



# Institute of Industrial & Systems Engineers

2018 Q3 Newsletter

Detroit Chapter #47

September 2018

Volume 62, Issue 3

## 2<sup>nd</sup> Annual Great Lakes Siim-Q Conference

by David M Chegash

### In this issue:

2<sup>nd</sup> Annual Great Lakes Siim-Q Conference

1

Website

1

Next Chapter Meeting

1

Board Member Spotlight

2

Siim-Q Conf. (continued)

3

Job Opportunity

4

Membership Update

4

Volunteer Opportunity at Gleaners Save the Date

4

Chapter Activity Report Board

4

Members contact info

6

~~2018 Board~~

Members

6

~~Mission Statement~~

6

~~President's Message~~

6

It's a beautiful (but hot) day outside. Plenty of sunshine and hardly a cloud in the sky. So, what should you do? Stay inside of course and attend the Siim-Q Conference.

This was the second time the conference was held at Oakland University and was sponsored by the OU student chapter of IISE.

This year's conference attracted 119 people to an offering of many wonderful presentations and demonstrations. There were 5 Tracks to choose from this year: IISE Student Presentations, Industrial Systems, Manufacturing and Quality (2). As usual, participants could select to attend one track or pick and choose from all five.

Opening remarks were given by Dr. William Edwards who thanked everyone for their attendance and provided a brief synopsis of the day's offerings. Dr. Edwards then introduced the event's keynote speaker, Doug Fish – Siemens Vice President.

Industry 4.0 was the focus of his presentation. Early leaders of the industrial revolution were Sears and Roebuck. Their catalog was an industry standard from 1894 to 1993. Sears didn't embrace technology which led to the eventual decline of their company. Richard Morley began our march to computers with his development of the Programmable Logic Computer and helped pave the way for the IT revolution in the '90's.

Mr. Fish made a strong argument for data collection when he quoted Dr. Deming: "Without data you're just another person with an opinion."



Doug Fish – Keynote Speaker



Oakland University's Engineering Center was the site of the second annual Great Lakes Siim-Q Conference.

(see Conference on Pg. 3)

### IISE Detroit Website

Our parent organization updated our name to better reflect our members. Bookmark our IISE Detroit website at [www.iisedetroit.org](http://www.iisedetroit.org)



### Next Chapter Meeting:

Our new Board of Directors have set up a new recurring meeting schedule. As always, members are welcome to join our phone conferences.

Dial-in Information: (515) 739-1020, Participant code: 583021#  
Chapter meetings: 3<sup>rd</sup> Wed. @ 6:30 pm (call-in only)  
Please send questions to [president@iisedetroit.org](mailto:president@iisedetroit.org)

## Member Spotlight: John Preston – V.P. Webmaster

### ***How/why you first picked the Industrial Engineering field...***

I picked the field of Industrial Engineering because I've always liked working to make things more efficient. As a child, I liked performing time studies on myself. For example, I'd time how long it took me to deliver the papers on my newspaper route and try to figure out ways to do it more quickly while keeping the customers happy, of course. When I was a senior in high school, I participated in Junior Achievement (JA). Our JA coach, the local General Motors plant's general manager, was an IE. He shared with our JA group his experiences at NUMMI and his team's efforts working to adopt lean methods within their factory. I found his stories inspiring. It was then that I decided that IE was the right fit for me.



### ***What you most enjoy about IE?...***

I like being an IE because the problems that we help to solve are exciting. The solutions can have huge impacts on a company's future or can make a positive difference in an individual's life. These solutions help companies to avoid variability and overburdened conditions. Both of which can be a death sentence for a business. IE programs and projects reduce wastes that have a direct impact on the bottom line and have long lasting echo effects on businesses years after implementation.

### ***Examples of past projects?...***

As an IE, I've had the prized opportunity to help individuals by resolving unsafe conditions in both the factories and within the offices. Having an individual tell you that they are no longer in pain at the end of the day after resolving a poor ergonomic condition is an incredibly rewarding experience.

### ***What do you like to do in your free time?...***

Outside of being an IE, I enjoy being with my family and friends. As a Michigander, I'm lucky to have many family and friends within lower Michigan. I also like to run, go to the gym and volunteer with IISE. I spend summer weekends in northern Michigan and try to take in all that it has to offer.

**(Conference – from Pg. 1)**

In the Quality Track, ASQ Fellow Jd Marhevko, gave an overview entitled: *The Alphabet Soup of Core Tools APQP, FMEA, PPAP/CP, MSA & SPC*. The title of her presentation should have given away her humorous and animated nature.

During her two hour presentation she went on to explain what all of those acronyms mean and how they relate to quality in the workplace. We will only be able to provide a rudimentary explanation here. If you would like more detail contact the Greater Detroit Section of the ASQ.

The alphabet soup she mentions are made up of Advance Product Quality Planning (APQP), Failure Modes and Effect Analysis (FMEA), Production Part Approval Process (PPAP), Measurement Systems Analysis (MSA) and Statistical Process Control (SPC).

