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The effects of climate change

The changing job market
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OACETT has many features that are the envy of other associations. We have over 350 active volunteers who work at the local, regional, provincial and national levels for the betterment of the industry and their fellow members. Employers tell us that the skills that their employees acquire through volunteering are invaluable and are considered to be part of professional development.

Member loyalty has always been a hallmark of OACETT and is evident by the number of 25, 40 and 50 year awards we give out on a regular basis. Our members are what I like to refer to as the “word of mouth marketers” for the association.

I have often given thought to what sets us apart from our peers who are not certified. I believe that the true difference is that we represent a standard in the industry and this standard or certification is our brand. We are also fortunate that OACETT is the only professional association serving engineering and applied science technology professionals.

To quote my good friend and business associate John Gamble of Consulting Engineers of Ontario: “OACETT has a very unique value proposition in that many employers require certification – not because they have to, but because they choose to.”

Your Council has stated that employer and college outreach is a priority for your association. Our college partnerships have never been better and we are working with them to accredit programs, certify faculty and offer courses on-site. They in turn are working with us to provide access to students and providing testimonials on the importance of certification in the workplace and for career enhancement. I am sure you have noticed the many companies we have profiled in *The Ontario Technologist* who have made the decision to become one of our strategic partners. They want the best and brightest employees, who value standards and believe in ongoing professional development and they know that this is what our membership is all about.

We are often asked what the member benefits or value proposition of being an OACETT member are and it is being asked in the context of “what discounts are offered on products and services.” Member benefits and privileges go far beyond discounts. In this edition we have an article on the benefits of OACETT membership and I am hoping that after you read the article, you will see that the benefits you receive as a member are far reaching, and set you apart in the workplace and the community.

I encourage all of you to stand up and be recognized for taking that all important step to distinguish yourself. Never has this been more important than now with our turbulent economy and employers looking to hire the best and the brightest. I welcome your comments at president@oacett.org.

David C.M. Tsang, A.Sc.T.
President

---

**OACETT members stand out from the pack**

![David C.M. Tsang, A.Sc.T., is Supervisor of Technical Services with the City of Welland’s engineering department.](image)
50-year member reflects

The following letter was sent to OACETT President David Tsang.

I applied for accreditation on the advice of A.P.E.O. Field Representative Blake Goodings. I was working in engineering standards, in the engineering laboratory at Canadian General Electric – Peterborough Works, in 1958.

Two years later, I attended O.C.E. at the U of T and became a high school technical teacher. Ten years later, I went back to O.C.E., received my elementary school teaching qualifications and spent the next four years teaching Grade 7 and 8 Industrial Arts. Then, it was back to high school teaching.

I spent one year in the Ministry of Education, Toronto, as an advisor for courses in technology, taken by correspondence. After retirement, I became an elected Public School Trustee.

Volunteer work of a technical nature in Municipal Government Affairs – Public Works, Water Plant, Waste Management, Committee of Review and Leisure Services has been very rewarding.

My retirement home includes areas set up for welding, blacksmithing, wood-millwork, machining, design, painting, fabrication and repair. In this building I housed a collection of 13 antique farm tractors, until they were sold in 2007.

I wish to thank OACETT for the honour of being a C.E.T. for 50 years. The C.E.T. emblem on hard hats, office and classroom walls and after my name on staff lists has opened doors to literally hundreds of great opportunities, throughout the past ‘Half Century.’

It has been a great ride.

Sincerely,

S. Laverne (Verne) McKee, C.E.T.

Tell your story

The Ontario Technologist welcomes contributions to the association magazine from members, colleges and other experts. If you would like to contribute an article or have an idea for a story, please contact the editor, Melissa Thurlow, at 416-621-9621, ext. 228, or mthurlow@oacett.org.
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Celebrating 25, 40 and 50 years of membership!

This listing represents those who have reached their milestone between August 23, 2008 and October 24, 2008.

25-year members
Nicolas Alexiou, C.E.T.
Yancy Ambing, C.E.T.
Brant Armstrong, C.E.T.
Don Baergen, C.E.T.
Robert Bishop, C.E.T.
From Brandt
Stephen Campbell, C.E.T.
Filippo Capuano, C.E.T.
Cherise Charron
Edward Clarke, C.E.T.
John Crane, C.E.T.
Terrence Dragomatz, C.E.T.
Gregory Ellis
David Fletcher, C.E.T.
Valentine Gascoyne, C.E.T.
Walter Grambow, C.E.T.
Larry Herron, C.E.T.
Warren Hinton, C.E.T.
Dragan Karajovic, C.E.T.
Stephen Kaye, C.E.T.
Clement King, C.E.T.
Michael Konopelky, C.Tech.
Ihor Kowal, C.E.T.
Alexander Logan, C.E.T.
Mihael Luzar, C.E.T.
Raymond MacMurchy, C.E.T.
Gordon MacPherson, CST
Donald Mann, C.E.T.
Larry Marks, C.E.T.
Michael McCallum, C.E.T.
Larry McGregor
Peter Mitchell, C.E.T.
Ross Monsour, C.E.T.
Dale Morgan, C.E.T.
Paul Muia, C.E.T.
Joe O'Reilly, C.E.T.
Ronald Pansino, C.E.T.
Peter Patterson, C.E.T.
Robert Payne, C.E.T.
Munesh Phulesar, C.E.T.
Renzo Pupulin, C.E.T.
Donald Roy, C.E.T.
Allan Ruish
Robert Spence, C.E.T.
James Steeves, C.E.T.
Robert Stokes
Paul Sulman, C.E.T.
Mario Sylvestre, C.E.T.
Gary Szego, C.E.T.
Carlos Toste
Richard Toth, C.E.T.
William Toth, C.E.T.
Eladio Vilar
John Vinken, C.E.T.
Alexander Wai, C.E.T.
Arthur Weaver, C.E.T.
Clay Williams, C.E.T.
Edmond Young, C.E.T.
Joseph Yung, C.E.T.
David Larkins, C.E.T.
Eric Leat, C.E.T.
Manfred Lupke, C.E.T.
Alastair Maclver, C.E.T.
James Maxwell, CST
Robert Muldoon, C.E.T.
Lorne Munro, C.E.T.
Mirko Obendorfer, C.E.T.
Stanley Parsons, CST
Ronald Paterson, CST
David Paterson, C.E.T.
Sudarsan Ray, C.E.T.
Douglas Reith, C.E.T.
Victor Rorke, C.E.T.
William Ross, CST
Hitoshi Suzuki, C.E.T.
George Tersteege, C.E.T.
Lorne Tolton, CST
William Ubink, C.E.T.
Gerard Van Bunderen, C.E.T.
Edwin Wainwright, C.E.T.
Raymond Walker, C.E.T.
John Whitnell, C.E.T.
Alan Wonntner, C.E.T.

40-year members
Ernest Baldock, C.E.T.
Michael Baranowski, C.E.T.
Gideon Bradbury, C.E.T.
Robert Chambers, C.E.T.
Arthur Cleghorn, C.E.T.
Donald Douglas, CST
Eugene Duggan, CST
J R Dundas, C.E.T.
Donald Durance, C.E.T.
John Dybus, C.E.T.
Edward Fenton, C.E.T.
James Fiddler, CST
William Frawley, CST
Christian Gautier, C.E.T.
Paul Heffernan, C.E.T.
Arthur Herd, C.E.T.
Wayne Hetherington, C.E.T.
Robert Hobbs, C.E.T.
Robert Hobson, C.E.T.
Thomas Hodgins, C.E.T.
Ralf Holzhuetter, C.E.T.
William Johnston, C.E.T.
Roger Kay, C.E.T.
Norman Kerswell, C.E.T.
Sung Kim, C.E.T.
Donald Lancaster, CST

50-year members
Eino Rentola, C.E.T.

