

SOCIETY of MANUFACTURING ENGINEERS

TORONTO CHAPTER 26

NOVEMBER 2002



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



Talk: Six Sigma

Speaker: Andrew Milivojevic, a 'Six Sigma Black Belt' and Quality Engineering Instructor.

NOTE NEW ADDRESS !!

Thursday November 28, 2002

Social (Cash Bar) at 5:45, Dinner 6:15 pm, Certificate Presentations, Talk at 7:15 pm

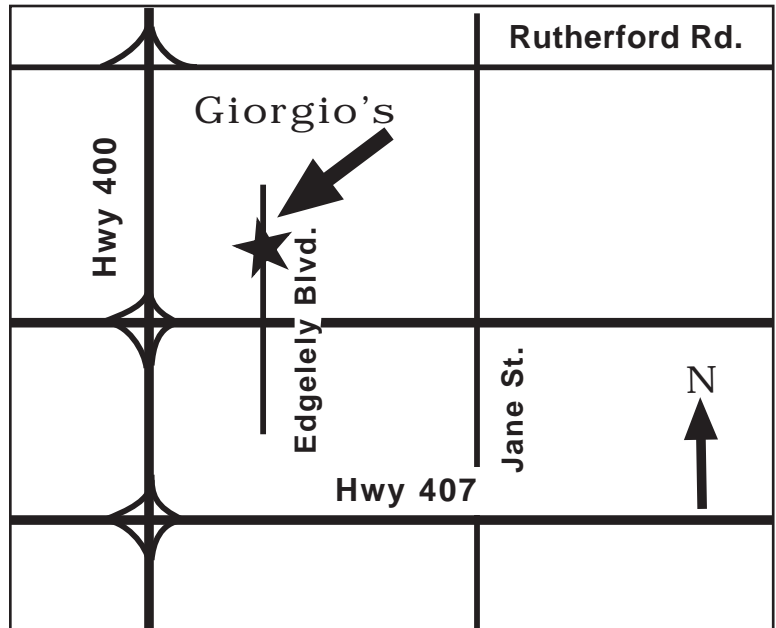
Giorgio D Ristorante, 344 Edgeley Boulevard, Concord, Ontario, 905-669-2191

www.giorgiod.com/giorgio/main.html

Six Sigma is a 'must' for your job or your business! Learn about it at this talk.

Six Sigma is a business improvement strategy that seeks to identify, reduce, and eliminate variation in a process. The key to business process improvement is the acquisition of knowledge. Management has a responsibility to produce an environment that fosters knowledge creation and encourage and embrace a learning organization. Through the effective deployment of Six Sigma, the acquisition of knowledge by people is possible. Effective utilization of people can improve process performance, affect product and service quality, positively influence the bottom-line, increase customer satisfaction, and assure long-term business success. In this contribution, the concepts of Six Sigma and its application to the overall business are discussed.

Andrew Milivojevic is an authority in the application of statistical methods and Six Sigma to improve business performance and was recommended by the Automotive Manufacturing society as one of the top authorities in this field. He has over 15 years of experience with Magna International, The Woodbridge Group, Juran Institute, and Progressive Moulded Products where he was Vice President of Quality. Andrew has provided leadership, direction, vision, and fostered an environment of continuous improvement for a number of organizations. He has applied statistical and Six Sigma methods to Reasearch, Development, Operations, and Service. He is the Founder and Principal of The Knowledge Management Group, a service organization assisting management in the acquisition of knowledge to achieve business process improvement.



Andrew has an Engineering Degree from Ryerson Polytechnic University and a Masters Degree in Mathematical Statistics from the Center for Quality and Applied Statistics, College of Engineering, Rochester institute of Technology, USA.

Andrew Milivojevic, andrewm@ca.inter.net

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

\$30 for members (CMMA & CTMA included), \$40 for non-members, student members \$20.

