

SOCIETY of MANUFACTURING ENGINEERS TORONTO CHAPTER 26 MAY 2002



<http://www.sme-toronto-26.org/>

Tour: Robotics for Manufacturing - Where is it Going?



FANUC Robotics Integration and Training Centre Canada, Ltd.
6774 Financial Drive, Mississauga, Ontario L5N 7J6, Phone (905) 812-2300

Wednesday May 1, 2002

Tour 7 - 9 pm

We continue the theme of preparing for future areas of manufacturing.

Note: Limit of 30 people - first to register basis - members, student members and then guests.

The dramatic growth of robotic applications is being driven by decreasing total cost of robots and the value of speed and flexibility.

Fanuc is the world leader in robots. If you want to learn about robots these are the guys to learn it from.

The tour given by dedicated application engineers will consist of:

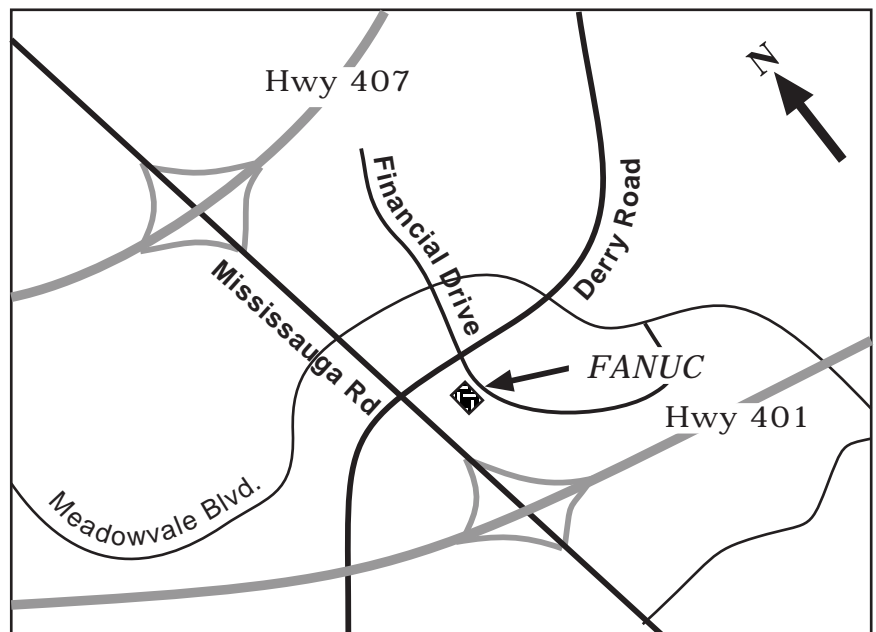
One hour presentation

- When to use a robot - survey of applications
- Trends and directions - the future, networking, computers, sensors, and extensions
- Justification - how do I present my ideas to my boss and to accounting

45 minute tour of applications of robots

- Welding
- Palletizing
- Material handling
- Packaging
- Machine tending

15 minute questions and answers



Register today for this event with Loris Giuricich 416-448-2225, Lgiurici@celestica.com or Ken Kogej 416-402-3146, Ken-dante.msn@attcanada.net

\$10 for members (CMMA & CTMA included), \$20 for non-members and \$5 for students

Our theme for the year: FUTURE GROWTH AREAS IN MANUFACTURING



Joe's Corner: SME Toronto Chapter 26 Highlights in Design Engineering Magazine

“Joe's Corner: SME Toronto Chapter 26 Highlights” will have its launch in the upcoming issue of Design Engineering Magazine. Joe Benedetto will be supplying a regular column for **Joe's Corner**. The articles will cover an SME-related topic each month focussing on issues of interest to manufacturing engineers as well as listing upcoming chapter events.

There will be a link from the Toronto Chapter 26 web site at <http://www.sme-toronto-26.org> to the Design Engineering web site at <http://www.design-engineering.com/> and vice-versa to facilitate communication between the two organizations.

Bulletin Copy Deadlines

NOTE: Send material to Jenny Ono Suttaby at jono@jentekcompany.com by the following dates for inclusion in the upcoming Chapter Bulletin:
June Issue: May 7

Your Company Flyer Bulletin Enclosure Opportunity

Chapter 26 is offering companies the opportunity to enclose their company flyer in our monthly Bulletin mailing. The piece to be included must meet the following criteria:

- 500 folded flyers ready for stuffing into a #10 envelope supplied by 1 week after copy deadline.
- Is of interest to our membership - is manufacturing oriented (we don't want life insurance or travel brochures)
- Weighs less than 3 sheets of 8.5 x 11 in 20 lb bond paper. Larger items could be negotiated.