Calendar of events

January 8–11, 2009
International Consumer Electronics Show
Las Vegas, Nevada
www.cesweb.org/sitemap.asp

January 15, 2009
Building Science Insight 2008/09
Single and Multi-Family Houses: Improving performance through a systems approach
Co-hosted by the Greater Home Builders’ Association
Ottawa

February 8–11, 2009
SolidWorks World 2009
Swan & Dolphin Hotel, Orlando, Florida
www.solidworks.com/pages/swworld09/index.html

February 25–29, 2009
Ontario Good Roads Association
Fairmont Royal York, Toronto
There’s no place like this – OACETT offers unique member benefits

OACETT members are the cream of the crop in the engineering and applied science technology field. As part of your professional association, you have access to many benefits that help to set you apart from the competition.

The mark of professionalism

When you earn certification from OACETT, you earn the right to use one of the following exclusive, protected titles:

- Certified Engineering Technologist (C.E.T.)
- Applied Science Technologist (A.Sc.T.)
- Certified Technician (C.Tech.)

The use of these titles is a significant benefit as they are recognized by employers, governments, educational institutions and the public in Ontario and across Canada. Certification demonstrates that you meet a high standard of academic excellence, are experienced in your field and have demonstrated an understanding of ethics and your responsibility to your employer and the public.

Identification stamp and technology ring

Certified OACETT members qualify to use an OACETT stamp that acknowledges that they accept responsibility for the integrity of the work performed. All certified members may wear an engineering technology ring, the visible symbol of certification. What better way to promote your status and professional association?

Employers value certification

Whether you’re looking for a job or want to advance with your present employer, you’re one step ahead if you are a member of OACETT. Employers across Canada know the professional designations granted by OACETT are the best qualifications for technical talent.

Have a voice in government issues

OACETT represents the interests of its members to the provincial government to ensure that the skills and training of technicians and technologists are reflected in regulations and legislation. We look at proposed regulatory or legislative changes that affect public safety, in areas where many of our members currently have significant responsibilities and expertise. Strength in numbers opens doors.

Make a difference to your profession

As a certified member, you have the opportunity to participate as a volunteer to help promote the growth and development of the engineering technology profession. All certi-
fied members have the right to vote to elect the OACETT Council.

OACETT offers certified members many opportunities for personal development through leadership roles in the chapters, on Council and committees. While working toward certification, associate members can volunteer for some roles at the chapter level.

Find a job
OACETT members have exclusive access to CTEN, the Canadian Technical Employment Network, at www.cten.ca. This national job bank gives OACETT members access to employers and jobs in Canada. It is popular among employers in the technology sector who are looking for qualified job candidates. When you post your profile on the database, you’ll open doors to employers across the country.

National and international mobility
OACETT credentials are recognized across Canada and internationally, making it easy to transfer to another jurisdiction. OACETT has an agreement with each of the other provincial associations to allow certified technicians and technologists to transfer to another province and retain their certified status.

Canadian technicians and technologists are part of the Sydney Accord, an international agreement that allows members to transport their credentials to many other partner countries.

Make connections
Network with other technology professionals through your local OACETT chapter. Your chapter offers social, professional and educational activities. Members are also able to connect with their fellow members through the online member forum at www.oacett.org.

Know what you’re worth
OACETT conducts the only comprehensive survey of compensation and determining factors for Ontario technicians and technologists. The survey provides invaluable information about your compensation and benefits.

Save money
OACETT members have access to preferred rates on insurance, financial services, cell phones and much more! Visit the member section of the website for details on all of our value-added member benefits.

Calling all volunteers for National Engineering Week 2009

National Engineering Week (NEW) would not be a success without the myriad volunteers who donate their time and expertise to help raise awareness of the importance of engineering and technology in daily life and to help encourage young people to consider careers in engineering and technology. Now in its 18th year, NEW will run from February 28 to March 8, 2009 in Ontario.

An important part of the province’s Engineering Week activities includes drop-in K’NEX construction workshops at science centres or children’s museums in Kitchener, London, Ottawa, Sudbury and Toronto. About 300 engineering and technology volunteers are needed for these workshops.

Volunteers will help children age six and up translate their imaginations into reality by creating wonderful structures using K’NEX, the popular colour-coded building toy.

To volunteer for one of the Drop-in K’NEX Construction Workshops, please visit www.engineeringweek.on.ca and click on Volunteer Opportunities to fill out an online volunteer form.

Toronto-area engineering volunteers are also needed to give career talks to elementary or middle school classes on the weekdays of Engineering Week (March 2 to 6) at various Toronto Public Libraries. Dozens of branches will be involved, some hoping for French presentations. If you are interested in participating, please contact Julia Melnikova by e-mail at jmelnikova@ospe.on.ca or by telephone at 416-223-9961 ext. 225.

Don’t forget that it’s not too late to start organizing an event for Engineering Week 2009. Ideas and information for activities and events can be found on the NEW Ontario website at www.engineeringweek.on.ca (click on Event Organizer Help, then Planning Advice).
CWO Mike Hayes CStJ, CD, C.E.T., is a reservist who has taken a leave of absence from his employer ADGA Group where he is a Manager of Technical Services, to serve in Afghanistan with the Canadian Forces. CWO Hayes will be serving as a Mentor in Combat Service Support to the Afghanistan National Army. This mentorship will help in continuing the development of Afghanistan into the future.

Shane Hogan, C.E.T., has recently been promoted to Manager of Environment for the Regional Municipality of Woodbuffalo in Alberta. Shane moved out west two years ago as foreman for water/wastewater treatment.

Carole Horton, A.Sc.T., has been hired on by the District School Board Ontario North East as their Building Services Manager where she is responsible for the maintenance and operation of approximately 50 schools and buildings, as well as all capital projects for the schools. Previously Horton worked at B.H.Martin Consultants Ltd., an Architectural/Engineering firm (now known as Genivar Timmins), for 19 years where she was responsible for the architectural drafting, design and project management for residential, commercial, institutional and industrial buildings.

Stuart G. McCrady, C.E.T., has started a full-time teaching position with the North American Trade Schools in London as an instructor in Electrical Technology. Previously he taught in the Manufacturing Sciences Division at Fanshawe College.

Paul Rivet PMP, C.Tech, has been promoted to the position of Manager, Project Planning and Control with the Project Delivery Office for Canada Post Corporation (CPC). His prior position with CPC for eight years was Officer, Mechanical Engineering.

Micah Slingerland, rcji, a Graduate Technologist, recently started a job as a Civil Technologist at R.J. Burnside and Associates in Newmarket. Previously Slingerland worked as a Field Services Project Coordinator at Stantec Consulting.

Mario Sylvestre, C.E.T., has taken a new job with J.L. Richard & Associates Ltd. as a Civil/Mechanical Technologist. Previously Sylvestre worked as a general foreman at G&P Welding & Iron Works.

