A warm welcome from your Detroit ASM Board and Executive Committee to all our readers on this holiday edition newsletter. In November, our National Officers Dr. William Frazier, President of ASM International and Mr. Thomas Dudley, Executive Liaison to ASM visited the Chapter to meet Detroit members and see some of the industry and associated partnerships in the area. We had an opportunity to visit Linear AMS, where we saw examples of cutting edge additive manufacturing in works; it is a definitive sign of revolutionary progress in the Nation's next frontier of manufacturing. At our Chapter talk, Dr. Frazier, in his role as a lead Naval scientist, shared various examples of additive manufacturing, its strengths and challenges as he sees it revolutionizing the way designers and manufacturers are adopting this new technology for mainstream use. The following day, they visited Lightweighting Innovations for Tomorrow (LIFT) Center to learn first-hand how federal and industry partnership is coming together to further the common goal of reducing the cost and risk associated with commercializing transformative advanced technologies to ensure USA regains its manufacturing leadership. They visited Joyworks Studio, an Ann Arbor based innovative R&D and casting prototype center owned and run by one of our own, John (Chip) Keough, FASM. The officers, along with some members of the Detroit Executive Committee, also had an opportunity to meet and greet UofM students at the Ann Arbor campus to tell them about ASM and value the proposition it brings to its members. Finally, we were able to drive them through the Detroit area to show them the Park Metallurgical/Heatbath location where William Woodside and his contemporary heat treaters started sharing of ideas, which led to the foundation of ASM International, as we know it today.

As the year draws to close, we would like to remember and be thankful for another very productive year at our Chapter and various new associations and friendships we have been able to forge in our professional lives. In February 2017, I would urge our members to break the silo of old Winter and plan to join us for Membership Awards Night to honor you, our members, and celebrate long-standing members on their reaching membership milestones during their ASM journey.

I leave you all with one final thought for this year – as ambassadors of ASM, let’s reach out to our extended professional network to invite new members into the folds of our Chapter so that we grow strong year after year. Wish you all a Merry Christmas and happy and safe holidays from your Detroit ASM family!

2016-2017 ASM-Detroit Chapter Events

February 13, 2017 Membership Awards Night, Lafayette Grande Banquet Facility, Pontiac Speaker: Darryl Hammock of Weldmold

March 13, 2017 Sustaining Members Night, Farina’s Banquet Center, Berkely. Speaker: Mr. Probir Guha – VP, Continental Structural Plastics


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

- Monday, January 23, 2017 Future Cities Judging Day
- Wednesday, March 15, 2017 Science Fair Judging Day
ASM International Awards Fellow Status and More to 3 Michiganders At An Evening to Remember

2016 was a banner year as three of the most active members from the Michigan chapters of ASM were honored as Fellow of ASM (FASM) for technical accomplishments and volunteerism with other 19 new Fellow peers at the ASM International Awards Dinner held on Tuesday, October 25 in conjunction with the week-long 2016 MS&T Conference in Salt Lake City, UT.

This was the largest presentation to candidates from Michigan for an incoming batch of Fellows in recent memory, and is befitting of the Detroit region's century-old tradition in spurring ASM's origins, advancing materials and process innovations, and leading the education/sustainment of the materials engineering and metallurgy professions for major global impact.

The two FASM honorees from the ASM Detroit Chapter included:

- **Dr Susan Hartfield-Wünsch**, Technical Fellow at General Motors (and a past ASM Detroit Chair) for “advancing the state-of-the-art in aluminum sheet technology and implementation in the automotive industry.”

- **Dr Manish Mehta**, President of M-Tech International LLC (and past ASM Detroit Chair) for “sustained contributions in lightweighting and Nano materials studies, and processes, and to technology transfer programs to accelerate global commercialization.”

The FASM honoree from the ASM Saginaw Valley Chapter (whom we count as one of our own Detroiters) was:

- **Dr Peggy E. Jones**, Senior Project Engineer at General Motors-Saginaw, (Chair of the ASM Saginaw Valley Chapter) for “the application of ICME and fracture mechanics based design to aluminum automotive castings, including creation of the Virtual Cast Component Design System.”

The ambience and attention given to ceremony, orchestrated by ASM’s wonderful staff at this elegant formal dinner banquet, was at a level none of us had witnessed before, making it truly memorable for all honorees and their peers/relatives who attended. The 22 Fellow honorees and other special awardees (some from as far away as Australia, Denmark and France) were first received and joined a cocktail reception held in front of a custom banner or “wall of fame” displayed by ASM - great photo op! We were all then briefed for 15 minutes on the ceremonial award procedure by ASM International’s outgoing and incoming Presidents, Jon Tirpak and Bill Frazier, respectively, who served as MCs for the evening. We were paraded in two’s to the sound of drum-rolls and trumpets, making a grand entry into the SLC Hilton Hotel Ballroom for the black-tie-only banquet’s opening in a grandeur evocative of an opulent Bollywood wedding reception or a college commencement ceremony! We were all then seated in assigned seats on a raised stage for the entire evening.