We reserve the right to reject pieces we do not feel to be consistent with our professional goals and objectives. Our mailing list is currently over 400 manufacturing professionals. The current price is \$300 per issue. We reserve the right to change any of the above items without prior notice. For more information please get in touch with Ken Kogej, 416-274-2540 or Ken-dante.msn@attcanada.net

THIS SEASON: Topics & Schedule 2002

Wednesday, May 1. “Robotics for Manufacturing - Where is it Going?” Evening tour and presentation by Fanuc Robotics

Wednesday, June 5. Our Annual RP Overview and Update Panel, 6:30 pm Centennial College, Progress Campus (location to be confirmed).

PASS IT ON...

WaterTalk - StormTalk - SewerTalk

...three new Technical Forums for water resource professionals.

These forums will keep you up-to-date with the latest tips and tricks in hydraulic and hydrologic modeling. Post your engineering questions and share your unique modeling experiences with a global audience of thousands of professionals. Learn more and sign up at: <http://www.haestad.com/e/m.asp?d=49&m=020404DGb>

Executive Meetings

EXECUTIVE MEETINGS 2002 6:30 pm start:

Thursday, April 11 EXECUTIVE PLANNING MEETING, 28 Kildeer, 6:30 pm

Thursday, April 25, 60 Burnhamthorpe Park Boulevard, 6:30 pm

Thursday, May 30

Thursday, June 13

For additional information on the next meeting phone 416-274-2540 or email: Ken-dante.msn@attcanada.net or gheintzman@sympatico.ca

Note: The Joseph R. Benedetto Scholarship

The Application Form for the Joseph R. Benedetto Scholarship is now available on the chapter web site at www.sme-toronto-26.org.

We are seeking:

VOLUNTEERS to help run the Chapter. Please get in touch with Joe Benedetto, if you can spare a little time, 416-267-2102 or jrbene@attglobal.net

PROGRAM/TALK/TOUR SUGGESTIONS. We are in the planning stages for next year's programs and tours and want to offer talks and tours of interest to our members. If you have a suggestion please get in touch with Ken Kogej, 416-274-2540 or Ken-dante.msn@attcanada.net

EXECUTIVE LIST

Office	Name	Company	Phone	Email
Chair	Ken Kogej	Fuchs Lubricants Canada Ltd.	416-274-2540	Ken-dante.msn@attcanada.net
Vice-Chair	Amallesh Chakraborty	MechatroSoft Inc.	416-894-5168	CAmallesh@aol.com
2nd Vice-Chair	John Wagner	Hamond Industries	905-761-9094	dovmargiewagner@home.com
Secretary	Paul Ellis	Tristar Metal Stampings Inc.	905-851-7724	paulellis7@hotmail.com
Treasurer	John Camarda	Ryerson University	416-445-5784	camarda@uReach.com
Past Chair	George C. Heintzman	Systems Consultant	416-467-8298	gheintzman@sympatico.ca
Past Chair/Education	Peter J. Morgan	MURO North America Inc.	905-451-7667 X233	pmorgan@muro.com
Executive Advisor	Joe Benedetto	JRB Enterprises	416-267-2102	jrbene@attglobal.net
Programs	Bruce Keeling		416-239-2811	bandi@sympatico.ca
Program Advisor	Robert Hope	R. B. Hope Industries Inc.	416-465-7603	bob@rbhope.ca
Tours	Loris Giuricich	Celestica Inc.	416-448-2225	Lgiurici@celestica.com
RP Liaison	Vesna Cota	Tyco Electronics Canada Ltd.	905-474-5541	vcota@tycoelectronics.com
Bulletin & Web Editor	Jenny Ono Suttaby	Jentek Company	416-761-1810	jono@jentekcompany.com
George Brown Stu Advisor	Franz Aschwanden	Professor	905-775-3759	sfasch@netcom.ca
U of Toronto Stu Advisor	Beno Benhabib	Professor	416-978-3447	beno@mie.utoronto.ca
Chair U of T Stu Ch	Andrew Low Ah Kee	U of T Student		andrew.lowahkee@utoronto.ca
Ryerson U Stu Advisor	Farrokh Sharifi	Professor	416-979-5265	fsharifi@acs.ryerson.ca
Chair Ryerson Stu Ch 165	Jason Samara	Ryerson Student		msamara@iprimus.ca

Our continuing thanks to Professor Mark Fox, U of T, for hosting the Chapter's web site on his server at <http://www.novator.com>

Review: Integrated Product Development at Messier Dowty

By Sutha Kugathasan, presented to the Chapter on April 3, 2002. Due to unforeseen circumstances, Mr. Stephen Armstrong was unable to speak as scheduled. Our thanks go to Mr. Kugathasan for stepping in at the last minute.

