

IEEE Canada at Sections

With the theme, Brilliant Minds, Bright Futures, IEEE Sections Congress 2017 was a shining example of how a volunteer organization renews itself at the grassroots.

IEEE Sections Congress, sponsored by the Member and Geographic Activities (MGA) Board, is a triennial global leadership conference to provide section leaders with training, skills and resources to better meet the needs of their section members. It also provides many opportunities for networking. Through the recommendations process delegates have an opportunity to influence the development of future goals and priorities for IEEE.

This year, 1250 attendees represented 165 countries and over 300 sections. They heard keynote presentations, attended workshops, tutorials and panel discussions. There were also short five-minute mini sessions, meant to acquaint listeners with topics and inspire a desire for more information. In the exhibitions area, delegates could



view and try out many of the numerous IEEE tools and resources available for members.

IEEE Canada's contingent including primary (voting) delegates from all 21 sections, plus an additional 12 second-



ary delegates. Also attending was our Executive Committee, so that together with representation from the sections, a BoD meeting could be held prior to the start of the first Sections Congress sessions.

The day after Sections Congress concluded, IEEE Canada held a full-day strategic planning session focusing on priority areas: Support for WIE, YP and students; increasing relevance with industry; and conference planning and delivery. More detailed information on the strategic planning session is provided on page 43.

Video recordings of many Sections Congress sessions are available from: <https://ieetv.ieee.org/event-showcase/sections-congress-2017>

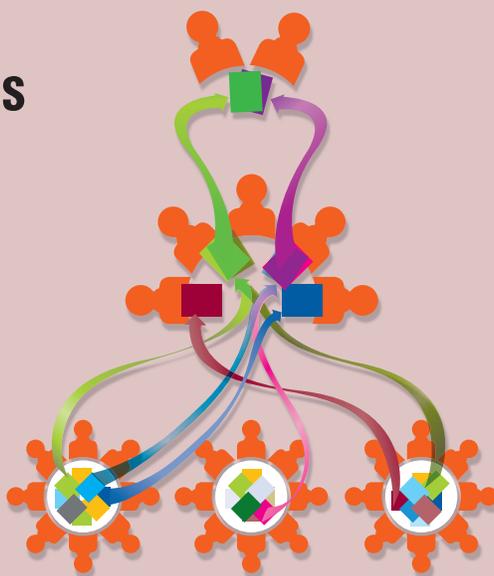
Recommendations development process

BY CHRISTOPHER WHITT

THE RECOMMENDATION PROCESS IS an important (and perhaps under-appreciated) component of each Sections Congress. It is a key opportunity for volunteers to voice their ideas to IEEE staff and leadership for improving our experience as members.

In 2014 I was a primary section delegate for Canadian Atlantic Section. I participated in a section brainstorming session several months before Sections Congress, and then dove into the discussion at the spring region meeting where we selected the top suggestions from the region to go to SC2014. It was very exciting that one recommendation from our section was a top-voted recommendation three years ago.

This time around it was a different experience as I helped at the regional level



to collect and refine recommendations from all 21 sections. Proposed recommendations were gathered from sections before the spring Region meeting in late April. At the region meeting, section and region volunteers discussed, debated, and re-formulated many ideas.

All three of the recommendations were reviewed and accepted by the MGA Operations committee to be included in the final list of 16 recommendations for voting in Sydney. Our top three recommendations related to improvements in volunteer tools (vTools), ensuring equitable Fellow elevation opportunities for members from industry, and increased collaboration between industry and academia.

It was fascinating to see the process all the way through from beginning to end: brainstorming in my section; debating at the region meeting; and finally having many informal conversations in Sydney with the highest levels of IEEE volunteer leadership. I was impressed by the passion and creativity brought to the process by many individuals. However, the most significant observation was that leaders at all levels of the organization are engaged with the recommendation process, and good ideas don't get lost even if they aren't voted into the top three.

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Congress 2017

Recommendations response

BY AMY PINCHUK

AS A FIRST-TIME ATTENDEE at Sections Congress I was extremely impressed by the organization of the Congress and by the Region 7 organizers' wonderful attention given to the Canadian delegates to help us figure out what to do and where to go. The Congress provided an excellent opportunity for people like me to fill in the blanks on IEEE initiatives and tools.

