

# SOCIETY of MANUFACTURING ENGINEERS

## TORONTO CHAPTER 26

### DECEMBER 2003 - JANUARY 2004



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



## Tour: Mold-Masters® Limited

Thursday January 22, 2004

Arrive between 6 - 6:30 pm. Tour starts promptly at 6:30 pm

HAPPY NEW YEAR  
TO ALL!!

233 Armstrong Avenue  
Georgetown, Ontario  
Phone: 905-877-0185

### About Mold-Masters® Limited:

Mold-Masters® Limited is the global leader in hot runner technology. The company has invested heavily in research and development with more than 1,600 granted and pending international patents. Mold-Masters designs and manufactures the industry's most advanced hot runner systems, temperature controllers and complete hot half solutions. Their support network spans over 40 countries, with facilities in North America, South America, Europe and the Pacific Rim.

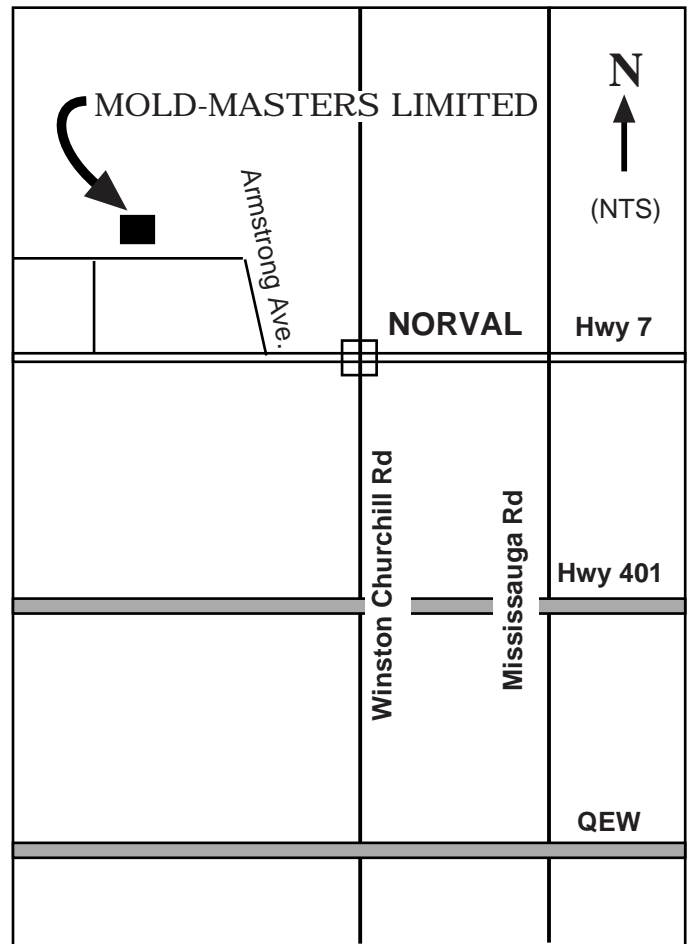
Mold-Masters currently has 6 manufacturing facilities located globally and is presently in construction of a new state of the art facility in Kunshan, China.

Its largest facility, located in Georgetown, Ontario, totals over 170,000 square feet and houses some of the most advanced and precision CNC machining and automation equipment available. The company has also invested heavily in capabilities in advanced metallurgical process including metal injection molding. The research and development center, not only has dedicated production equipment, but also advanced capabilities including FEA, 3D CAD, Mold Flow, and its test bay of injection molding machines.

Visit Mold-Masters® online at [www.moldmasters.com](http://www.moldmasters.com)

### Directions:

From Toronto take Highway 401 west. Exit at Mississauga Road. Go north on Mississauga Road to Highway 7. Turn left and drive west on Hwy 7. Follow Hwy 7 past Norval and into Georgetown. After the first set of lights, turn right at Armstrong Avenue. You will see Mold-Masters on the right side at # 233 Armstrong Avenue.



Please sign up with Loris Giuricich by January 19, 2004. 416-448-2225 or e-mail to [Lgiurici@celestica.com](mailto:Lgiurici@celestica.com) \$10 for members (CMTDMF -Canadian Machine Tool, Die & Mold Federation- included), \$20 for non-members, student members \$5.