Frank R. van Vliet, C.E.T., recently received his MBA with a specialization in Leadership and Organizational Change from the University of Baltimore, graduating with honours. He is the Director of Marketing Operations for Baltimore Aircoil Company, a wholly owned subsidiary of Amsted Industries, Inc.

We want to hear from other members who have recently changed jobs, received a promotion or an award or completed an educational program. Make sure your fellow OACETT members read about it in The Ontario Technologist. Don’t be shy — send in your submissions to the editor at mthurlow@oacett.org.

Industrial Drive Service Inc. (IDS) sees the value in hiring certified technicians and wants you to know it. IDS, which is headquartered in Hensall, ON, is the most recent addition to OACETT’s Strategic Partnership program.

“I believe that employers need to see that their counterparts see value in hiring certified OACETT members,” said Daryl Keys, C.E.T., President, Industrial Drive Services. “These partnerships can help create more interest among employees to become certified.”

With this partnership IDS knows that their company name will be front and centre with OACETT members and college students in engineering technology fields. As a proud OACETT member, Keys also sees it as an opportunity for IDS to help promote the association.

In addition to being a strategic partner, IDS is involved with OACETT at the chapter level, with Keys acting as London Chapter Chair. The company donates funds to the chapter each year that are used toward student awards in the London area. “We all need to do our part to encourage students to look more closely at entering some discipline of
Keys says that IDS is planning to add two technicians to their workforce and that the new hires must qualify for OACETT certification. Keys also values professional development and encourages his employees to update and improve their skills on a regular basis. IDS currently uses CTEN, OACETT’s job board, to recruit new employees.

75% of Industrial Drive Services’ workforce consists of trade and technical jobs, mainly in the electrical field. IDS electrical technicians do repairs for motor controls and design automation projects.

Industrial Drive Services designs, assembles/manufactures, programs and installs DC and AC variable speed drive-motor control systems which are, in turn, integrated into a wide variety of industrial applications, including metal processing lines, materials handling equipment, automation applications & process control machinery.

If your company is interested in finding out more about how you can benefit from OACETT’s Strategic Partnership program, please contact Sarah Halabi at 416-621-9621, ext. 255 or e-mail shalabi@oacett.org.

Strategic partners shake hands on a deal. David Thomson (left) expresses his appreciation to Daryl Keys, C.E.T., President of IDS, upon their decision to partner with OACETT to ensure the recruitment and retention of technical talent for IDS. Daryl Keys is also Chapter Chair of the successful London Chapter of OACETT.

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For all inquiries please contact:
Sarah Halabi, Phone: 416-621-9621, ext. 255   Email: shalabi@oacett.org
Professional development is the cornerstone of any engineering technician or technologist's career. It is a requirement not only for career advancement but for personal development in accomplishing a sense of satisfaction when acquiring new skills or specialized knowledge.

I most recently had the opportunity to complete the Municipal Leadership Program offered by the Schulich Executive Education Centre (SEEC) at York University. This three module program was developed for managers in a municipal environment with a focus of developing advanced leadership abilities. As the Deputy CBO for the Town of The Blue Mountains, I have focused most of my career developing my technical skills through building code and other building related courses. The Municipal Leadership program took me out of my comfort zone with interactive role playing and group discussions with a focus on team building and interpersonal awareness. This included an assessment of my skills and personal traits through a 360-degree assessment and helped focus on key areas and strategies to improve.

Other areas of study included coaching and mentoring for peak performance, to name a few.

Instructors of each section are experts and leaders in their particular areas, including faculty from The Toronto School of Business, World President's Organization, Seneca College, George Brown College, Ryerson University, York University and Wilfrid Laurier University.

Greg Miller, C.E.T., CBCO, BSSO, is IEET Councillor, Central Region, gmiller@thebluemountains.ca

OACETT Councillor benefits from professional development

By Greg Miller
Recognizing excellence in engineering and applied science technology

The Awards Committee invites individuals and employers to submit nominations for the Association awards listed below. Find the nomination form on the OACETT Website: www.oacett.org under Awards or call OACETT at 416-621-9621, ext. 236. Submit nomination forms to: Awards Committee, 10 Four Seasons Place, Suite 404, Toronto, ON, M9B 6H7 • Fax: (416) 621-8694

NOMINATIONS ARE DUE DECEMBER 31, 2008

Highest Association Recognition

Life Membership (Members)
The award is granted to an individual who has served the Association for many years in an exceptional manner.

Honorary Membership (Non-Members)
The award is granted to an individual who has made a significant contribution to the building of the Association, to the fulfilment of its objectives, or to the development of the profession of engineering/applied science technology.

Career excellence

Outstanding Technical Achievement Award (Members, Non-Members, Groups)
The award is granted to an individual, business firm, crown corporation, government agency, association, research and development agency, educational institution or individual entrepreneur to recognize outstanding technical achievement in engineering/applied science technology. The basis for granting the award could be a single exceptional accomplishment, or a long record of continuing excellence. It must be worthy of the designation “outstanding” in its contribution to technology in Canada.

Women in Engineering Technology Award (Members)
The award is granted to a certified OACETT member to recognize her outstanding technical achievement in engineering/applied science technology. The assessment criteria includes:
- A certified member in good standing
- Specific work accomplishments
- Career path improvements
- Corporate recognition
- Peer recognition
- Outstanding leadership
- Mentoring role
- Level of professional responsibility

George Burwash Langford Memorial Award (Members)
The award is granted to an individual who has distinguished himself/herself in his/her career, and thereby brought recognition and credit to the profession of engineering/applied science technology. It recognizes excellence in professional life, be it purely technical or in non-technical careers such as management, teaching, administration or other related work. It is not for work on Association-related bodies, boards or committees.

Outstanding Educator Award (Members, Non-Members)
The award is granted to an individual who has made a significant contribution to the education and training of engineering/applied science technicians and technologists. It recognizes a sustained record of teaching excellence over many years, and not for one specific year or singular accomplishment.

Meritorious service

Distinguished Service Award (Members, Non-Members)
The award is granted to an individual who has distinguished himself/herself in the service of the Association on a voluntary, salaried, or elected basis. While the award may be granted to recognize a singular accomplishment for the betterment of the Association, it is generally awarded to recognize sustained exceptional service over a period of time.

Blake H. Goodings Memorial Award (Members, Non-Members)
The award is granted to an individual who has either rendered long and distinguished service to the registration activities of the Association, or in the wider community, made a significant and definable contribution that impacts upon and benefits the Association’s registration, accreditation or certification process.

Outstanding Community Service Award (Members)
The award is granted to an individual to recognize outstanding voluntary service within the wider community. While the service performed does not necessarily have to be of a technology-related nature, his/her professional status/occupation as a technician or technologist is still publicly recognized, thereby bringing added admiration and respect to the profession. Recognition of past service or outstanding accomplishments by an organization, or the wider community in general, would be a major factor in assessing the nominee’s contribution. Length of volunteer service in itself would not qualify for the award.

Editorial excellence

Publications Award (Members, Non-Members)
The award is granted to an individual or group to recognize his/her/their authorship of an outstanding feature-length article, paper or work that was published during the relevant year by the Association itself or by another public communications medium. The work could have been completed singularly or in concert with others.

