The Annual ASM Professional/Student Mixer Night is set for 6:00 PM on Thursday, September 22, 2016, at Conor O’Neill’s in the heart of downtown 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 students to interact with professional leaders to discuss the various networking and scholarships opportunities ASM has to offer.

Mark the day! Please plan on joining this social event, which provides a unique social opportunity for students and professionals and to discuss various career paths as Materials Engineers.

AFC-Holcroft offers atmosphere-based heat treating equipment, built to the highest standards for quality. Our extensive product range includes universal batch systems, mesh/cast link belt furnaces, continuous pusher furnaces, roller hearth and rotary hearth furnaces, walking beam furnaces, austempering systems, atmosphere generators, aluminum processing equipment and more. Recently acquired by the AICHELIN Group, AFC-Holcroft has become a part of the largest provider of atmosphere furnaces worldwide.

We are proud of our many decades as Sustaining Members of ASM International and the ASM Detroit Chapter – and are also active in ASM International’s affiliated society ASM HTS which focuses specifically on heat treating. Our staff enjoy meeting other ASM Detroit Chapter participants and appreciate the unique opportunity to talk with students and other members, hearing firsthand from different perspectives while receiving suggestions how we might continue to evolve our industry in ways that are relevant and exciting to the workforce of the future.

We invite you to visit our website, wwwafc-holcroft.com to learn more about us.

**September 22, 2016**

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**Thank You!**

**To Our Student Mixer Sponsor**

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Welcome to an official start of our 2016-17 Chapter year! As the summer in Michigan turns into a spectacular fall with its changing colors, we will kick-off by welcoming students of Materials Sciences and Engineering during our annual Student Mixer at the University of Michigan campus. You may ask why this is an important event in the calendar of our Chapter activities. As an ever-growing organization, which has thrived for more than a century, ASM has seen evolution of its membership from a society of heat-treaters and metalworkers to metallurgists, and now encompasses all the fields within the realms of Materials Sciences. We need to ensure that as mature an organization as ours is, we strengthen and adapt to the needs of the times and incorporate in mind, spirit and body our new members, who are going to run it with passion and fervor of the current membership they will replace over the years. We want to bring in new faces with fresh ideas to help grow our organization further and make it stronger as a materials community. This desire was a common theme among various participants at the recent ASM Leadership Days, an event that attracts membership from all across the globe.

While my fellow ASM Detroit members were enjoying a very successful golf outing in August, I was attending Leadership Days, where I was able to interact with 58 other members in various leadership roles from more than 40 Chapters, with ASM members from as far as Italy and India in attendance. As an annual effort from ASM International, it brought together current and upcoming leaders of our professional society. The conference included interactions with the ASM International’s leadership, ASM Young Professionals and student members over the three days of programming covering seminars and interactive sessions on strategic planning, chapter operations, communications, education, innovative programming, and volunteerism. The goal was to ensure that Chapters were aware of available resources through the ASM International, be cognizant of the role of Chapter Council, learn about good governance, improve their chapter visibility and outreach to members across their regions; all this, especially to engage and retain young members. On a final note on this front, some good news to share is that four ASM Chapters were rejuvenated, resulting from member interest within their respective regions.

The Detroit Chapter received a Chapter Award in the area of Student Outreach, to recognize the leadership of our Chapter in various activities over the last Chapter year, focusing on University students and K-12 STEM programs. Some key accomplishments that highlighted our student outreach were:

- Chapter outreach to meet university students via the annual University Night at University of Michigan (UM) in Ann Arbor.
- Awarded two student scholarships of $1500 each for the students awards to undergraduate students.
- Working with the ASM MEF, established a national scholarship program of $500 awards.
- Chapter STEM activities in Engineering Society of Detroit (ESD) sponsored Michigan Regional Future Cities Competition, sponsoring and providing judges for the “Best Use of Materials Award.”
- Strong and consistent support of the Science and Engineering Fair of Metro Detroit.