Acknowledgement Seven past Detroit Chapter Chairs attended the November 14th ASM Detroit Chapter Dinner National Officer’s Night. We would like to recognize them and thank for their continuous support of the Detroit Chapter.

Soon after the welcome speech by Bill Mahoney, ASM’s new Executive Director, a few toasts and over dinner, our names were called in alphabetical sequence to receive the coveted FASM certificate and gold pin from ASM President Jon Tirpak, while also posing for a photograph. Other nearly twenty Awards from ASM were also given after the FASMs. Several non-FASM awardees delivered brief acceptance remarks.

About 400 persons were seated around dinner tables in the ballroom, including our own Michigan cheering section comprised of our family members and ASM Detroit Chapter members and leaders in the audience such as: Dr Ray Decker (past President of ASM International), Dr John (Chip) Keough (outgoing Trustee of ASM international), Dr Ron Radzilowski (past ASM Detroit Chair and Incoming Chair of the ASM Emerging Technology Awareness Committee, ETAC), and Thomas Kozina (Past Chair of ASM Detroit). The first and major award of the evening, the 2016 George A. Roberts Award, went to Dr Peggy Jones in recognition of her exceptional service to the profession, through her years of dedication and contributions to advances in aerospace and automotive materials engineering, and for her volunteerism at Teachers Materials Camps, and promoting STEM education via the ASM Materials Education Foundation. After a rousing and deeply touching speech on how Peg grew up to become a materials engineer in a lineage of accomplished family of scientists/inventors, the entire gathering gave her a standing ovation - her Eagle Trophy was THE most elegant I have seen in a long time!

The festive evening concluded and was immediately followed by the ASM President’s Dessert Reception with more informal socializing and congratulatory reveling with family and peers who had joined us. The next morning, all 22 FASMs attended the ASM President’s Breakfast where Dr Bill Frazier invited us to get more involved in helping grow ASM, to volunteer on committees, and to help our profession.

I was delighted and honored as the only FASM this year to also receive a second award plaque on October 24 in SLC- Fellow Member of Alpha Sigma Mu (the International Professional Honor Society for Materials Science and Engineering) in the presence of Dr Alton Romig, Executive Director of National Academy of Engineering. In his remarks, the current Society President Prof Joseph Newkirk, cited my volunteerism “as a Rotarian with a social conscience for working on humanitarian causes as an application of my technical knowledge.” Many of you know that rural sanitation, water/hygiene, healthcare and women’s empowerment are causes I care deeply about.

Conspicuous by his absence at the ASM Awards Dinner was our good friend and mentor, Dr Jack Simon (past President of ASM International), who cancelled his planned travel to SLC so as to provide tender loving care for his beloved wife in Aiken, SC...we missed Jack’s presence and send good wishes and positive vibes for her speedy recovery and also thank him for his support and encouragement.

For this celebration of the rare and unique honor bestowed by ASM, we are all deeply humbled and are most grateful to all our respective nominators, mentors, ASM Intl and Detroit Chapter leaders, Board and work colleagues who took the time and trouble to write thoughtful recommendation letters to the ASM Awards Selection Committee over the last year.

In writing this article the week of Thanksgiving, as I relive the surreal experience from that fine Awards Banquet, I am grateful to the membership of ASM Detroit and ASM HQ/Chapter friends from around the world, as well as appreciate the support of my parents, mentors and family.

I conclude with some profound lines I recently came across...“SUCCESS isn’t all about what you have accomplished in your life; it’s more about what you INSPIRE others to do.”

We three newest FASMs share our Chapter’s and ASM’s commitment to professional excellence, and look forward to helping anyone who wishes to embark on the journey to Fellow status and beyond. Thank you, ASM Detroit!

-Manish Mehta, PhD
(FASM, Fellow of Alpha Sigma Mu and ESD)
November 14, 2016
Dinner Meeting

From Left To Right: JP Singh (16-17 ASM Detroit Chapter Chair), Chip Keough (November 15th Tech Chair), Dr. William Frazier (16-17 ASM International President), Thomas Dudley, (Executive Liaison for ASM International)

From Left to Right: JP Singh (16-17 ASM Detroit Chapter Chair), Laura Moore (2016 Peg Jones Teacher Scholar Award Recipient), Peg Jones (ASM Detroit Chapter Teachers Camp Co-Chair), Dr. William Frazier (2016 ASM International President), Wanda Bryant (2016 Kathy Hayrynen Teacher Scholar Award), Kathy Hayrynen (ASM Detroit Chapter Teachers Camp Co-Chair), Karen Forsyth (2016 ASM Detroit Chapter Teacher Scholar Award)
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- Heat Treating Services
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- Michigan Metrology
- MNP Genfast General Fasteners Engineering
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- Sun Tec Corporation
- TRW Automotive
- United Technical Inc.
- United Testing Systems
- Upton Industries Incorporated
- Vac-Met Incorporated

College and University Students in Materials: Two Scholarships Available

Our chapter is happy to announce that it will be offering two scholarships to students pursuing a degree in materials science and engineering.