## Mark Your Calendars: THIS SEASON: Topics & Schedule 2003-04

**Thursday January 22, 2004:** Tour of Mold-Masters

**Thursday February 19:** Automation Talk. Joint meeting with PMA\*\*

**Thursday March 25, 12:30 pm:** Honda Automotive Tour - . Limited to 30 people, members have priority.

**Thursday April 22:** Dofasco Talk. Joint meeting with PMA\*\*

**Thursday May 20:** TBA.

\* CMTDMF = Canadian Machine Tool, Die & Mould Federation

\*\*PMA = Precision Metal Forming Association

## New Officers for 2004

The following candidates were sworn into office for the year 2004 at the meeting on Thursday November 27, 2003:

Son Nguyen, Chair  
Farhad Shafiei, Chair Elect,  
Rick Marme, Secretary, and  
Wen Chen, Treasurer.

Congratulations to the new Executive!

## Executive Meetings: Mark Your Calendar !!!

**EXECUTIVE MEETINGS 2004 6:30 pm start:**

**LOCATION:** George Brown College, room C302

For additional information on the next meeting phone 416-535-1593, or [snguyen\\_2050@hotmail.com](mailto:snguyen_2050@hotmail.com)

Wednesday January 7  
Wednesday February 4  
Wednesday March 3  
Wednesday April 7  
Wednesday May 5  
Wednesday June 2

## 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, Son Nguyen, at 416-535-1593 [snguyen\\_2050@hotmail.com](mailto:snguyen_2050@hotmail.com) 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](http://www.sme-toronto-26.org) Headquarters web site is at [www.sme.org](http://www.sme.org)

## Your Company Flyer Bulletin Enclosure Special Offer!!

Chapter 26 is offering companies the opportunity to enclose their company flyer in our monthly Bulletin mailing. We have a special offer for the coming year. Enclosure in

one issue: .....\$300

four issues: .....\$1000

eight issues.....\$1800

We mail Bulletins 8 times a year (Sept., Oct, Nov, Dec/Jan, Feb, Mar, April, May) to nearly 500 manufacturing professionals in the GTA. For more information please get in touch with Ken Kogej, 416-274-2540 or [Kendante.msn@attcanada.net](mailto:Kendante.msn@attcanada.net)

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.
- We reserve the right to change any of the above items without prior notice.

## Bulletin Copy Deadlines

**NOTE: Send material to Jenny Ono Suttaby at [jono@jentekcompany.com](mailto:jono@jentekcompany.com) by the following dates for inclusion in the upcoming Chapter Bulletin:**

February Issue: by January 15, 2004

March Issue: by February 15

April Issue: by March 15

## 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](http://www.sme-toronto-26.org).

## NB: Please -update Your Information

Please check that your information in the SME headquarters database is correct or renew your membership online!

Phone (toll free): 1-800-733-4763.

Website: <http://www.sme.org/>

## Non-members can subscribe:

Price: \$2.50 Cdn. (included in the price of membership)  
Annual subscription to this Bulletin \$20 (8 issues)  
SME Membership \$85 USD available at: [www.sme.org](http://www.sme.org) or 313-271-1500

## EXECUTIVE LIST

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

## New SME Reciprocal Partnerships

In continuing to be the best resource for manufacturing information, SME has formed several partnerships with key organizations and companies. These alliances serve as a forum for exchanging information, jointly sponsoring events, developing educational programs and offering valuable resources to manufacturers around the world. The partnership with the Association for Manufacturing Excellence (AME) was announced at the Lean Manufacturing Conference held in Toronto in October this year. For more information about AME take a look at their web site, [www.ame.org](http://www.ame.org)

An SME partnership with the Institute of Industrial Engineers

(IIE) has recently been announced. The two organizations have completed reciprocal membership agreements that will allow members of each organization to join the other at a discounted rate. Not currently a member of either? You can join both for a combined discounted rate. To join either association call the SME Resource Center at (800) 733-4763 (US only) or (313) 271-1500, extension 4500. For more information about the IIE, visit their web site at [www.iienet.org](http://www.iienet.org).

Application forms for joint memberships in both SME/AME or SME/IIE can be found on the SME web site at [www.sme.org](http://www.sme.org).

