



**Institute of Industrial Engineers
Chapter 47
NEWSLETTER
Detroit, Michigan**

Mission:
The Mission of the Detroit Chapter is to promote the advancement of Industrial Engineering by providing professional development information and resources to our customers.

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Gary Altman

**Friday, November 21, 2003
Visteon Rawsonville Plant
Tour and Presentation**



Article on page 3. Map on page 8.
RSVP: by Monday, **November 18th** to our IIE VOICEMAIL (313) 438-0205
Reservations are limited.

- See how lean principles can be implemented with the aid of UAW workforce
- Early operator involvement is key
- Quick operator access to problem resolution
- Ergonomic considerations for job rotation

Meet in front lobby, may begin arriving around at 1:45 pm. The tour will be from 2-3 pm. Visitor parking is in the front of the building off Textile Rd. The Visteon Rawsonville assembly plant is located at Textile and McKean Roads, Ypsilanti, MI.

**Friday, December 12, 2003
December Holiday Dinner and Inauguration**

RSVP: by Tuesday, **December 9th** to our IIE VOICEMAIL (313) 438-0205
See page 4 for details. Reservations are limited.

Time: 6:30 pm cocktails (cash bar)
7:00 pm introduction of officers
8:00 pm dinner

Where: Traffic Jam Restaurant is located at the corner of Canfield & Second Avenue (WSU Campus Area). web site: www.traffic-jam.com

The **2004 Ballot** is inside. Please take time to vote, write-in your favorite candidates, and volunteer your time for a community service project or to be involved with some form of IIE Detroit Chapter operations.

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Chapter President's Message

by Tej Jhamb

We are nearing the year-end of greater Detroit Chapter's programs occurring in 2003. To reminiscence a little, it was a wonderful year for your chapter. The current Board of Director member's unmitigated enthusiasm, and your participation in this process, made us proud to deliver to your expectations.



In this cooperative atmosphere of win-win situation, we were recognized and awarded by our IIE headquarters in Atlanta and other institutions for being the best provider of a "VALUED" service to our members and also to the community. To enumerate:

- National IIE awarded the Detroit Chapter the Gold Award for its chapter activities in 2002 and we are heading for the highest award again for 2003.

- The Detroit Chapter was also awarded a Platinum award for 2002 in the Newsletter competition and we are on-track to receive it for 2003.

- The Engineering Society of Detroit (ESD) will be recognizing the IIE Detroit Chapter as "Partner of Year" for 2003 in their annual banquet.

- The September 2003 issue of the IE Magazine had an article regarding community service provided by Mr. Victor Lloyd, VP Community Service and his associates.

- Visitation to our Website has increased multifold since it was reengineered recently.

- On Oct 24, 2003, the "Six Sigma Symposium" was held in William Beaumont Hospitals Royal Oak, co-sponsored by IIE Detroit Chapter and Beaumont University, to a packed conference center. This was our first walk into a uncharted territory. Based on the evaluations and handshakes it was a "TREMENDOUS" success.

My thanks go to Dr. Vinod Sahney, Senior Vice President of Henry Ford Health Systems, as keynote speaker for the symposium. Thanks also to Beaumont University for providing us great accommodations and services for this symposium. Members of our IIE Board and Wayne State University Student IIE Chapter did a superlative job

in providing all the basic necessities for the attendees.

Ladies and gentlemen, thanks from abyss of my heart.

This current issue Newsletter also includes the ballot for your Detroit Chapter Board of Directors for 2004. Please take your time to vote and nominate candidates of your choice. Also please volunteer your services to be a part of the board. We would like to hear from you.

I would like to invite all of you to contact me with your suggestions and advice, as how to improve the delivery of the services we are currently providing, directly via e-mail (president@iiedetroit.org) or through our website (www.iiedetroit.org).

Have the best of the fall season and soon to be arriving holiday season.

Thanks.

Tej

Up Coming Events in 2004

January	Student Competition WSU
February	
March	
April 16th	Joint IIE/APICS
May	
June	Jane Harris, GM, Lean Mfg
July	Golf Outing, Sylvan Glen, Troy
August	Harbour Report, Gazebo
September	Student Night, UM-AA
October	Productivity Symposium
November	
December	Holiday Dinner and Inauguration

Membership Report

Total Members = 257, as of 10/02/2003

NEW MEMBERS

Springstead, Deborah C.	Bednarz, Neil G.
Simpson, Shane	Wolff, Daniel Christopher
Shah, Kunal	Chacon, Joe
Pasinetti, Timothy J.	Ellis, Darin
Xu, Kui	Manivvan, Mani S.