Mark Your Calendars: THIS SEASON: Topics & Schedule 2002-03

Thursday November 28: **Six Sigma**. Speaker: Andrew Milivojevic (see p 3). Giorgio D Ristorante, 5:45 pm - social, dinner, presentations, 7:15 pm - talk.

Thursday January 23: TBD

Thursday February 20:7 pm: "Waste Management from a Manufacturing Viewpoint" at Husky Injection Molding (Bolton). Tour and talk on site.

Thursday March 20: TBD

Thursday April 10: TBD

Wednesday May 14: TBD

Wednesday June 4: TBD

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:

December/January Issue: by Nov 15

February Issue: by Jan 16

March Issue: by Feb 14

April Issue: by Mar 7

May Issue: by April 11

June Issue: by May 2

Note: The Joseph R. Benedetto Scholarship

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

The SME Chapter 26 Bulletin

The **SME Chapter 26 Bulletin** is published eight or nine times a season by the Toronto Chapter of the Society of Manufacturing Engineers (SME). The SME provides support for people and industries in manufacturing by providing opportunities for networking, professional development and technical information.

Headquarters of this 70 year old professional society are in Dearborn, Michigan. For more information or to join, phone or email the Chapter Chair, Ken Kogej, at 416-274-2540 or Ken-dante.msn@attcanada.net or Headquarters at 1-800-733-4763. Talks and tours put on by the Chapter are listed on the Chapter web site at www.sme-toronto-26.org Headquarters web site is at www.sme.org

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

Executive Meetings

EXECUTIVE MEETINGS 2002 6:30 pm start:

Tuesday, November 12, 115 Brookside Ave

December TBD

Tuesday, January 7

Tuesday, February 11

Tuesday, March 11

Tuesday, April 1

Tuesday, May 6

June TBD

For additional information on the next meeting phone 416-274-2540 or email:

Ken-dante.msn@attcanada.net or
gheintzman@sympatico.ca

Telephone Committee

We are looking for volunteers to form a telephone committee. This would involve spending maybe half an hour a week doing a little member relations building and "taking the pulse" of our membership by telephone. The goal is to poll our members as to the kind of program that would be useful to them professionally and to promote Chapter activities to our members. Any takers? Please phone Ken Kogej, 416-274-2540 or email 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
Chair-Elect	Amalsh Chakraborty	MechatroSoft Inc.	416-894-5168	camalsh@sympatico.ca
2nd Vice-Chair	John Wagner	Hamond Industries	905-761-9094	dovmargiewagner@home.com
Secretary	Paul Ellis	Tristar Metal Stampings Inc.	905-853-5583	paulellis7@hotmail.com
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Treasurer	John Camarda	Ryerson University	416-445-5784	camarda@uReach.com
Past Chair/Education	George C. Heintzman	Systems Consultant	416-467-8298	gheintzman@sympatico.ca
Education	Wen Chen		416-922-3807	w.chen@utoronto.ca
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Programs	Amalsh Chakraborty	MechatroSoft Inc.	416-894-5168	camalsh@sympatico.ca
Programs	Bruce Keeling		416-239-2811	bandi@sympatico.ca
Programs	Farhad Shafiei	Commercial Roll Fmd Prod	905-790-5665	fshafiei@commercialroll.com
Executive Advisor	Joe Benedetto	JRB Enterprises	416-267-2102	jrben@attglobal.net
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
U of Toronto Stu Advisor	Beno Benhabib	Professor	416-978-3447	beno@mie.utoronto.ca
Chair U of T Stu Ch	Sharlah Morrison	U of T Student		smorrison11@hotmail.com
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>

With Sympathy

This is a note regarding the Cancer Society donation. Recently we received the sad news that Joe Benedetto's daughter died of Cancer. It was decided that a donation to the Cancer Society in memory of Joe's daughter would be appropriate. We made an announcement at the last monthly meeting and received a total of \$400 in donations. The donations have been delivered to the Cancer Society and notes will be sent out to Joe and his family on behalf of the donors.

If anyone has not had an opportunity to participate and would like to do so, you can donate to the Cancer Society on your own and I am sure Joe would appreciate it.