A Message from JP

continued on page 8
2016-2017 Chapter Program Dates & Locations

**September 22, 2016**
University Night at Conor O’Neill’s,
Ann Arbor

**October 3, 2016**
Chapter Dinner Meeting, Livonia Marriott, Livonia. Speaker: Dr. Lukasak, Director of Metallurgy and Research at Sapa Extrusion North America

**November 14, 2016**

**February 13, 2017**
Membership Awards Night, Lafayette Grande Banquet Facility, Pontiac

**March 13, 2017**
Sustaining Members Night, Farina’s Banquet Center, Berkely

**April 10, 2017**
ASM/AFS Joint Meeting – The Dearborn Inn, Dearborn

**May 8, 2017**
Woodside Lecture, The Gazebo Banquet Facility, Warren

**Volunteer Opportunities**
Contact Julie at asm detroitchapter@gmail.com if you would like to volunteer for one of the following events.

- **Oct. 28-29, 2016**
  Schoolcraft College Science and Engineering Festival, Schoolcraft College Gym, Livonia

- **Monday, January 30, 2017**
  Future Cities Judging Day

- **Wednesday, March 15, 2017**
  Science Fair Judging Day

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Micro-Examiner 2016–2017 Advertising Supporters

We are currently in the process of updating our newsletter advertising supporters for the 2016-2017 season. If you are a current advertiser you will be receiving a letter of solicitation shortly. If you wish to be a new advertiser in the Micro-Examiner and show your support of ASM, please contact the Detroit Chapter Administrator at (586) 944-5656 or asm detroitchapter@gmail.com.

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The 2016 Joint ASM/AFS Golf Outing

The 2016 Joint ASM / AFS golf outing held at Fellows Creek Golf Course in Canton, MI this past August was a great success! We had a little rain (or a lot depending on your point of view) to add to the challenge of the course this year.

The weather proved the old adage: “Golfing with great people will always be a great time.” I truly had a great time getting to see 104 golfers spend the day hitting their best shots and winning some fantastic prizes. It is also duly noted that this is the 104th Anniversary year for ASM!

Of course my being able to see 104 golfers enjoy the day comes as the result of incredible work on the part of the golf committee. Therefore, a “BIG” thanks goes out to the golf committee which included Eugene Kuo, Greg Woycik, Jim Panasiewicz, Julie Nimer, Mike Blazejewski, Alex Preisser, Urban de Souza, JP Singh and ASM Entertainment Chairman Tim Stachowski for organizing the event. I also have to recognize our volunteers: Kae Trojanowski deserves thanks for helping out by selling raffle tickets and handing out free drinks to our golfers from the beverage cart. A new volunteer, Nikki Tiernan this year helped in taking photographs of the golfers.

The banquet held after golf consisted of a delicious steak dinner followed by the awards ceremony. Sponsors were all recognized for the generous donations. Included in the MicroExaminer is a complete list of all sponsors for the golf outing. Many other companies brought additional prizes which were raffled off and made some happy participants multiple winners. A final thank you needs to go out to these companies for their contributions. The funds raised from the outing will be used by both ASM and AFS to better serve their respective programs and community activities. Hope to see everyone again next year!

Thank You To Our Golf Outing Sponsors!

Lunch Table Sponsor – Element Materials Technology
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Vegas Hole Sponsor – Anderson Global

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Thank You! To Our Student Mixer Sponsor

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

Serving as a platform for casting design, product development, research, teaching, and creative, metallurgical endeavors, Joyworks puts a new spin on the continuing development of one of human kinds’ oldest professions. Joyworks harnesses the full breadth of technology, and works closely with customers to develop the smartest casting designs and prototypes.

Specializing in ferrous castings, Joyworks takes pride in shortening the new product development cycle by optimizing the casting design for fit, form, function and cost.

Equipped with 200# Inductotherm furnaces, Solidworks CAD and FEA software, and a 3-D printer, Joyworks applies the 1800 sq ft studio to craft the highest quality gray, ductile, and austempered ductile iron casting prototypes.

Joyworks strongly believes in paving the way for future metallurgical innovations and innovators. Partnering with the University of Michigan, Joyworks helps teach future Materials Science and Engineering students the science and art of the foundry. The team also aims to serve the industry and industrial associations related to metal casting.