## ISCAR Tools Talk: Cost Effective Fast Metal Removal

Andy Lux, ISCAR, covered many important issues. Tools cost only about 3% of the cost of manufacturing a part but can affect the productivity by more than 50% (The NC machine tool distributor sitting beside me said 3 or four times [300% to 400%] but he may have had experience with really bad tooling)

For me the most important lesson is the need for management to balance the whole process. The chart Andy spent the most time on showed the components of total cost where tooling was only 3% but had a big impact on overall productivity. I have seen machine tool suppliers use a similar chart showing that a \$100,000 NC mill which was charged out at \$100/hr would last for 10 years at 2000 hours a year or \$5 an hour or 5% of the cost of parts. Therefore the choice of the machine tool was important. Computer suppliers want to sell dual processor work stations with huge storage and excellent graphics for \$15,000. They point out that this station can keep several machine tools busy and increase the productivity <http://www.sme-toronto-26.org/>

of the operator. If it lasts 5 years at 2000 hours a year this is only \$1.50 an hour or way less than 1% of the cost of a part. Because of the potential to improve productivity this is a very small but very important decision. CAM software vendors offer packages for \$25,000 plus \$1000/year maintenance or over 5 years at 2000 hours per year is only \$3 per hour spread over several machines and is less than 1% of the cost of a part. To listen to the vendors all the capital decisions are small potatoes and critical to productivity. Training is critical to utilizing these resources. Logistics is critical. Sales getting the right jobs is critical. Purchasing is critical. Yes, Andy, tooling is critical. But it is management that we need to educate so they can get it all in balance and make it work. SME's role is education and we thank you for your excellent contribution.

*George Heintzman,  
Past Chair, [gheintzman@sympatico.ca](mailto:gheintzman@sympatico.ca)*

# Many Thanks to our BULLETIN PUBLICATION and WEB SITE SPONSORS:



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

## The End of the Oil Age

The end of the Oil Age

This was the front page headline on the cover of the October 25th Economist. Usually when it make the front page of a popular magazine it is old news. Maybe that is still true since you read similar thoughts in this publication a year ago.

The foundation for this headline is on page 73 in an article titled "Buried Losses". It shows how much energy from the sun it takes to make petroleum and coal It points out that photosynthesis only uses about 7% of the energy of the sun and then only 10% of the captured carbon makes the transition from plant to peat to lignite to coal. Then we burn it at about 30% efficiency. Oil and gas come from plankton and the conversion efficiency for the captured carbon is about .01%

By contrast solar cells have achieved efficiencies of 27%.

To drive home the point the Economist quotes Dr. Duke who calculates that in 1977 the world burnt coal and oil that would take 400 years of sunshine to create. Therefore mankind must switch to using the sunshine directly. This implies an electric economy which is what we have been saying.

*George Heintzman  
gheintzman@sympatico.ca*

## 2004 - Our 65th Anniversary

In 1939 the SME had a membership of 3,500 with 25 chapters. Toronto Chapter 26, the first non-USA chapter, was chartered in June of that year, chaired by Arnold Thompson.

## WANTED: Old SME Mags and Books

WANTED: ANY old SME Magazines etc. & ANY Surplus Technical books for Student Chapters use!!! Please bring ANY old SME Magazines etc. & ANY surplus technical books for our student chapters use, to ANY of the SME Chapter Meetings for the Executive to distribute to the Students.

## SME Niagara Region 4 Conference

Three of our Executives went to the Region 4 Conference held on October 24, 2003, in London, Ontario - and it was enjoyable. The members that attended were Son Nguyen, Chair, Joe Benedetto, Past Chair, Rick Marme, Secretary. It was a really nice black tie dinner in the evening and educational conference during the day. There were approximately 10 chapters represented from Ontario and New York State, with members attending from London, Niagara, Toronto, Hamilton, Rochester, New York, and many more areas.

The meeting was a gala event to honour the chairs and people who have supported the region for many years. Many awards were given out and many people were honoured for their hard work. During the day there were educational seminars given to new chapter officers to update them on meeting management procedures. Topics included Teleconferencing, chapter accounting and holding effective meetings. There was also a very informative talk given by the GM Defense Division about their successful project, "The Stryker Armored Vehicle". This is the same vehicle that is being delivered to Canada's troops in Afganistan in order to protect them adequately. It is a very tough vehicle.

This will be the last Region 4 Conference as SME headquarters are re-organizing the regions across North America to become more streamlined in order to better serve SME members. This should not affect the running of local chapters or headquarters. The regional offices will be replaced with a representative from headquarters, thus continuing the link between headquarters and the local chapters. More information about this can be found at [www.sme.org](http://www.sme.org).

*Written by Rick Marme and Son Nguyen*

Remember, some students cannot afford to purchase some of the technical books...

Regards...

*Joe Benedetto, jrbene@attglobal.net  
SME Toronto Chapter 26 Executive Advisor*