Here are my thoughts on two of the top recommendations:

Strengthen and Recognize Industry/Academia/Government Collaboration/ Partnerships.

Collaboration and partnerships amongst these three groups are indeed really important. I'm not so sure an award will pro-

vide any incentives to industry, though. Multidisciplinary events at an international level would complement what we are doing in Montreal and is being done elsewhere within the region through Industrial Relations Chapters.

Develop an incentive program for corporations to join IEEE as Corporate Member.

This is an initiative that in general I support; however, I hope consideration will be given to reduced membership fees for small business owners and their employees. For large corporations, a well structured membership offering would give sufficient access to IEEE resources for management to champion them with (Continued on page 45) >

Recommendations response

BY MURRAY MACDONALD

THE 2017 VERSION OF IEEE's Sections Congress was again a great training opportunity for volunteers, both new and more seasoned. There was a wide range of topics and formats ranging from five-minute IGNITE sessions as brief introductions on topics such as IEEE Day, through training on the volunteer suite of tools, to longer and more detailed presentations.

Interestingly, one of the top three recommendations from delegate voting at Sections Congress was "Develop (or expand existing) training programs and/or create partnerships with external organizations to allow members to provide STEM activities to pre-college students". The voting delegates may not

have been aware of the IEEE Teacher In-Service Program's available resources and had not considered the logistics required to reach the world's students. For example, there are over 5 million elementary and secondary students in Canada and only 17,000 IEEE members (of which only about 50 are actively involved in education outreach activities). It is clearly impractical for the IEEE to directly reach an impactful number of students even once a year. While engaging directly with the students may be fulfilling, providing the awareness and resources to teachers will reach many more students over many years. This is an embodiment of the proverb "Give a man a fish and you feed him (Continued on page 45) >

Three Top Recommendations as voted by SC'17 primary delegates

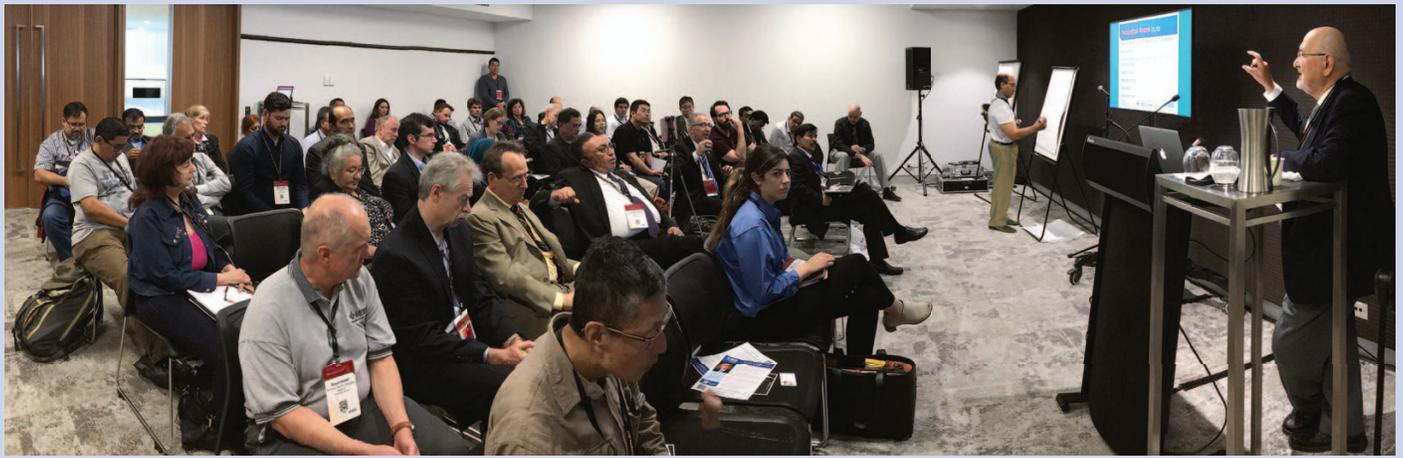
- **Strengthen and recognize Industry/Academia/Government Collaboration/Partnerships** - Create a Section Award for Industry/Academia/Volunteer collaboration - Organize multidisciplinary Industry/Academia/Government events focused on 'hot' issues - Develop a public communications platform to develop projects and share results - Create a 'dating' platform to communicate industry issues searching for solutions and possible 'applications' of research results.
- **Develop an incentive program for corporations to join IEEE as 'Corporate Member'.**
- **Develop (or expand existing) training programs and/or create partnerships with external organizations to allow members to provide STEM activities to pre-college students.** Provide 'canned' or 'in a box' style demonstrations and presentations that local Sections can deliver to pre-college students. Re-evaluate a 'Junior IEEE' membership program targeted at pre-college students.