To find out more about Joyworks Studio, please visit Joyworksstudio.com. We look forward to sharing with you at member events.

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The ASM Detroit Chapter Would Like to Thank Its Sustaining Members for Their Continued Support!

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- RTI Laboratories, Inc.
- Sun Tec Corporation
- TRW Automotive
- United Testing Systems Incorporated
- Upton Industries Incorporated
- Vac-Met Incorporated
We enjoyed hosting 32 teachers from the US, Canada, and Brazil for the advanced version of Teachers Camp this year. About a quarter of them already teach a high school materials science elective, and many of them will introduce a materials course this fall. In addition to the significant financial support from Detroit ASM members, and from the Chapter, we are very lucky to have outstanding support from the University of Michigan MSE department and many volunteers. James Boileau, Carlos Prado, and Detroit Public Schools teacher Jim Skorna allowed us to add airport transportation service to our renowned hospitality. The teachers enjoyed a special evening making lost foam castings at Joyworks thanks to Justin Lefevre, Kathy Hayrynen, and the Joyworks Interns. Ron Radzilowski provided emergency delivery of high purity zinc when one of our shipments arrived late. Where else can you make a 911 call for 99.9% Zn and have it delivered to your doorstep the next morning? (We needed the zinc to make a metastable zinc-aluminum alloy that has a very exothermic precipitation reaction triggered by banging the sample on a table.) We also began development of a new curriculum module illustrating lightweighting design by creating low mass beams representing the “B Pillar” that protects you in the event of a t-bone crash in your car. GM allowed Peg Jones and Trisha Rouse to spend the whole week providing on site support, and Kathy Hayrynen provided a bounty of delicious treats. JP Singh welcomed the teachers on your behalf, Thomas Kozina helped us clean up, and Manish Mehta provided emergency back up support in case we needed anything. We’re already looking forward to 2017! 

Laura Moore, from Hartland High School just north of Brighton, has been teaching Materials Science for 4 years. She just finished pouring her lost foam casting at Joyworks.

One of the featured activities of the advanced “Camp” is making glass from silica and metal oxides using a table top furnace that runs on 110V power.

Chika Hampton (Kalamazoo Public Schools) and Tracy Veresh (Ferndale Public Schools) pouring glass we made from sand.
Leadership Days: Attendees at the Leadership Days at the culmination of 3 day seminars, posing under the ASM Materials Park Headquarters Dome in Cleveland, Ohio.

JP’s Message
(continued from page 2)

- Hosted ASM Teacher Camp (with other Michigan Chapters), and a Teacher Scholar Program. The Program awarded a $250.00 grant to six Teacher scholars for the purchase of equipment and supplies for materials-related experiments.
- Chapter conducted a “Mini-Camp” at the Heat Treat Expo. Over 150 students visited eight stations demonstrating material science topics.

At Leadership Days, I was pleased to visit a new display of handmade tools originally owned by ASM Founder William Park Woodside and used at the 90-year-old Park Metallurgical/HeatBath building in the city of Detroit. The building is being vacated for renovations and our Chapter was able to relocate the tools to the Dome thanks to past-chair, Eric McCarty and his young son, who personally delivered the artifacts. ASM placed the display case very close to the MEI classroom and labs, and in view of an anvil and blacksmith tools also belonging to Mr. Woodside. We are grateful to Park Metallurgical/HeatBath and its employees, for its safekeeping over half a century and finally to the ASM International for providing a befitting place to honor and inspire our future generations with the founder’s memory!

All the best - JP Singh

(From left to right) ASM Saginaw Valley Chair, Dr. Peggy Jones-FASM, ASM International vice-President Dr. William Frazier-FASM, ASM International President John Tirpak-FASM, ASM Detroit Chair, JP Singh, in Materials Park Headquarters showcasing display of William Park Woodside’s hand-made tools that were recently moved from Detroit to the ASM International Headquarters in Cleveland, Ohio.

(Below) Views of the William Park Woodside memorabilia at the location where other memorabilia is currently placed in the Materials Park Headquarters, Cleveland, Ohio.