TRANSFERS INTO THIS CHAPTER

Barbery, Luis Fernando	Chen, Yong
Goudreau, Kevin L	Huang, Roger Thomas

Visteon Rawsonville Plant Tour and Presentation Friday, November 21st

- See how lean principles can be implemented with the aid of UAW workforce
- Early operator involvement is key
- Quick operator access to problem resolution
- Ergonomic considerations for job rotation

IIE has the opportunity to tour the the Visteon assembly plant in Rawsonville to see the new IAFM assembly line for the 5.4-liter Engine Induction System .

Meet in front lobby, may begin arriving around at 1:45 pm. The tour will be from 2-3 pm. Visitor parking is in the front of the building off Textile Rd. The Visteon Rawsonville assembly plant is located at Textile and McKean Roads, Ypsilanti, MI.

Abstract:

Early operator involvement was the key to success on new Rawsonville line. Five years ago, planners at the Rawsonville Plant in Michigan, realized they needed to build a new assembly line for the 5.4-liter Engine Induction System, an integrated air/fuel module, to be installed in the new 2004 Ford F-150. So they decided to start from scratch. They knew they had to be at the 'top of their game' to help deliver what the *Detroit Free Press* called "the best pickup truck ever."

Taking advantage of the opportunity, the launch team worked to incorporate 'Lean' principles that they believed would help catapult Rawsonville's transformation into a more flexible, higher velocity manufacturing center.

The new IAFM line is designed with two main concepts at the forefront -- supporting the operator and matching the production process to customer requirements. Neither concept is revolutionary, but the team was committed to perfecting both concepts, then spreading the transformation to older lines within the plant.

Now that the new F-150 has been launched at Ford's Norfolk and Kansas City Assembly Plants, the Engine Induction System (EIS) assembly line is proving out its principles by humming along at the speed of its customer. And other lines are being rearranged to incorporate some of its principles as the opportunity arises.

Hourly operators were heavily involved in the early stages of planning the new line. Scott Lewis, an assembly technician, was taught the lean principle of Standardized Work and assembled and disassembled a prototype of the EIS more than 50 times. He documented each motion to derive the optimum assembly process. From that process, engineers and operators were able to sketch out an operation-by-operation work flow chart.

To make the process efficient, operators sketched out how the parts should be oriented as they entered and exited each operation. A flow rack supplier worked closely with the production operators, using the sketches to provide all of the part presentation racks. This shortened the development time by eliminating an engineering liaison.

Operators were included early in the process. The operators told what they needed on each piece of equipment for them to do their job properly. This not only involved safety and ergonomic issues, but also the assembly process itself.

The team decided that for quality reasons, operators should have quicker access to problem resolution. So the team leader -- also an hourly employee -- does not work directly on the assembly line but is trained to respond immediately to concerns. The communication system, a giant electronic board hung in the middle of the assembly area, is set up to elicit a response within the cycle time of every part -- normally within 42 seconds. Communication boards also let operators know the maintenance schedule of their machines and whether that maintenance has been performed.

For ergonomic purposes, operators rotate jobs every two hours. The line has been designed to exercise different areas of the body at each station, so rotating will help cut the fatigue factor on any one part of the body.

Speaker Bio:

Scott Hanson has 14 years with Ford/Visteon. He launched the fuel injector that is in current production at the rate of 30,000 units/day. Scott spent 4 years in alternator assembly leading the turnaround of \$8M/yr manufacturing performance plus a 75% year over year reduction in expedited freight. Scott led efforts to reduce the alternator PPM from over 400 to 22. He moved to Forward Model Manufacturing Engineer for 1 year, and launched the IAFM line.

December Holiday Dinner and Inauguration Friday, December 12, 2003

The Detroit Chapter IIE Inauguration and Holiday Party is open to all Detroit Chapter IIE members, students, spouses, and significant others.