A long time ago in a book on Dr. Demming's contribution to quality in Japan I read "If you have a problem make it a process and improve the process until you no longer have a problem."

What Sutha and his team have done for Messier Dowty is to define all the work products and processes required to take a customer's wish and turn it into a certified landing gear system flying on an aircraft. This is about 3200 work products or deliverables. The definition of these work products and the processes needed to produce them has given Messier Dowty a common language across the whole company and across National boundaries. Now they have a common language and a defined process they can improve it.

The initial reaction of Messier Dowty people was "That is too much work." However when they looked at it they all agreed that that was exactly what they were doing but they were inventing it each time. This formal approach lets them get to the work faster rather than reinvent the process each time.

The goals for the project are: Time (reduced and predictable), Cost (reduced and predictable), Quality (improved and predictable), and a defined process which can be measured and improved.

Based on the questions and my conversations with others, Sutha and his team feel they are 90% complete

an the people in the room feel they are only about 10% down the road. I would like to see where they are in a year.

Some of the work which remains to be done: Now that product teams are so important a new job must be defined for functional managers which will ensure the long term technical excellence and product leadership; Meeting skills must be improved - name acceptable behavior - set goals for meeting performance; Communication skills must be improved - listening, presenting, writing, personality modeling; Cross cultural awareness so that different approaches and assumptions are recognized and not mislabeled as a failed process - how decisions are made - how you know when a decision is made; The approach to problem solving [theoretical (European) vs experimental (North American)]; A balance between flexibility and rigidity - too much rigidity will result in rejection and the stifling of progress - too little will result in the whole thing being diluted into nothingness; How to include customers, suppliers, contractors and partners in the process; What to measure so the process improves - measurements that are motivating rather than de-motivating

This was a very important presentation in terms of learning how we will all be working in the future. We wish them luck and look forward to hearing of their progress.

George Heintzman
gheintzman@sympatico.ca
Past Chair

Many Thanks to our BULLETIN PUBLICATION and WEB SITE SPONSORS:



A & M HEAT TREATING LTD.



Novator & Co.

Treco

High Precision Machining

Information and links at: <http://www.sme-toronto-26.org/>

The Cost of NOT Addressing Global Warming

Last month I complained about those who were whining about the jobs that would be lost as a result of the Kyoto agreement rather than the manufacturing opportunities which would arise. I immediately received a question from our much beloved editor, Jenny, asking "What about the cost of **not** addressing global warming."

At the last Commonwealth Prime ministers conference (Which if you don't remember was dominated by the War on Terrorism) one Prime minister from an atoll in the Pacific was lamenting the fact that the water in the Pacific had gone up a meter in the last 50 years and if that continued he would have to move all his people, 10,000 of them, to some where else. The article in the Globe and Mail was lamenting how the world perspective was being bent out of shape by recent events. Of course when this happens we will also have to relocate a million people in Florida and a 100 million in Bangladesh.

Canada is losing 37,000 square kilometers of pack ice every year. The polar bears in Hudson Bay are being driven further north. Hundreds of thousands of Harp seal pups perished this year in the Saint Lawrence because of lack of ice on which to calve.

A chart on the Jan 2002 map of Antarctica produced by the

National Geographic correlates global temperature with levels of CO₂ and CH₄ (methane) over the last 400,000 years. It shows CO₂ almost twice the average and CH₄ 3 times the average and therefore we should expect higher temperatures than at any time in the last .5 million years. A similar chart for CO₂ appeared in Limits of Growth first published in 1958 and redone by MIT professors in 1972. They forecasted absolutely disastrous effects for mankind. So far they are, unfortunately, bang on.

The long term forecast for Alberta is interesting. As the polar high pressure cell shrinks the American desert will move north into Alberta. Plants will not be able to migrate as fast as the temperature. Plants will die. Then the animals will die. The job loss will be much worse than the current employment in energy.

Yes Jenny, it is time to take Kyoto seriously. The cost of not doing so is enormous. But let's focus on the manufacturing jobs it can create if we do it right.

*George Heintzman
gheintzman@sympatico.ca
Past Chair*

*Thanks, George!. I'm glad to see that Mr Schad has also spoken out in favour of the Kyoto Agreement.
J.O.S.,Ed.*

NB: Please -update Your Information

Please check that your information in the SME headquarters database is correct!

Phone (toll free): 1-800-733-4763. Website: <http://www.sme.org/>

You can renew your membership on line by clicking on "Renew Membership" in the Member Services section.