Ken Kogej, Chair

Ken-dante.msm@attcanada.net

Frank Stronach to Speak at the Toronto Board of Trade's 115th Annual Dinner

This black tie event sponsored by Ray & Berndtson/Lovas Stanley will take place on Monday, January 20, 2003, at the Westin Harbour Castle Hotel with a reception commencing at 6:00 p.m. in the Frontenac Ballroom followed by dinner at 7:00 p.m. in the Metropolitan Grand Ballroom.

Mr. Frank Stronach, is Chairman of the Board, Magna International Inc., and well known in the manufacturing community. Last year's speaker was Laurent Beaudoin, Chairman, Bombardier, and the year before was Gaelan Weston.

For more information see the Toronto Board of Trade's Web Site at www.bot.com and click on Events, or phone the Events Line at 416-862-4507 or email dlewis@bot.com. Discount prices are available until December 2, 2002.

Talking of Energy Consumption...

We're all wondering how, in our businesses and homes, we will be able to cut our electricity use by 20% as suggested recently in the news. I don't know if you saw the article in the Globe and Mail on October 22, but University of Calgary professor Dave Irvine-Halliday has come up with what sounds like an incredible invention.

The idea was triggered by a visit to Nepal where he saw the dim gloom that school children had to work in. Over the

next five years he developed a system where an entire village could be lit with less energy than it takes to power a 100-watt light bulb. The system can be powered by solar panels and rechargeable batteries for a one-time cost of about \$60. Selfishly, I think of our own need to reduce consumption of energy.

You can find out more about it at www.lightuptheworld.org/
Jenny Ono Suttaby, Past Chair
jono@jentekcompany.com

Many Thanks to our BULLETIN PUBLICATION and WEB SITE SPONSORS:



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

Machine Vision Inspection Systems, tour R. G. Shelley Limited

Thursday October 24 2002

Very professional from the prepared name badges, the excellent food and drink, to the enthusiasm, clarity, and knowledge of the presenters. Thank you R. G. Shelley. We had a great turn out for this meeting, and I'm sure everyone appreciated the welcome and the information.

What has always been true

1. *Illumination is key.* If you can not see it you can not inspect it with a vision system. If a shaft of sunlight hits the working area at a particular time of day it will take the system outside its parameters. If there is a hand or glove in the field of view it will not work.

2. *Optics* - If the object is not clear then the results will not be consistent.

3. *Cleanliness and consistency of the object being inspected.* If a gob of grease obscures or changes the shape of the object then the system will not recognize it.

What is new

1. *Speed* - The rate at which features can be detected and parts inspected is amazing. More complex tests can be performed in reasonable time.

2. *Ease of programming* - The "Tools" (Macros or subroutines) available and their capability is now amazing. For example there is a "Find the edge of the part" tool. The tool is selected graphically and the area to be searched for the edge is chosen with the cursor on the screen. The inspection is then

carried out with more "Tools" relative to this edge.

3. *Connectivity and integration* - These inspection cameras, complete with their controllers, are the size of a couple of decks of cards. They come equipped with connectors for digital inputs (such as triggers for inspection), digital output (to trigger acceptance or rejection mechanisms), and ethernet connection for integration into factory systems.

What is not changing quickly.

I was surprised to learn that most vision inspection applications use 640 by 480 pixel cameras. They are cheap and rugged and all that is required for over 90% of the jobs.

What is driving the fast pace of adoption of this technology?

The total cost of the devices, programming and integration is plummeting. The demand for higher quality and the records to prove it is increasing dramatically and in many cases is a condition of doing business. This makes the business case very simple.

Applications

Too many to list them adequately here. Examples are: Is the label on? Is it in the right place? Is it oriented properly? Is the glue in the right place in the right quantity? Are the bottles filled properly? Are all components installed? Are all the needles in a needle bearing? Find defects in glass, extrusions, molded parts? Etc....

George Heintzman, Past Chair
gheintzman@sympatico.ca

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.