM Joint Meeting – Farina’s Banquet Center, Berkley</td>
</tr>
<tr>
<td>May 11, 2015</td>
<td>Woodside Lecture – Livonia Marriott</td>
</tr>
</tbody>
</table>

Jump into the Fall and Jump ahead of your Competition

The Annual ASM Professional/Student Mixer Night is set for 6:00 PM on Thursday, September 11, 2014, at Conor O’Niell’s in Ann Arbor. This is a great event where Chapter Members can meet the up and coming talent in Materials Science from local universities and colleges in a casual environment. It also provides an opportunity for professionals and students to discuss internships, co-ops for the following summer as well as full time jobs.

Mark the day! Plan on joining us for this event so that the students can introduce themselves to potential employers and for professionals to advertise opportunities their companies have available. More details will be sent via email in late August.

May 2014 Woodside Lecture

Ray Decker, Technical Chair for the May 12, 2014 Woodside Lecture, along with Sue Hartfield-Wünsch (2013-2014 ASM Detroit Chapter Chair) and Manish Mehta (2014-2015 ASM Detroit Chapter Chair), present Steve LeBeau with the ASM Speaker Award. Steve is the CEO of Thixomat, Inc and the CTO and President of nanoMAg, LLC.