Thomas William Hopson Memorial Award (Members, Non-Members, Groups)
The award is granted to an individual or group to recognize work of a technological nature and which is directed towards the service and betterment of humanity. It must be worthy of the accolade “for distinguished service to mankind through the application of engineering technology”. The work being recognized could be completed on a paid or voluntary basis, as well as singularly or in concert with others. Recognition of the work in the wider community would be a major factor in assessing the nominee’s contribution. It excludes service to the Association or for general technical work or non-technical community service.
In Canada’s northern communities, warming trends have been even more rapid and the consequences are often more acute.
Adapting our built infrastructures

Ask your friends or colleagues about climate change and their thoughts will likely turn to debates about global warming or greenhouse gas (GHG) emissions. However, adapting built infrastructure to the impacts of climate change is also an important consideration. Infrastructure professionals need to understand what it is all about and why it is important. Where climate change ‘mitigation’ refers to the reduction of GHG emissions, ‘impacts’ refers to the consequences on people and property – consequences may be adverse or beneficial. ‘Adaptation’ refers to the responses taken to reduce the risk of adverse consequences.

Although mitigation is a longer-term response to climate change, communities and the infrastructure that they rely upon must be adaptable and resilient. GHG reduction is an issue that must be addressed on a world-wide scale to be effective. On the other hand, adaptation responses must be local and site specific. To illustrate, winter road maintenance practices in southern Ontario’s urban centres are much different from the maintenance of ice roads and bridges in northern regions. Coastal zones and low-lying regions are more vulnerable to sea-level rise. Over the next 20 to 50 years specific regions of Canada will become warmer and experience more precipitation, while in other areas, more frequent drought conditions will be experienced. Research as well as anecdotal evidence indicates that historical climate patterns are no longer good indicators of future climate conditions. This must be considered along with the multitude of conventional considerations of infrastructure designers and operators. These include: economics, environmental stewardship, required service level, planned service life, operations and maintenance, capacity, and changing demographics.

Although Canada has far more adaptive capacity than other parts of the world, there has still been a 50% increase in insurance claims due to weather-related events since the 1970s. In Canada’s northern communities, warming trends have been even more rapid and the consequences are often more acute. Permafrost is melting in some areas, leading to the premature failure of buildings and roads, and shorter operating seasons for the ice roads that many northern communities rely upon. In the past, containment ponds for mine tailings or municipal sewage were built using permafrost as part of their
structural design. In some instances, melting permafrost has led to failure of the containment structure.

Flooding creates structural damage as well as health risks such as mould and sewer backups. Wind damage is also a concern. Studies have shown that when winds gusts increase from 50 knots to 60 knots – a 25% increase, a 650% increase in building damage occurs.

In many parts of Ontario, more frequent freeze/thaw cycles will increase the incidence of damage to homes and buildings from ice damming. Pot holes in roads, rapid ice build-ups and accumulations on walkways and overhead electrical transmission lines result.

Since designers and operators of infrastructure often rely heavily on historical climate data, this is a contributing factor to the overall vulnerability of infrastructure. Also compounding the challenge is the reality that much of Canada’s built infrastructure is expected to have a useful service life of many decades.

There are other factors that contribute to vulnerable infrastructures:

- Lack of site-specific, future-looking climate data;
- Procurement and contracting policies;
- Infrastructure turnover and age;
- Rising affluence in North America and consumer behaviour.

To be useful, climatic data needs to be very site-specific and local in nature. Many of the existing climate projection models do not have sufficient resolution. Accuracy often cannot be pinpointed to areas of less than 200 square kilometers, although better tools are under development.

Procurement and contracting policies that put emphasis only on initial capital costs without consideration of total-lifecycle costs can also lead to added vulnerability. Infrastructure turnover and age present windows of opportunity as well as potential vulnerability. Also, recent studies have shown that rising affluence and consumer behaviour in many parts of North
America are actually increasing risks in some regions. There is high demand for coastal properties and they often command price premiums in the market. Yet as coastal property development increases, it also reduces the natural protective features of coastlines and increases their vulnerability.

In a recent investigation of a tornado in Mitchell, Ontario, a forensic study of a severely damaged home found improper attention to detail for connections, such as missed nails that should have kept the roofing materials fastened to the trusses. This type of sub-standard construction practice is believed to be amongst the contributing factors to increased risk of damage.

While the technology to adapt often already exists, new decision-making tools are also required to guide professional judgment. A national survey that was carried out by the Canadian Standards Association (CSA, www.csa.ca) in May/June 2007 confirms the need for better decision-support tools. Among the CSA survey’s findings, 82% of respondents felt that climate change impacts need to be considered at least to some extent within engineering decision-making. Yet when it came to addressing climate change adaptation issues, less than a third of respondents felt that they had adequate information available.

Presently, up to date and future-looking climate data is not available or is difficult and costly to acquire. Much of the data that Environment Canada collected in the late 1980s and 1990s is not yet in a format that is useful to the engineering community. In response, Environment Canada is working collaboratively with infrastructure data-users to fill in the gaps. This will help provide a more accurate picture of how climate is changing.

Infrastructure planning as well as design approaches may need to change. It is often more cost-effective to build-in resilience during planning and design phases rather than to apply it after the fact to an existing, already-built infrastructure.

Lessons learned from the 1998 ice storm are instructive. The massive ice storm dumped as much as 108 mm of freezing rain on parts of Ontario, Quebec and New Brunswick. It downed telephone and power lines affecting more than five million Canadians. In Quebec alone, more than 1,000 utility poles and electrical transmission towers were toppled, leaving one million Quebeckers without power for several days, and in some cases weeks. Approximately one million residents were without power or heat for up to 23 days.

The storm exposed the many interdependencies and cascading impacts between infrastructures. Downed power and telephone lines blocked major transportation routes. This impeded the relocation of people and slowed down movement of emergency services and equipment. The power failure also led to loss of heating capacity in homes and buildings. Water supply became scarce where pumping stations and treatment plants didn’t have sufficient on-site emergency power back up capacity.

To limit the scope and impact of future blackouts, Hydro-Québec has spent about $1.5 billion repairing and rebuilding its network since the storm. It replanted and reinforced wooden utility poles to prevent the domino-toppling effect and buried some electrical lines.

Environment Canada studies have since shown that the risks of major power outages lasting several days tend to increase when freezing rain amounts exceed the 30 mm threshold. Historical evidence indicates that the potential for long power outages and for a community disaster becomes likely when freezing rain

<table>
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</tbody>
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Built infrastructure is often intended to have a useful life that extends many decades. The chart above shows typical lifecycles for various infrastructure categories.

totals exceed approximately 40 mm. Eastern Ontario is the area most at risk for transmission line failure and communication tower collapses.

The findings from Environment Canada’s studies were among the inputs that the CSA technical committee for the Canadian Electrical Code part 3 considered during its recent update to CSA’s C22.2 standard for overhead transmission systems. A new reliability-based design approach is included in the most recent edition. Hydro-Quebec was amongst the first utilities in Canada to use this new design approach. Neuer standards such as the recently introduced CSA Z1600 on emergency management and business continuity will also assist both private businesses and public organizations.

Other Canadian codes and standards organizations are also looking at what needs to change to enable better adaptation responses to climate change. The Canadian Commission on Buildings and Fire Codes established a working group with a mandate to recommend how climate data should be updated for use in building codes. Members of CSA’s structural design standards technical committees will also review updated climate data as it becomes available. The Transportation Association of Canada has established a climate change task force to assess, prioritize and coordinate work on climate change issues between various technical committees.

Recognizing that foreign and international standards are broadly referenced within Canadian jurisdictions, it is important that those which rely on local, site-specific climate data be reviewed and adapted by Canadian-based experts.
Effective adaptation responses will ensure that the built infrastructure that Canada relies upon will remain useful, resilient and robust.