Three Top Recommendations from IEEE Canada R7

- **Facilitate Industry and Academia Collaboration with IEEE resources.** IEEE can play vital role by providing networking platform, engaging volunteers and connecting local members. Volunteers can connect (i.e. symposiums) local industry professionals/entrepreneurs/SMEs with academic research groups and government bodies to explore available resources (equipment, skill set, funding) and collaborate. Special recognitions can motivate volunteers (individuals) to contributing effectively. Successful sections/members/organization may receive awards or special recognition from IEEE. IEEE can offer funding in the form of scholarships to students or as a grant to the faculties. To be implemented on a country by country basis.
- **Increase resources for development of vTools.** There has been a history

of feature requests to vTools, however, progress to address these requests has been slow due to the lack of resources being given to the platform. It is suggested that IEEE increase support for vTools by hiring additional support to help address the backlog of feature requests and accelerate the completion and integration of these new options.

- **Modify the Fellowship nomination forms and process to make it relevant to non-academics.** Industry, government, military and other non-academic members are challenged as the application form only fits academics, who are expected to publish, write books and patent. This is not expected in the non-academic world; some are constrained by organizational proprietaryness or publishability. Reformat the nomination form to fit non-academic member qualifications.



A veteran's take

BY DAN COODE

I CONSIDER MYSELF FORTUNATE as this was not the first Sections Congress I have had the privilege to attend, and the depth and breadth of IEEE services and diversity of the IEEE volunteer base worldwide never ceases to amaze me. It's interesting to meet other volunteers from other parts of the world that have the same challenges I see locally. It was inspiring to exchange ideas, best practices, and lessons learned with them.

Sections Congress is a special event where Sections from around the world have the opportunity to bring recommen-

dations on how to improve the IEEE. Over the event primary delegates from each Section vote on the recommendations which are most important to them and their Section. The IEEE staff and volunteers then prioritize and work on those recommendations in the years ahead. The top recommendation this year is one close to my heart, creating a corporate IEEE membership, which I believe will better engage industry where I work and a topic I have had many companies ask me about. The recommendation process is an important part of Sections Congress and it gives a powerful voice to all IEEE Sections.

I have been an active IEEE volunteer for close to 20 years and had the honour of Chairing the MGA Center for Leadership Excellence (CLE) committee when it was first rolled out to the membership at Sections Congress in San Francisco giving me a significant amount of experience with IEEE, its services, and its tools. I was pleased to discover that Sections Congress is still a wonderful learning opportunity even with all my experience. I was able to learn about new tools like IEEE Collaborate™ and how to take advantage of it. I also learned lots about planning conferences and their associated challenges, which is an area in which I have less experience. Most importantly I learned about resources like

MCE and POCO that can assist in conference planning.

Outside of volunteer tools and services I learned about newer technical issues facing our society that IEEE volunteers are starting to tackle, such as issues of who is responsible for decisions made by artificial intelligence or self-driving cars. It became clear to me that IEEE has an important role to play in addressing these types of technical/societal issues, and I look forward to seeing the solutions IEEE members discover while I hope to see IEEE as an organization play an important role influencing related policies as they are created around the world.

*Dan Coode
SED Systems
West Area Chair, IEEE Canada*

A student's take

BY CHIEN DAT NGUYEN DINH

BEING RELATIVELY NEW to IEEE, Sections Congress was an amazing opportunity for me to learn and be inspired. The presentations, booths, learning hubs and other sessions covered a large pool of services provided to sections and members. There were longer sessions that began from the afternoon of the first day discussing various topics from increasing interaction with members to case studies and project funding.