Date: Friday 12/12/03

Time: 6:30 pm cocktails (cash bar)
7:00 pm introduction of officers
8:00 pm dinner

Where:

Traffic Jam Restaurant is located at the corner of Canfield & Second Avenue (WSU Campus Area). web site: www.traffic-jam.com

The Traffic Jam is south of Wayne State University in Detroit, which is south of I-94 {Ford}, east of US-10 {Lodge}. The address is 511 West Canfield, at the South East corner of Second Ave. Canfield is the second traffic light after Warren, if traveling southbound on M1 {WoodWard Avenue}. Second is 2 blocks west of M1, and is one way north. Park in the 100 car lighted, fenced parking lot.

Cost:

\$25 IIE member / guest (advanced reservations prior to 12/9)
\$30 IIE member and guest night of the event
\$20 IIE student members
\$32 non-IIE member (advanced reservations prior to 12/9)
\$37 non-IIE member night of the event

Dinner includes entree of choice, bread, house mixed greens salad, desert of choice and coffee/tea/soda.

Notes:

- Please do not leave your credit card information on the reservation line – we will call you to confirm and finalize the reservation on 12/9 or soon thereafter - we take Visa, MasterCard, and American Express.
- We will accept advanced reservations on the reservation line and will charge your credit card on 12/9/03 or soon thereafter.
- On the night of the event you will be able to pay with cash, check, or credit card.
- Reservations can be cancelled on or before 12/9 (no charge will be made to your credit card)
- No Refunds are offered after the event
- We have a room with a maximum of 40 people – so please make your reservations early.

Reservation Line:

(313) 438-0205 – To make a reservation, Please call and leave your name, a contact phone number, IIE affiliation, and number of people.

2004 Detroit Chapter Student Technical Paper Competition

The IIE Detroit Chapter is looking for VOLUNTEERS as JUDGES for the 2004 Detroit Chapter Student Technical paper competition. The papers will be judged in January 2004. Please send indication of your interest to volunteer for a judge position to webmaster@iiedetroit.org or leave a message on the voicemail 313-438-0205.

If you are a student and have recent paper or study you have performed, the Detroit Chapter wants to encourage you to submit that interesting research for competition. You could win \$100. All individuals that submit a paper and compete are encouraged to continue competition at the Regional conference in February.

Papers are due to Detroit Chapter by January 2, 2004. Please email them to webmaster@iiedetroit.org Papers must be submitted electronically for review.

A 15 to 30 minute presentation of your research is required. Actual date, time, and location for the presentations will be held before January 31 and is dependent on the number of papers submitted. The presentation information will be announced on the website (and to all individuals that submitted papers) after January 2.

Individual eligibility for this Detroit Chapter technical paper competition is limited to members of any IIE student chapter in Michigan. Chapters that we know of include: Wayne State University, University of Michigan Dearborn, University of Michigan Ann Arbor, Kettering University, and Western Michigan University. Last years winner was Mia Mossa of Wayne State.

For rules and guidelines, please check the IIE website at www.iienet.org and see the rules for the regional student paper competition. You must follow these rules to compete at the regional conference – so we will follow them too.

Membership Activities

Wayne State University, IIE Student Chapter, organized volunteer work at Gleaner's Food Bank (GFB) on Saturday, October 18th. GFB is located at 2131 Beaufait, Detroit 48207.

Victor Lloyd, our Community Service VP, helps the Chesterfield community and an article was published in the October 2003 issue of "Industrial Engineer" magazine.

Detroit Chapter Board authorizes Vito Wasniewski to form Planning Committee for bringing the 2006 IIE Convention to Detroit. Vito also has the new position of IIE Region VP for our Region 4. Please give your support.

Richard and Sheryl Krasnow celebrate their 50th wedding anniversary. Congratulations!

Membership Activities (Continued)

Photographs of the Harbour Report
presented by Ron Harbour on July 30th



Photographs from the Six Sigma Symposium, October 24th



Keynote speaker -
Dr. Vinod Sahney
with IIE President
Tej Jhamb.



Steven Winokur, M.D., discussing
Six Sigma Navigation in Crossing
the Quality Chasm.



IIE Detroit Chapter Exec VP Dr Bijay Nayak was moder-
ator for the day, and seen here presenting appreciation
awards to Dr. Winokur, Drew Algase and Kush Sha for
their presentations.