During her presentation, Jd had the class break up into groups to try and understand some of the concept of qualities core tools (see photo below right).

Judson Estes, Director of Master Blackbelt Training at FCA presented FCA-Shainin Blackbelt Technical Problem Solving. He stressed the need for adequate performance measurement systems to be able to identify if a system is going from good to bad or bad to good.

One of the methods used is to take a bad part and put it into a good car. Then take a good part and put it into a bad car. By examining all details on the bad parts, you should try to determine the root cause.

You could tell that Judson is a man who likes to take his work home with him when he declared that “my wife doesn’t want to go shopping with me.” He feels that the ‘trick’ is in the organization of data to assist in detecting the root problem.

The recently retired Ron May, Executive Vice President at DTE Energy spoke on Leadership Principles / Positive Engagement. He asked who defines what is ‘normal’ in leadership? His answer was that comes from you. Use hard trends to see what’s coming.

A brief word from each of the co-sponsoring organizations was given right after lunch starting with Dr. William Edwards for the Greater Detroit Chapter of IISE who spoke on the group’s active membership and that they always have room for more members.

Claire Krupp of the Michigan Simulation Users Group (MSUG) spoke about their web site and the competition for the student simulation award.

Past chair, Steve Sibrel, of the American Society for Quality also spoke briefly on the group’s current and future plans.

**Track 1 – IISE Student Presentations** featured Russell Bauer and Umang Alwan on Siemens Ergonomic Jack HANDS-ON Simulation. This is always a well attended and well run presentation. Students are shown how to set-up and run a simple production operation. Then they are shown how to modify the layout and / or the method to improve the productivity for that operation.

(see Conference on Pg. 4)



Jd Marhevko, ASQ Fellow presented an overview of 'The Alphabet Soup of Core Tools'.



Working on an in-class team project during Jd Marhevko's lecture were (clockwise from lower left) Joe Chanting, Ray Kennedy, Jayson Reyes and Noble Amarteifio



Attendees give the speaker their undivided attention during their presentation.



(**Conference** from page 3)

The second IISE student presentation was made by Darryl Forget regarding Lean Manufacturing (Kaizen). Just remember, every process can be improved, it will never be perfect. Operational Research was presented by Ryan Schoettle who let us know that the government and scientists had a big impact in the discovery and usage of operational research.

**Track 2 – Industrial Systems.** This track began with a student workshop led by Ryan Schoettle and Darryl Forget on the Design of Experiments. This was one of my personal favorite presentations since the experiment was to determine the amount of chocolate chips that makes a good chocolate chip cookie. After much discussion and taste testing, we all agreed that much, much more work would need to be done.

(see Conference Pg. 5)

## Job Opportunities

MidMichigan Healthcare in Midland, MI. has a posting open for a full time Performance Improvement Specialist. The posting can be found at:

<https://jobs.midmichigan.net/prod/CandidateSelfService/controller.servlet?dataarea=prod&context.session.key.HROrganization=10&context.session.key.JobBoard=EXTERNALJOBS&context.session.key.noheader=false>

### SAVE THE DATE!!

Volunteer at Gleaners – volunteer activities involve sorting and packing food, picking orders and more. Only 10 spots available-[register here](#).

Where: Gleaners Community Food Bank  
120 E. Columbia Ave, Pontiac, MI  
When: Saturday November 10<sup>th</sup> – 9-11:30 am.

### **Chapter Activity Report – Student Outreach**

Information on the 2018 Irv Otis Award and student paper is available on our website. This is a great opportunity for students to turn in project work from their summer internships or school projects and get valuable feedback from professional Industrial Engineers. In the past, the questions asked and suggestions given have been both technical as well as helping students improve their presentation skills. And don't forget, it is also an opportunity for students to earn money to help offset the cost of their education.

Submissions for the Irv Otis Award and paper competition are due October 20<sup>th</sup>, with the paper competition presentations held on October 30<sup>th</sup>.

Scholarship amounts:

Irv Otis: \$1,000

1<sup>st</sup> Place Paper Competition: \$500

2<sup>nd</sup> Place Paper Competition: \$100

### **Membership Update**

As of August 31, 2018:

Total Members: 182

New members – 1

Expired - 2

Transferred out – 0

Transferred in – 0

Reinstated Members – 0

Memberships to expire within two months – 18

Total members deleted – 2

Total members added – 1

We have many members that need to renew within the next two months. Please check your membership status and renew if needed at: <http://www.iise.org/Details.aspx?id=560> We will send reminder emails to those individuals shortly!

(**Conference** from page 4)

Ray Ahmad presented a study utilizing ERP – Enterprise Resource Planning. The study concentrated on what it takes to own a firm. It examined the question of why own a firm and what industry would fit you.

Devone Reese was the last to present in this track. His offering was Industrial Robotics, an introduction. He concentrated on when and why you should use a robot and how to determine what type of robot is needed.