There were several breakout sessions on the second day of the congress that caught a lot of attention. One particular topic that interested me was the talk on how to make IEEE relevant to entrepreneurs. The IEEE Entrepreneurship initiative helps local engineering entrepreneurs find the information they need and helps them get in touch with more established entrepreneurs in their field. There were also helpful sessions



Allan Tear of RevUp describes how entrepreneurs can connect to industry experts

on IEEE Day and the IEEE Xtreme programming competition. I also learned about a variety of projects that improved

communities around the world with the support of IEEE.

In addition to the information I gained, Section Congress 2017 was a great opportunity for me to network with delegates from around the world. As part of the organizing team for IEEE Day this fall at the University of New Brunswick, I could speak firsthand about IEEE's global impact, and how much opportunity there is for those who get involved.

*Chien Dat Nguyen Dinh
M.Sc. in Engineering student at U.
of New Brunswick
IEEE UNB Student Branch*

Rewriting the book on Chapter Development

BY FABRICE LABEAU

ALTHOUGH THIS WAS MY third time attending Sections Congress, my objectives for this Sydney edition were a bit different from a few years back in Amsterdam and San Francisco. This time, apart from a presentation that I delivered regarding the distinguished lecturers program developed within my home technical society, I spent most of my time on the exhibit floor, sharing time between the booth of the IEEE Vehicular Technology Society (VTS, for which I am the VP for Membership Development) and that of the IEEE Sensors Council. This was an incredible opportunity to meet and discuss with many section representatives from all over the world.

At the VTS booth in particular, the objectives we had were first to pursue new chapter develop-

ment opportunities and second to increase VTS membership in sections. Before coming to Sydney, our team had developed specific flyers about the benefits of creating a chapter and benefits of membership; we also made sure to bring eye-catching goodies for the booth. These served as ice breakers and conversation starters (together with the remote controlled car we were driving around the exhibit floor), opening up conversations with section leaders from all over the world. We were in this way able to make contact with dozens of sections in two days, many of them having the potential to create a local VTS chapter. Compared to our usual way of trying to create chapters, which involves physically traveling to a section, the concentration of sections leaders in the same place which happens only every three years at Sections Congress created an incredibly efficient way to connect and develop interactions.

The presence of the IEEE Sensors Council had different objectives.



Fabrice Labeau explaining the ABCs of VTS Chapter formation at that Society's booth. He spoke to "dozens" of Section Executives using this approach.

Contrary to an IEEE Technical Society, an IEEE Technical Council does not have individual members: its members are IEEE Technical Societies who decide to put their efforts together in an area that cuts across their mandate. In this case, the field of sensors is so vast that 26 societies of IEEE are members of the Sensors Council. So, without individual members, the objectives at Sections Congress are

not to attract more members, but to grow the community, by encouraging section leaders to create chapters, or host summer schools. Again, Sections Congress was a unique opportunity to do so!

At the end of the day, looking back at my experience at Sections Congress 2017, I can say it was efficient and effective in terms of my objectives, but also, as always, a very rewarding experience meeting old friends and meeting new IEEE volunteers from around the globe!

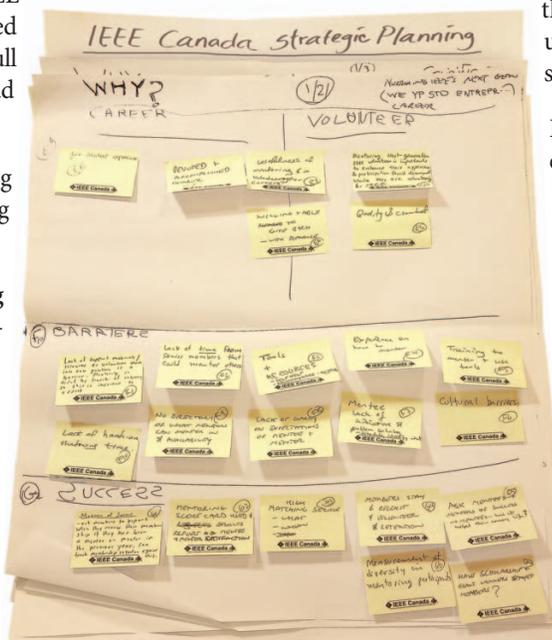
Charting IEEE Canada's Course Ahead

INSPIRED BY A WEEKEND of engaging workshops, panels and presentations, the IEEE Canada contingent remained in Sydney for another full day to chart a course ahead for our region.