Developing effective adaptation responses

Often, a single solution will solve problems beyond just adapting to a changing climate. This has the benefit of not only reducing overall vulnerability, but often makes the justification easier or more attractive to stakeholders. For example, properly maintained infrastructure not only guarantees better service level, it can reduce vulnerability to weather extremes versus a poorly maintained infrastructure.

Developing appropriate responses usually consists of one or more measures such as: reducing the sensitivity of an infrastructure to climate change impacts; altering the infrastructure’s exposure to the impact; and, increasing the resilience of the infrastructure itself.

As an illustration, the capacity of water reservoirs could be increased in response to more frequent drought conditions. The situating of buildings in high-risk flood regions could be prohibited or dykes could be built – both examples of altering the exposure. Increasing resilience might entail a building design with flood-tolerant ground and below-grade levels.

Risk management and vulnerability assessment strategies

While new design approaches are helpful, there is also growing demand from planners and municipalities for methods and strategies to assess vulnerabilities and risks associated with complex infrastructure systems. Early versions of these were introduced in the late 1990s, although they are sometimes difficult to implement and have limitations.

Assessment and implementation of adaptation responses also requires a team-based approach from different disciplines. This may include engineering and finance professionals as well as climatologists, climate scientists, architects, hydrologists, planners and other experts. The involvement of front-line staff and trades personnel is also essential on these teams.

Through years of on-the-job experience in the operation of a particular infrastructure or system, they are often in the best position to provide pragmatic and insightful first-hand experience.

An assessment protocol adapted from CSA’s, “Risk Management: Guidelines for Decision-makers” (CAN/CSAQ850-01) was introduced to Ontario municipalities in late 2006. It was jointly funded by the Ontario Ministry of Municipal Affairs and Housing, the Institute for Catastrophic Loss Reduction and Natural Resources Canada. Its qualitative, systematic decision-making process can be used to identify, assess and prioritize vulnerabilities within various management systems, disaster response plans and built infrastructure systems. The process emphasizes continuous communications and good documentation of each important action.

Another recent initiative is aimed at engineered infrastructure. Operating under the auspices of Engineers Canada, the Public Infrastructure Engineering Vulnerability Committee was formed in 2005. Its scope includes municipal buildings, water, wastewater and storm water systems, as well as transportation infrastructures. Financial support came from Natural Resources Canada and was matched with significant in-kind contributions from expert engineering practitioners, interested municipalities, and other private and government organizations. It developed an engineering vulnerability protocol with provision for both qualitative and quantitative assessment methods. In partnership with selected cities and agencies, the protocol was pilot tested with various categories of infrastructure in different regions. While additional testing and refinement is planned, many useful methods and findings arose from this initiative.

Every Canadian community relies on its built infrastructure. It will be impacted either directly or indirectly by climate change. Adaptation is a must and the need for timely and pragmatic responses continues to grow. Effective adaptation responses will ensure that the built infrastructure that Canada relies upon will remain useful, resilient and robust. Engineering technicians and technologists working collaboratively with other infrastructure professionals have a significant role to play in solving this rapidly emerging issue.

Michael Mortimer, P. Eng. is Program Manager, Built Environment Standards, Canadian Standards Association (CSA). CSA is a member-based, independent association. It has approximately 9,000 members, responsible for 3,000 publications in 54 subject areas.
Revitalizing our streets

OACETT members help improve pedestrian areas and roadways through streetscaping

Certified Engineering Technologists are making their mark on the streets we use and enjoy as members of our community. As leaders or members of project teams that improve pedestrian areas and roadways through streetscaping, they are helping to shape the neighbourhoods where we work and play.

Streetscaping refers to urban roadway design and the impact that this design has on pedestrians and businesses in the area.

According to the Victoria Transport Policy Institute in British Columbia, streetscaping can help create more diverse transportation systems and more accessible communities by improving non-motorized travel conditions, creating more attractive urban environments, and integrating special design features such as pedestrian and cycling improvements,
Traffic calming and road space reallocation. It often includes wider sidewalks, bicycle lanes, bus pullouts and improved on-street parking design.

It can also include changes to the landscaping of an area by adding street furniture like benches and lampposts, public art installations and making changes to crosswalks and sidewalks, and the look of buildings in the area.

Scott Stewart, C.E.T., General Manager Public Works Department, City of Hamilton, claims that streetscaping is an element of all construction projects that his city undertakes. “It is imbedded in our thinking when planning projects,” said Stewart.

When asked about the most significant benefit of streetscaping, Stewart believes it is safety. However, increasing the safety of an area brings about other benefits: “When urban areas are made safer, they become more inviting to pedestrians. When pedestrian traffic increases we see a reduction in road traffic and a stimulation of local economic activity,” said Stewart. It also shows developers that the city is committed to upgrading and improving their downtown areas, which make them desirable locations to invest in.

There is a rebirth of new business when streetscaping is done and Stewart has seen it first hand in Hamilton. He claims that by doing things as simple as putting flowers in boulevards and using different colours and textures for sidewalks, pedestrian traffic increases.

One interesting example of streetscaping was done on Ottawa Street in Hamilton. The street is home to several clothiers and sewing shops. Stewart and his team conferred with them about what their tools of the trade were and then incorporated that into a new design for a small parkette in the area. They made their seating areas resemble items like thimbles and spools. It was a creative way to celebrate the history of the area which has become a popular site.

Large sidewalks and patios encourage pedestrian traffic in downtown areas.

Computer imaging allows planners to see a streetscaping plan "virtually" before a single hole is dug.
Eric Saunderson, C.E.T., is a Project Manager with the City of Kitchener, and is currently involved in an $8.8 million dollar project in the downtown area of the city.

The project was undertaken to increase safety with better lighting for pedestrians, but rather than tackle that one element, Saunderson and his team looked at everything and reviewed the rest of the infrastructure like surface treatments. The intent is to have the new streetscaping design endure for 25-30 years.

The City of Kitchener isn’t just making streets safer and looking good. They are also making sure that the changes they are implementing are as environmentally friendly as possible. Some of the innovative initiatives they are putting in place include tree planting and storm water planters that have an inlet and outlet, and take the filtered runoff from the roads. The city is also recycling the old roadway by using crushed concrete as aggregate rather than using new material.

“When urban areas are made safer, they become more inviting to pedestrians. When pedestrian traffic increases we see a reduction in road traffic and a stimulation of local economic activity,”

With any large scale projects, there are going to be challenges. Stewart points to difficulties working with aging underground infrastructure, which in the City of Hamilton could be 60 to 100 years old: “Old lines of cable, gas and electric can limit what you can do underground and the physical restrictions of buildings in older areas can limit what you can do above ground.”

The main challenge that the City of Kitchener has encountered is maintaining pedestrian movement and vehicular access to the businesses in the area. Some business owners get frustrated, especially when delays occur, but they realize that improving the neighbourhood will be beneficial to them in the long run.

David Ferguson, C.E.T., Manager of Traffic and Parking Operations for the City of Welland, has worked in this field for many years and is currently heading a team of 40 through a five-phase, five-year project to revitalize the city’s downtown core.
Streetscaping can help create more diverse transportation systems and more accessible communities by improving non-motorized travel conditions and creating more attractive urban environments.