The Marion Semchyshen and James A. Mansfield Scholarships will be given to two students selected for their high scholastic achievement and their activities in the field of materials science or metallurgy. The scholarships are for students that are sophomores, juniors, and first-year seniors. Each scholarship consists of a $1,500 cash award and certificate, and will be presented at an ASM-Detroit Chapter meeting in March or April.

If you know of a college or a university student in materials science or metallurgy, please let them know of this opportunity. The scholarship applications will be mailed to university advisors and posted on the ASM-Detroit website by January 3, 2017; the deadline will be in order to be considered, they need to complete the form and return it to the ASM Detroit Chapter before midnight on Sunday, January 29, 2017.

Please take a moment and think of that outstanding co-op or student intern you know; send them and email and encourage them to apply!

Chapter Members Needed to Judge on Monday, January 23th “Best Use of Materials” Award

Please join the members of the ASM Detroit Chapter as we again judge the annual Future City Competition. As part of National Engineers’ Week, Future Cities gives middle school students a chance to envision a city in the year 2050, and to address the challenges that face it. This year’s theme is the “Power of Public Spaces” and challenges student teams to design a network of innovative, multi-use public spaces throughout their city that serves the city’s diverse population.

The Future City Competition is being held on Monday, January 23, 2017 at the Suburban Collection Showplace in Novi, MI. The ASM Detroit Chapter has a judging team that awards the “Best Use of Materials” to one of the competing schools. In the past, we have had a judging team with 8 people; with this number, the judging goes quickly and smoothly for everyone. The judging begins with an orientation at 8 AM and will be finished by 11:30 AM. A complimentary breakfast is offered to each judge.

Please take the time to mark your calendar and volunteer be an ASM judge for this program; to do so, please email Carlos Prado (carlos.1.prado@gm.com) or Julie Nimer (asmdetroitchapter@gmail.com).

Chapter Members Needed To Judge on Wednesday, March 15 “Best Materials” Projects at the Science and Engineering Fair

Come see the Materials Scientists of the future. The 60th annual Science and Engineering Fair of Metro Detroit will be held at Cobo Hall on Wednesday, March 15, 2017.

Each year, our chapter has sponsored a “Best Materials Project” award for both the Junior (6th – 8th grade) and Senior (9th –12th) categories. To choose the awardees, a team of chapter members are needed to visit and judge the projects. The judging begins with an orientation at 8 AM and will be finished by 11:30 AM. A complimentary breakfast is offered to each judge.

Please take the time to be an ASM judge for this program; to do so, email either:

- Carlos Prado carlos.1.prado@gm.com
- Julie Nimer asmdetroitchapter@gmail.com

December 2016

asminternational.org/web/detroit-chapter/home | 586)944-5656 | asmdetroitchapter@gmail.com
Dr. Frazier Tours

November 14th – Visit to Linear AMS. From Left To Right, Tyson Brown, JP Singh, Dr. William Frazier, Jason Coryell, Kae Trojanowski, Peg Jones, Urban De Souza, Bob Henderson, Thomas Dudley, Dan Baker, Chip Keough

November 14th, Thomas Dudley and Dr. William Frazier in front of the Park Metallurgical Heatbath Building which was awarded a Historical Landmark in 2015.

November 15th, Tour of the Lift Facility – From Left to Right, Eric McCarty, JP Singh, Larry Brown, Dr. William Frazier and Thomas Dudley

November 15th – Tour of Joyworks – From Left to Right – Chip Keough, Thomas Dudley, Dr. William Frazier, Eric McCarty, and JP Singh

November 15th – Pizza Luncheon with MMS/ U of M students with Dr. Frazier

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ASM-Detroit to Offer a Short Course
Non-Destructive Evaluation of Automotive Components

The ADM Detroit Chapter is pleased to announce a 1/2 day short course on Non-Destructive Evaluation of Automotive Components. The course will be held on Friday, February 10, 2017, from 12:00 - 3:30, and will cost $25 per attendee; the location is being determined.

The short course features two experts in their fields:

**Dr. Cameron Dasch**: Dr. Dasch will begin with a short tutorial on the theory of ultrasonic inspection, then discuss the ultrasonic instrumentation available and its uses/limitations, and finally focus on automotive applications.

**Dr. Martin Jones**: Dr. Jones will present the fundamentals of x-ray analysis, discuss X-Ray/CT Scanning systems, and then show the application to the inspection of automotive components.

In addition, a select number of key local suppliers will be present to showcase the latest technologies and services in the NDE field.

Additional details on the course location and fee will be emailed to members shortly.

Mark your calendars for **Friday, February 10, 2017**!