The strategic planning session yielded the following top priorities:

- **Formalize mentoring programs** for more effective volunteer recruitment and recognition, as well as establishing quality control. Mount mentoring events to supplement one-on-one efforts
- **Increase conference bidding** by greater coordination with section chairs and IEEE soci-

eties. Promote greater collaboration with local tourism offices.



The result of one of the approximately 30 small-group discussions that took place during the strategic planning session at SC '17.

- **Create more industry-focused content** in the IEEE Canadian Review.
- **Greater public visibility** through media exposure and engagements in schools.

In total, roughly 30 strategies were identified. These were developed by focusing on four areas:

- recruitment and training of volunteers, value and relevance to members, internal and external communication
- mentoring, diversity, YPs
- greater relevance to industry
- conference planning and delivery

For each focus area, sub-topics were discussed in eight groups, facilitated by the following experienced volunteers: Raed Abdullah, Amir Aghdam, Dan Coode, Michael Lamoureux, Murray MacDonald, Scott Melvin, Elena Uchiteleva and Christopher Whitt.

Guiding the day's activities was Fabrice Labeau, who led a wrap-up session to prioritize identified strategies. President Witold Kinsner and President-Elect Maike Luiken led planning of the event.

The Sydney session built on a shorter session that followed IEEE Canada's Spring Board meeting in Windsor and a subsequent survey of experienced volunteers within the region to determine Strengths, Weaknesses, Opportunities and Threats.

Humanitarian Appeal

BY DALE TARDIFF

THIS WAS MY FIRST TIME to attend Sections Congress. I attended as the Primary Section Delegate from Southern Alberta Section (SAS). The congress was worthwhile for the information presented and the people I met. Shan Pandher also attended from SAS as the secondary delegate, coming away with some good ideas for the section.

SC was very informative, with booths and presentations covering a large variety of IEEE

IEEE's Mobile Outreach Vehicle (MOVE) program assists in natural disasters with short-term communications



All about ideas

BY GUILLAUME BOISSET

SECTIONS CONGRESS WAS a tremendous success. It allowed us to explore how we can offer more opportunities to our members here in Vancouver and all across Canada. The Vancouver delegation met delegates from all over the world to share ideas and best practices. We saw a presentation on the IEEE Xtreme 24-Hour Programming Competition, and how it is now a major success that we want to encourage all students and professors to contribute to. There were presentations on how to make IEEE Day a greater success. We intend this year to organize an IEEE Day event across four

services volunteers can take advantage of. The major tools and services were presented in large-group sessions. Small-group sessions were more specifically targeted.

Of particular interest to me going in was to learn about projects that sections can undertake to engage their members. There was such a small-group session Shan and I attended; it turned out to be very popular. By the end, we had several good ideas for possible section projects. For SAS, a humanitarian outreach project would have wide appeal.

sections (Vancouver, Victoria, Seattle, Portland) to generate a greater sense of community. There was the IEEE Move Humanitarian Truck Initiative; we will investigate how to launch a similar program here in Canada. There were many other programs that were presented that we can bring back to improve the experience and opportunities for IEEE members here. Many thanks to Witold Kinsner, Maike Luiken and all the IEEE Canada executive for organizing R7 participation in this event.

*Guillaume Boisset
Sierra Wireless
Section Vice-Chair, Vancouver*

In addition to this small-group session, there was also a breakout session on MOVE; a community outreach project sponsored by IEEE USA. This started as a section project where members outfitted a vehicle to provide some communications and limited power to assist communities facing a natural disaster. When not providing disaster assistance, it is used for community outreach to bring more awareness of IEEE to the general public.

More information is at <http://move.ieeeusa.org/>

Other presentations included information on the major IEEE boards (e.g. Technical Activities, Educational Activities) and what they offer for sections.

I also found the networking at SC very valuable. I had discussions with Section representa-

tives from IEEE Canada and around the world, and compared section issues and solutions with them. All sections encounter similar problems with the ups and downs of member involvement and it is good to compare ideas and understand your particular section is not alone.

The MGA Outstanding Section awards are also presented at Sections Congress. Two awards went to Region 7. I am proud to announce that the Southern Alberta Section won the Outstanding Medium Section award, and London Section won the Outstanding Small Section Award. Congratulations to the London Section; and many thanks to the members and volunteers of both sections that have made this recognition possible.