The first phase, which was completed this fall cost $1.5 million and included upgrading roadways/curb reconstruction, bumpouts for speed, new trees, benches, gateway entrances, patterned sidewalks and the use of aqueduct stones from the Welland Canal that add a sense of history.

Ferguson says that his project in Welland has also faced some roadblocks because of the difficulties in working with two levels of government – the region dealt with streets and the city jurisdiction dealt with curbs. There were two separate contracts and they couldn’t be on site at the same time. This has the potential to cause delays, in addition with dealing with events in the downtown core, such as this year’s 150th anniversary of the City of Welland.

“Streetscaping projects are a team effort. Engineering technicians and technologists are usually part of a team that consists of urban planners, professional engineers and architects,” said Stewart.

Aside from the team that plans and executes the project, the community at large has an influence on the outcomes. Streetscaping projects have a public consultation before they begin to ensure that they are meeting the needs of the community.

Ferguson’s team has already held three public consultations and there will be another one in the New Year. The city has spoken at length with neighbourhood and business associations in the area. “The input from the public is so important – we couldn’t do the job effectively without it,” said Ferguson.

So why are C.E.T.s such good candidates for this line of work? Because they have a wealth of hands-on experience that they bring to the table. Saunderson claims that his experience with hands-on construction projects now informs his design decisions when leading projects.

The next time you take a walk or drive through one of Ontario’s downtown neighbourhoods, be sure to take note of the details. Chances are, one of your fellow OACETT members had a hand in making it a safe and attractive place for you to enjoy.
For many months now, the media have been full of negative economic news – the collapse of the sub-prime lending market, skyrocketing oil prices, plunging automotive sales, factory after factory shutting down, tens of thousands of people losing their long-term jobs. It may have already happened to one or more of your friends, relatives, or colleagues. Are you looking over your shoulder yet?

Historically, most employers have sought, expected and usually received long time loyalty from their staff. But since the last major recession in the early 1990s, few have returned that loyalty when their chips are down. Today we are in an environment, hard as it may be for some, that when profits tumble, heads follow soon after. Under these circumstances, the best policy is to be prepared and to know what to do if it should happen to you.

Most of you will want to start looking for your next job, one that relates to what you were doing before the axe fell. Here are some helpful suggestions that will increase your chances of success.

Don’t take it personally
If you lose your job for any reason other than your inability to perform as required, don’t take it personally. Your boss, in conjunction with HR staff, had to make some difficult choices, and you ended up with the short straw.

Give yourself time to adjust
If you didn’t know it was coming, expect to feel shocked, angry, disappointed, revengeful and any number of other negative emotions that may pass through your mind. That’s
only normal; you’ve just received a major shock – life-changing news. Allow yourself some time to grieve, a few days for the shock to wear off and for your mind to come down from the boiling point. Then prepare yourself to get on with the rest of your life.

Prepare a professional quality résumé
Many people don’t realize that a résumé is their own personal sales brochure and needs to be written like one. Its only purpose is to pique the recipient’s interest to the point that they will want to meet with you, either to network or to interview you for a job. As such, it needs to be written in a positive, action-oriented tone, and must emphasize your accomplishments, not simply be a record of your professional responsibilities. What is an accomplishment? It’s a two to four line description of some work you did that produced positive results or made a noticeable difference to some aspect of your company’s business. Quantify results where you can, even if it’s only an approximation. But never exaggerate!

Start networking
What is networking? In this context, it is simply asking people you know who they might know who may be interested in having a business related conversation with you. It is having a brief (20 minute or so) conversation with people about their company, their industry, your background, your industry, etc. At the end of the conversation, you ask them for referrals to people they know, and that way your network keeps growing. Say, for example, that Mary Jones gives you John Brown’s name and phone number. When you call John it’s not like making the ever-dreaded “cold call”, because you have been referred to John by someone you both know, which greatly increases the chances that you will get a positive reaction. Remember the TV commercial for hair colouring of a few years ago? “I told two friends, and they told two friends, and so on and so on.....” So goes the building of a network. And it only takes a small number of contacts to get it started. As a member of a professional association you can look to your chapters and peers to start building your network. In working your network judiciously you will come across job opportunities, and many of them may not be known by anyone but you and the person with whom you are networking. That spells opportunity!

Begin your job search
Finding job opportunities has never been cheaper, easier or faster; nor has there ever been such a proliferation of them simply a mouse click away! Despite all the bad news, online job boards, like OACETT’s CTEN (www.cten.ca) contain thousands of jobs on any given day. So, register with every job board that you can find that might have postings requiring experience like yours. Post your résumé everywhere you can, and set “alerts” (automatic job listing queries) on those boards that offer this feature.

Don’t waste your time applying for jobs that don’t closely resemble what you have been doing most recently – you’ll never make it to the interview stage. And making it to interviews is what a successful job search is all about. Finally, understand that searching for a job is a full-time task. No golf, no laundry, no chores, no dilly-dallying! So, get on with it, and best of luck in your search!

Reg Shortt, P.Eng., Certified Personnel Consultant, has spent the last 15 years as a Partner with Stoakley-Dudley Consultants, recruiting for primarily technical positions for a wide variety of industries in Ontario and across Canada. Reg is one of a very small number of Professional Engineers in the recruiting profession.
new members

RECOGNIZING NEW AND CERTIFIED TECHNICIANS AND TECHNOLOGISTS

July 4, 2008

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Marshal Deane, C.E.T.
Vadim Dmitriev, C.E.T.
Suresh Doraiswamy, C.E.T.
Mark Furniss, C.E.T.
Ashok Gangwar, C.E.T.
Olgiert Garbos, C.E.T.
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Pawan Jain, C.E.T.
Qamar-Ul-Islam Janjua, C.E.T.
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Apinder Sehgal, C.E.T.
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Sunilkumar Shah, C.E.T.
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RECOGNIZING NEW AND CERTIFIED TECHNICIANS AND TECHNOLOGISTS

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Anton Ayad
Dhiren Barot
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Alfat Chaudhry
Francis Ching
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Basil D Souza

James Edwards
Gregors Grinfelds
Shashi Guleria
Darren Hardenbrook
Iqbal Hossain
Raied Ibrahim
Adeniji Idowu
Chao Jiang
Navdeep Kahlon
Anil Kakar
Qasim Khan
Gurcharan Manhaji
Ghasan Markos
Brodie McArthur
Reza Mohammadi
MD Moniruzzaman
Benjamin Parrenas
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Amitkumar Patel
Himes Patel
Shajeesheneh Rajakulendran
Varatharaj Ramachandran
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Harpreet Sarangal
Mohammed Shafi
Senthinatha Thabendran
Qiang Tu
Thayanathan Velumyllum
Eubert Vitorillo
Touraj Zakeri

OACETT Members with road construction designation

Certified Engineering Technologist

Gerald Chester, C.E.T., rcji

Certified Technicians

Jean Champagne, C.Tech., rcji
Jacque Couture, C.Tech., rcji

Certified Technicians

Jean Champagne, C.Tech., rcji
Jacque Couture, C.Tech., rcji

Graduate Technician

Emily Peel, rcji

Graduate Technologists

Aziz Masood, rcji
Andrea Van Elswyk, rcji
Jonathan Wishart, rcji

Technical Specialist

Lilie Ying, rcji

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new members

RECOGNIZING NEW AND CERTIFIED TECHNICIANS AND TECHNOLOGISTS

New members with road construction designation

Graduate Technician
Gordon Steele, rcca

Graduate Technologist
Mugurel Serban, rcji

Technical Specialist
Brian Murray, rcji

August 6, 2008

Certified Engineering Technologists
Dhansukh Ahir, C.E.T.
Mehrabuddin Ahmed, C.E.T.
Russell Atkins, C.E.T.
Oleg Burda, C.E.T.
Dean Chevalier, C.E.T.
Patrick Crosby, C.E.T.
Adam Douglas, C.E.T.
Nick Gollan, C.E.T.
William Jimenez, C.E.T.