Dr. Jayant Trewn presents
6 Sigma concepts while
enlisting the assistance of
volunteers from Purdue
University (who did an out-
standing job as compared
to their football team on
the following day in Ann
Arbor)

An outstanding Lean
IQ test was adminis-
tered by Kim Forshee,
Kim McNelis (both of
American Axle), and
Dr. Kevin Yamada (of
Oakland University).
Detroit Chapter Presi-
dent Tej Jhamb is
standing at the right
with a hat awarded to
Lean Experts by the presenters.



Chapter Activity Report

Dr. Bijay Nayak

2003 has been so far very hectic with numerous activities, initiatives and achievements. The year-to-date 2003 snapshots are :

- Held 8 E-Board Meetings.
- Organized 8 educational activities.
- Published 3 Newsletters full of exciting programs and chapter news.
- Published articles in the IIE Solutions magazine.
- The Membership increased by 12% and the First Year Membership Growth was 46.
- Following Awards were received by Chapter Members :
 - a. Irv Otis Scholarship for 2003 by IIE Detroit Chapter – Gary Altman II
 - b. Distinguished Service Award by ESD, Detroit – Dean Pyers
 - c. Best Technical Paper Award by IIE Detroit Chapter – Dia Mossa, Wayne State University.
 - d. Community Leadership Award by IIE National – Tej Jhamb
- The Board Members actively participated in following Community and Student Outreach Programs :
 - a. CASS House project at Detroit for homeless (Victor Lloyd).
 - b. Recording for the Blinds & Dyslexic at Troy, Michigan (Doug Rogers)
 - c. Clean up for HIV Patients at Detroit (Victor Lloyd)
 - d. March of Dimes in Plymouth, Michigan (Bob Fitzgerald and Dale Hunter)
 - e. Church Career Fair for High School Students and presented IEs at Work video to students.
 - f. Training students for Robotics Club Regional & National Competition at Novi High School (Vinod Chauhan).
- The Board Members attended and presented technical papers in several conferences and classes :
 - a. Khaled Mabrouk and Dr. Jayant Trewn presented technical papers at IIE National Conference, Oregon.
 - b. Dr. Muna Kachhal presented technical paper at Society for Health Systems Conference.
 - c. Khaled Mabrouk presented technical paper at IIE Sponsored Conference, Lafayette, Indiana.
 - d. Dr. Muna Kachhal presented a technical paper at IIA Annual Topical Seminar.
 - e. Khaled Mabrouk presented technical paper at InfoUSA Heartland Free Enterprise Conference.
 - f. Dr. Jayant Trewn attended Communication Leadership Training Class at IIE National Conference, Oregon.

The 2003 YTD Score (estimated) = 83 which gets us "Gold Award".

If you have any news items related to member promotions, activities, awards, publications, or projects, training or workshops conducted, please forward it to **Dr. Bijay Nayak**, Executive VP & Chapter Development at Phone : 248-475-4662, Fax : 248-475-4663, E-mail : bnayak@msn.com to include in the Chapter Activity Report.

Career Development

Help Wanted

Mabrouk Modeling Solutions is looking for simulation engineers. Please send resume to kalmb@attglobal.net

My name is Bruce Goodman technical recruiter for **Stealth Staffing**. I am recruiting to fill numerous positions for **Automotive Manufacturer** who is building a new state of the art automotive assembly plant. We are recruiting an **immediate need** for a senior level automotive industrial engineer with **MODAPTS** training and certification and a recent industrial engineering graduates with co-op experience in the automotive industry.

If you are interested in employment opportunities with one of the **fastest growing automotive companies in the world** or know of someone who might be, please E-mail resume to me in an MS Word format to stealthst@aol.com.

Industrial/Manufacturing Engineering Position

The Senior Consultant position will be responsible for using Industrial/Manufacturing engineering and analysis skills for developing and executing manufacturing industry solutions, layout development, process engineering and classical industrial engineering assignments. Will be required to work hands-on as a team leader or team member, to work with little or no direct supervision, and to make client presentations and work in a multi-cultural setting.