**Track 3 – Manufacturing.** The first class in this track was a student workshop in Lean Manufacturing by Ray Ahmad and Mohamad Hassein. They introduced the concept of flexible manufacturing in a simulation of a process. The concepts of starved, blocked, push, pull, etc. were defined and discussed.

Preparing the Workforce through Education in the 21<sup>st</sup> Century presented by Patrick Hillberg from Siemens Architect Solutions filled out the track.

**Track 4 – Quality.** The first track in Quality was covered in some detail on page 3. The next presentation was on the FMEA tool and some basics of the PFMEA. Carlo Forest, BIW ME Global Lead for GM Manufacturing Engineering was the presenter. Jim Wrock and Harry Guo from FCA US LLC closed out this track with Designing an Effective DVP&R Process for Ensuring Product Reliability.

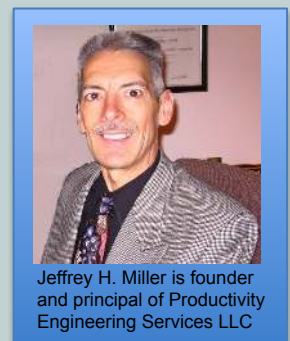
**Track 5 – Deming Library Videos.** I'll give you one guess as to who is the presenter in this track. Dr. Deming's videos are shown throughout the conference. The Deming philosophy looks at the world through a lens that is different from all others. It brings together an understanding of variation, theory of knowledge, psychology and an appreciation for a system.

## Highlights from the Siim-Q Conference



## IISE Senior Member Earns Professional Certification in Sales and Operations Planning

Jeffrey H. Miller, PE, CPIM, CS&OP of Productivity Engineering Services LLC recently achieved Certification in Sales and Operations Planning (CS&OP). CS&OP is a program offered by the S&OP Institute and its academic affiliate – the USC Marshall Center for the Global Supply Chain Management, to build and validate knowledge in Sales and Operations Planning and the careers of those in the field. This designation demonstrates the supply chain professional has substantial expertise in the field of S&OP – a set of powerful decision making processes that balance demand and supply, integrate financial and operational planning, and link high-level strategy to ongoing, day-to-day operations





## 2018 Board Members

### President

Lisa Takis  
[president@iisedetroit.org](mailto:president@iisedetroit.org)

### Vice President

Muhanad Hirzallah

### VP Administration

Bryan Beaver

### VP Programs

Bill Edwards  
[programs@iisedetroit.org](mailto:programs@iisedetroit.org)

### VP Membership

Lauren Heibeck

### VP Webmaster

John Preston

### VP Communications

David Chegash  
[communications@iisedetroit.org](mailto:communications@iisedetroit.org)

### VP Finance

Britney Beyer

If you are interested in joining the board of directors, please email [president@iisedetroit.org](mailto:president@iisedetroit.org)

For questions or comments about the Detroit Chapter of IISE, please email [president@iisedetroit.org](mailto:president@iisedetroit.org)

## Please welcome your 2018 Board of Directors

Thank you to our new Board Member volunteers and those that took the time to vote. Here is the 2018 Board of Directors:

President: Lisa Takis  
Vice President: Dr. Muhanad Hirzallah  
VP Administration: Bryan Beaver  
VP Programs: Dr. Bill Edwards  
VP Finance: Britney Beyer  
VP Webmaster: John Preston  
VP Communications: Dave Chegash  
VP Membership: Lauren Heibeck

The new board looks forward to working with you to host great events! If you have suggestions for improvements, please email [president@iisedetroit.org](mailto:president@iisedetroit.org)

MISSION: IT IS THE MISSION OF THE GREATER DETROIT CHAPTER TO PROMOTE THE ADVANCEMENT OF INDUSTRIAL ENGINEERING BY PROVIDING PROFESSIONAL DEVELOPMENT AND RESOURCES TO OUR MEMBERS AND THE COMMUNITY.

## Message from the President

I would like to officially welcome some “new” members to our local chapter. The regional IISE leadership has evaluated those not associated with a local chapter and assigned them to a local chapter. This may be your first newsletter from us! Welcome! IISE Greater Detroit Chapter just expanded our reach, further west and north in the state of Michigan. As part of our chapter we want to hear from you. What events would you like to see? What interests you? Do not hesitate to reach out and let us know. We are looking to make some of our events accessible virtually. As always, we welcome our members to join our monthly board calls too.

There are several events coming up in the remainder of this calendar year: October Student paper competition, November volunteer event, December holiday party and announcement of the 2019 board. We look forward to seeing all of our members at these events. Calls are open to all professional members, student members, or anyone who is interested in learning more about our chapter. Chapter meetings are held on the third Wednesday of the month, call-in: 515-739-1020, attendee code: 583021#.

Lisa Takis  
*President - IISE Greater Detroit Chapter*

Please email  
[president@iisedetroit.org](mailto:president@iisedetroit.org)