Devang Joshi, C.E.T.
Ashwani Kumar, C.E.T.
Alex Labagueis, C.E.T.
Sergey Lesnikov, C.E.T.
Jason Mantifel, C.E.T.
Mansoor Mirza, C.E.T.
Khan Moudud, C.E.T.
Anwar Nagar, C.E.T.
Frank Natale, C.E.T.
Tushar Patel, C.E.T.
Willie Perez, C.E.T.
Sergio Polanco, C.E.T.
Jaime Ramos, C.E.T.
Masood Rao, C.E.T.
Tejinder Reehal, C.E.T.
David Schmidt, C.E.T.
Elena Stoykovich, C.E.T.
Nikolai Timokhine, C.E.T.
Naw Httee Paw Tin, C.E.T.
Mohammed Zamshad, C.E.T.
Serguei Zykov, C.E.T.

Jonathan Brooks, A.Sc.T.
Mark Charko, A.Sc.T.
Bradley Csomas, A.Sc.T.
Timothy Dejong, A.Sc.T.
Christopher Friedmann, A.Sc.T.
Roy Joseph, A.Sc.T.
Ashwin Joshi, A.Sc.T.
Christopher Lyons, A.Sc.T.
Steven MacMillan, A.Sc.T.
Marc Maida, A.Sc.T.
Melinda Maika, A.Sc.T.
Mark Misko, A.Sc.T.
Thuy Nguyen, A.Sc.T.
Villamor Pineda, A.Sc.T.
Paul Plourde, A.Sc.T.
Timothy Skrins, A.Sc.T.
Alexei Tokarev, A.Sc.T.

Certified Technicians
Brian Ferguson, C.Tech.
Dean Girard, C.Tech.
M. Roy Leitch, C.Tech.
Judith McKenzie, C.Tech.
Nancy Orr, C.Tech.

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John Adams, A.Sc.T.

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new members

RECOGNIZING NEW AND CERTIFIED TECHNICIANS AND TECHNOLOGISTS

Ryan Peacock, C.Tech.
Nirav Popawala, C.Tech.
Joseph Reid, C.Tech.
Anthony Rocco, C.Tech.
Scott Strain, C.Tech.

Associate Members
Lisa Dwyer
Shawn Easton
Nishat Hassan
Jeta Haxhimanka
Anjelina Konini
Jason Quackenbush
Benjamin Rousseau
Cassandra Trudeau
Brian Webster

Graduate Technicians
Tony Cardamone
Anthony Incitto
Stephen Mallia
Bruce Martin
John Steckly
Adam Thompson

Graduate Technologists
Christopher Balestreri
Johan Bannan
Julien Cameron
David Ellis
Scott Hamill
Thomas Hickey
Raymond Jameson
Darrell Kublick
Antonio (Anthony) La Porta
Robert Lehecka
Daniel Lepine
Manon Litalien
Darryl McCambridge
Christopher Moore
Dawn Morrison
Seri Mutsuwario
Muneer Nissan
Michael Perger
Stephanie Reeder
Mario Sawatzky
Andrew Smith
Roman Stangl

Technical Specialists
Brian Abbey
Meah Ahmed

Zulfiqar Ahmed
Jamal Al-Gailani
Ibrahim Amerih
Rodica Anton
Hassan Haghghighi
Philip Bayer
Beant Bedi
Miral Bhatt
Nasir Bhatti
Paul Boyce
Mahesh Chinnian
Ricky de Castro
Chintan Desai
Susan Devison
Kushal Divekar
Ionel Dragomir
Ghassan Fayad
Rakesh Gupta
Linda Harnish
Jennifer Harper Holmberg
Catlan Harrison
Keith Heibein
Barkawi Jayachandran
Douglas Job
Robert Jolly
Ayad Karem
Manoharan Kasiapillai
Muhammed Khan
Jennifer Koen
Oluwatoyin Korede
Maurice Lefaive
Gerald LeMay
Gino Llave
Garry Lozano
Daljeet Mahal
Nataliya Makhalik
Adam Mamon
Alexander Milevski
Meheqi Mistry
Aaron Morris
Frank Murphy
Hariprasad Nuralapati
Henry Olbach
Jose Oliveira
Hadilah Osman
Harshvadhan Panchal
Fei Pang
David Paradis
Hetal Patel
Kamlesh Patel
Virendrakumar Patel
Eric Perrin
Nick Piedigrossi
Vladimir Poluektov

Nathaniel Quiboloy
Michele (Michael) Racioppo
Kaviraj Ramgoolam
Alexzander Reinis
Syed Rizvi
Roy Robielos
Kristy Roelens
Paul Rutten
James Sampson
Ivan Secen
Uday Singh
Kenneth Stewart
Natasha Stoesser
Marilou Tan
Padinjaremannil Thomas
Mark Valdes
Henry Vandendort
Christopher Webb
Richard Webb
Mark White
Xiong Zhang
Haibo Zhou
Xiaomei Zhu

OACETT Members with road construction designation

Applied Science Technologist
Michael Zambri, A.Sc.T., rcji

Certified Engineering Technologist
Douglas Bowes, C.E.T., rcji

Graduate Technicians
Thomas Mills, rcji
Tahir Mir, rcji

Graduate Technologists
Dawn Coulson, rcji
Steven Glass, rcji
Nicholas Hilts, rcji
Jeffrey Seaborn, rcji
Raman Verma, rcji
Jibin Yu, rcji

New members with road construction designation

Graduate Technician
Melissa Price, rcji

Graduate Technologist
Nehal Siddiqui, rcji
Grand Valley Chapter

Grand Valley Chapter’s first Technology Week was a huge success. Several members including Chris Van Dop, C.E.T., Doug Patterson, C.E.T., Ralph Ullman, C.E.T., Julia Evers and Mike Laurie, A. Sc. T., committed countless hours throughout the summer and fall to ensure the week went smoothly. Thank you to the Western Region of OACETT for the funding that we received for this event. Other companies that donated were: Corwhin Tool & Manufacturing Ltd., F.M. Engineering Inc., Mallot Creek Associates Inc., Melloul Blamey Construction, Sutherland-Schultz and The Main Man Services.

We developed a presentation based on renewable sources of energy – hydroelectric power, wind turbines and solar for a K-6 grade school in Kitchener. The presentation which can be viewed on at www.oacettgvc.ca, was well received by the students and faculty.

The balance of the week was spent helping the kids build small solar cars, small wind turbines for the older kids and pinwheels for the youngest kids. There were also two other activities for the kids to try throughout the week. The first was a purchased windmill model that could be modified with 2 to 6 blades. Each class had the opportunity to see how efficient the wind turbine could be by installing different blades, or adding more gears to the model. The other activity was the pedal power bike. We converted a stationary bike into a generator, where the person pedaling was the motor. Attached to the bike were two light bulbs – a regular incandescent bulb and a compact fluorescent. The kids found out just how hard it was to light either of these bulbs.