This position requires a BS in Mechanical /Industrial / Manufacturing /Production Engineering and a MS in Industrial/Manufacturing/Production Engineering. Other graduate degrees in engineering/management will also be considered. 5 to 10 years experience in the automotive industry is required, as well as hands on experience with automotive/manufacturing process engineering, simulation and modeling. Supervisory and business development skills will be a plus. Should have demonstrated experience in moving easily between conceptual/analytical/lateral thinking and practical execution. This is a mid-level position with the potential to move to a managerial position in the near future. Please send resume to 877-568-0659 or jobs.iptr@wgjobs.com. EEO. Please reference AIII- IPTR3042.

If any Chapter member would like to post a job opening or situation wanted, please contact: Greg Andrysiak at (248) 442-8607, greg.andrysiak@trw.com

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* These discounted rates are available July 1, 2002 through June 30, 2003

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www.hartlandinsurancegroup.com

ESD Update

By Khalid Mabrouk



IIE Detroit is 1 of only 3 winners for the ESD Affiliate Chapter Gold Award. Official notification will be presented with an award at the Banquet next February.

The Detroit Chapter will nominate Dr. Vinod Sahney for the ESD Gold Award at the February Banquet.

On November 5th, from 8:30am to 11am, there is a private tour of the Ford Rouge complex, still under construction, through ESD available for any affiliate member for \$35. This tour includes:

- continental breakfast
- tour of new Rouge plant that is yet to start running
- nine movie screen presentation on the complex & their recent green project
- a tour of one of the roofs where they have made the roof green (green plants, sedum).

For those who missed this tour, the Detroit Chapter is planning Ford Rouge tour in 2004 when the public tours begin.

IIE/SME Offer Dual Membership & Certifications

The Institute of Industrial Engineers and the Society of Manufacturing Engineers (SME) are offering a joint membership for \$160 per year. Joint members will have access to the benefits of both organizations at a savings of \$50 per year. Current IIE members can join SME immediately by contacting IIE Member and Customer Support at (800) 494-0460, (770) 449-0460, or cs@iienet.org.

IIE and SME have also joined to offer Certified Engineering Manager (CEM) and Certified Enterprise Integrator (CEI) certifications. IIE will provide the training for these certifications, and SME will administer the testing.

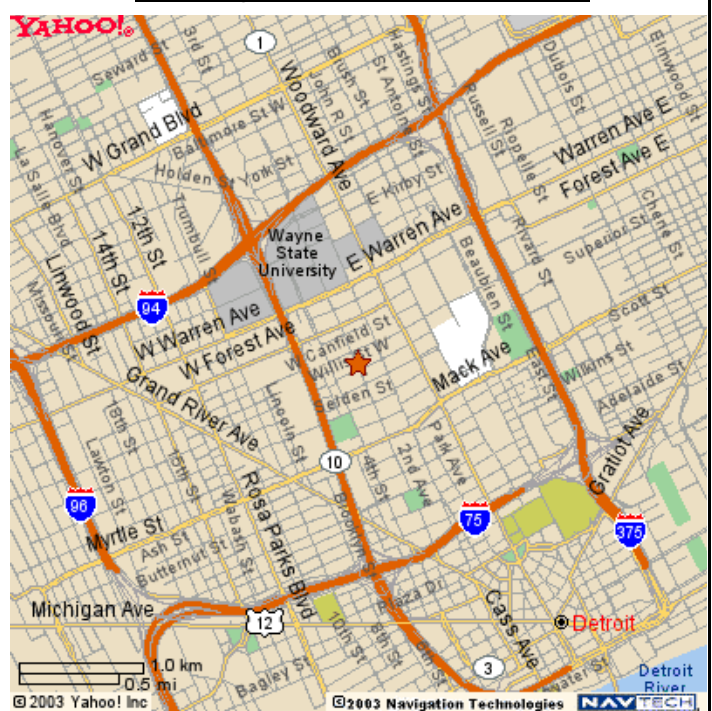


Visteon Rawsonville Plant Tour and Presentation Friday, November 21st



Visitor parking is in the front of the building off Textile Rd. The Visteon Rawsonville assembly plant is located at Textile and McKean Roads, Ypsilanti, MI.

December Holiday Dinner and Inauguration Friday, December 12th



Traffic Jam's address is 511 West Canfield - Detroit - MI
More Info: 313.831.9470

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c/o Ron Brzuch
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Canton, MI 48187

DATED MATERIAL