*Dale Tardiff
Innovative Power Solutions, Inc.
Section Chair, Southern Alberta*

Breadth, depth and reach of IEEE

BY P. TRAVIS JARDINE,

BEING RELATIVELY NEW TO the IEEE community, I did not know what to expect at the 2017 Sections Congress. My exposure to the organization had been mainly through technical conferences confined to the narrow scope of my field of academic research. By the end of the first day, I gained a greater appreciation for the breadth, depth, and reach of the IEEE and the important role it plays in advancing science and technology around the globe.

Of particularly interest to me were presentations by members of the IEEE Society on Social Implications of Technology (SSIT), specifically those of Mr. Paul Cunningham. During these presentations I learned of the sustainable development initiatives being spearheaded by IEEE in Africa and Central America. I had

no idea that IEEE was making that kind of impact.

I also had the opportunity to meet a lot of interesting and fun people. In particular, I attended several networking events organized by IEEE Young Professionals (YP), and found the activities engaged in by many of those attending to be highly motivating.

Finally, our Region held a strategic planning session at the tail end of the Sections Congress. During this time we put forth ideas that will help us set a trajectory that is aligned with IEEE's goals for the future. I returned home with a better perspective on where my Section stands and a handful of ideas to help us improve.

*P. Travis Jardine,
Royal Military College of Canada
Section Secretary, Kingston*

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Experiencing Sections Congress again, it is clear that we have a huge amount of energy and resources. With any organization of our size, change can sometimes seem slow – but looking through the recommendations from 1999-2014, it's amazing how many of those ideas are now implemented.

Voting on the top three recommendations worldwide is a privilege for only primary delegates, one from each section (MGA, regional and secondary section delegates do not vote). During the closing ceremony on Sunday afternoon, the top three voted recommendations were revealed. Again – just as in SC2014 in

Amsterdam--one of our R7 recommendations was top voted. Congratulations, and thanks to all of the section and region volunteers that participated in the process!

*Christopher Whitt
JASCO Applied Sciences
East Area Chair, IEEE Canada
SC '17 Recommendations
Development Coordinator*

» **Recommendations response** BY AMY PINCHUK continued from page 41

employees, and encourage active participation in the local section/chapters.

Sections Congress 2017 gave me ideas, tools, and increased energy to put towards the Montreal Section.

*Amy Pinchuk
InField Scientific Inc.
Section Chair IEEE Montreal*

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for a day. Teach a man to fish and you feed him for a lifetime.”

One session that hit on my passion was a presentation entitled “Inspiring a New Generation of Engineers: Resources to Empower Educators and Parents in Your Section.” This was based on the IEEE Teacher In-Service Program (TISP) and was presented by Dr. Elizabeth Burd from the University of Newcastle. Dr. Burd has experience doing TISP workshops in England, Europe, Australia, and

India. She covered the range of resources currently available on the TryEngineering and Try-Computing websites, describing how these can be used. Among these resources are 134 lesson plans aligned with curriculum documentation. A number of these are already translated into other languages.

One key takeaway from Dr. Burd's presentation for me was the need to focus on promoting these resources with teachers versus trying to deliver them

directly to the students. Teachers are trained and very capable in delivering educational programs. However, many do not have the background to be comfortable with delivering STEM programming. IEEE volunteers (a very limited resource) will gain the most leverage by helping put these resources into the teachers' hands and supporting them to improve their curriculum offerings. Dr. Burd described how successful she has been with workshops for teachers in Australia and in Southeast Asia. We in Region 7 can emulate this to deliver

the IEEE message and have an impact. These TryEngineering resources are also available to parents and that may be an untapped delivery channel for our volunteers.

All session presentations are now available on the SC2017 website. You can also search the SC2017 Event Showcase page on IEEE.tv to find videos of some sessions. Members will be interested in the range of information available.

*Murray MacDonald
Murray MacDonald Consulting
Central Area Chair, IEEE Canada*

N.Ed.: Thanks to all our contributors for taking the time to send in their impressions. Much appreciation as well to Jonathan Palmer and Ritu Malhotra from North Saskatchewan Section for their help in writing the introduction. A thank-you also to Chien Dat Nguyen Dinh for help in gathering reports.