Our chapters’ intent for this entire week was to promote technology, give the kids first-hand experience and to show them all of the people that were involved in surveys, city and provincial permits, consulting, design, construction and maintenance of these projects.

Upcoming Event

The GVC chapter has once again secured 50 tickets for a hockey game between Guelph and their arch rivals the Kitchener Rangers on Sunday, March 1 at 2 p.m. Please contact Chris van Dop, C.E.T., for tickets at cvandop@rogers.com.

Mike Laurie, A. Sc. T., is Chair of the Grand Valley Chapter: mike.laurie@melloul.com

London Chapter

Mike Laurie, A.Sc.T. and Chris Van Dop, C.E.T., make a presentation on renewable sources of energy to elementary students in Kitchener.

Quinte Chapter

Tour of New Hydro Generating Facility

This past summer, OACETT members from the Quinte and Kingston Chapters toured the construction site of a new generating plant being added to the existing McLeod Dam on the Moira River in Belleville. The dam is owned by the Quinte Conservation Authority and its primary role is flood control. This project will enable it to supply electric power into the
local distribution system during times of suitable river flow. Project Manager Brian Keene gave the visitors a detailed and entertaining tour.

Michelle Stobbart-Cornell, C.Tech., is Quinte Chapter Chair: quinte-chapter@oacett.org

**Peterborough Chapter**

The Peterborough Chapter enjoys a BBQ at the home of Sharon Reid, C. Tech, PASB Councillor for the Eastern Region.

**HORSESHOE REGION**

**Niagara Chapter Awards Night**

On Thursday September 18th the Niagara Chapter held its annual awards night to honour the chapter’s 25, 40 and 50 year members as well as the top technical students from Niagara College.

Four Niagara College students receive their awards for being the school’s top technical students.

**Golf Tournament**

On Friday August 22nd the Niagara Chapter held its first annual Golf Tournament at Peninsula Lakes Golf Club. This event saw 28 golfers take to the course and a great time was had by all.

**Wine Tour**

On October 19th the Niagara Chapter teamed up with the Hamilton chapter to offer a wine tour and tasting event. The chapters received a tour of the production facilities in Niagara Falls and wrapped up with an estate tour and tasting at one of the local wineries.

**Upcoming Event**

Our 3rd annual John A. Alton Memorial hockey tournament has been scheduled for January 24 - 25, 2009. More information will follow shortly in a mass e-mail.

Jim Sorley, C.E.T., is Niagara Chapter Chair: niagara-chapter@oacett.org

**NORTHERN REGION**

**Annual Fall Meeting**

The Sudbury Chapter hosted the Northern Region’s annual fall meeting October 17 and 18. On Friday evening, members of the region enjoyed a dinner and an IMAX Theatre presentation of “Mysteries of the Great Lakes”.

Saturday, business meetings were held, with the focus this year on the Institute of Engineering Technology of Ontario (IETO). Presentations by guest speakers Stephen Morley, C.E.T., Vice President,
IETO, and Andre Tardif, C.E.T., Northern Region IETO Councillor, clearly illustrated the significance and wide scope of activities undertaken by IETO. As well, Julie Nolan, Manager, Account Development for The Personal, traveled to Sudbury to provide an opportunity for updated information and questions and answers regarding their insurance products.

The meetings were well attended and welcomed guests included Diane O’Heron, C. Tech., Vice President, Professional Affairs and Services Board (PASB) and Sharon Reid, C. Tech., PASB Councillor, Eastern Region. Thank you to Andy Dryland, C.E.T., Sudbury Chapter Chair, and the executive members for a well planned and organized event.

Northern region members and guests enjoy dinner at the Lakehouse Restaurant in Sudbury.

Georgian Bay Chapter 19th Annual Golf Tournament

On Sept 12th, OACETT Georgian Bay Chapter and PEO Simcoe Muskoka Chapter hosted our annual golf tournament at Heritage Hills Golf Club in Barrie to raise funds for student awards in engineering and technology. $2700 was raised through hole sponsorships and a putting contest.

Special thanks to the following hole sponsors: Avanti Engineering & Design, Barrie Hydro Distribution, C.C. Tatham & Associates, Compliance Engineering, Decommissioning

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Congratulations to the following winners:

**Putting Contest:**
A tie between Murray Lees, C.E.T., and Stuart Englesman

**Lowest team score:**
A tie at minus 11 between Lees/Lees/Capling/Spooner and Lougheed/Rudkins/Christie/Simpson teams

**Longest Drive for men:** Brad Robinson

**Longest Drive for women:** Cathy Allen

**Closest to the pin for men:** Graeme King

**Closest to the pin for women:** Mary Offarell-Bowers

Thank you to the many prize donors, there are too many to mention individually. Book Friday, September 18, 2009 in your calendar for our next tournament. You don’t want to miss our biggest event and the chance to network with your fellow OACETT and PEO members! We will be celebrating 20 years of fun with great colleagues and friends!

**Upcoming events**

**Saturday, January 10, 2009:**
Annual Barrie Colts Hockey Night

**Saturday, February 28, 2009:**
Annual Curling Funspeil at Stayner Granite Curling Club

Check the chapter webpage on OACETT’s website for further details on these events.

Brian Emery, C.E.T., is Georgian Bay Chapter Chair:
georgianbay-chapter@oacett.org

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Patrick Ng, C.E.T., is York Chapter Chair:
york.yourchapter@gmail.com

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**TORONTO REGION**

Toronto Central and Toronto West held the first joint Golf Tournament at Centennial Park in Etobicoke on August 23. Consensus from everyone participating in the tournament was that this should definitely be an annual event.

Our PASB Councillor, Steve Barnes, C.E.T., put forth a lot of effort in spearheading the event, many thanks from the Toronto region!

Local companies sponsored the prizes, and without their support, the tournament would not have been the success that it was. The following sponsors are greatly appreciated for their kind prizes and funding: Ace Residential, Arclin, Big Snake Promotions, Buhler, CPC Pumps International, Golf Town, The Golf Clearance Warehouse, The Personal Insurance, and WATTS Industries (Canada) Inc. The Toronto Region would also like to extend appreciation to all of the volunteers who helped arrange this event.

Congratulations to Toronto Central’s David Chow, C.E.T. for winning the prize for the longest drive, and to the first place prize awarded to the team consisting of David Chow, C.E.T., Ed Prillo, C.E.T., Cedric Smith, C.E.T., and Mark LaFleche.
We are expecting greater participation from members the next time around. So look for this event again next year!!

**Toronto Central Chapter**

**Wine Tasting Tour**

Our tour of the Niagara region, organized by Ernie Chu, C.E.T., (our official chapter wine connoisseur) was held on October 25 and included stops at three wineries: Rosewood Winery – maker of honey wine, Kittling Ridge Estates Wines – known for their Brandy Ice Wine and Frog Pond Winery known for organic wine. By the end of the day we were fully educated in the art of wine tasting. Each member received a small bottle of ice wine and three lucky members won a bottle from the three wineries we visited.

The Chapter Executives ask for your continued support through attendance and feedback at our meetings and events in the New Year.

From the entire Chapter Executive, we would like to extend out best wishes for a safe and happy holiday season. We had an excellent year in 2008, and 2009 will be even better!

David Chow, C.E.T is Toronto Central Chapter Chair:
dchowcet@gmail.com

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