ISMVL Returns to Victoria

From May 14 to 16, 2012, the beautiful city of Victoria, British Columbia, Canada played host to the 42nd IEEE International Symposium on Multiple-Valued Logic (ISMVL). The conference was a great success, attracting 76 attendees from around the world. The technical program consisted of 59 peer-reviewed contributions and many other activities.

British Columbia Parliament Buildings (photo courtesy Y. Yuminaka)

The symposium opened with a panel discussion, organized by Takahiro Hanyu and Masanori Natsui, on future prospects for MVL research. The invited panelists: Sebastian Kerhoff, Chris Winstead, Shinobu Nagayama, Robert Wille, and Naofumi Homma, presented a multi-faceted view of multiple-valued logic, ranging from open theoretical problems to engineering aspects where MVL approaches may be the key enablers of exciting new technologies.

On Tuesday, Michele Mosca from the Institute for Quantum Computing at the University of Waterloo, presented an invited address on quantum computing, cryptography, and compilers. One of his many compelling messages was that we must prepare well in advance for the impact of potentially disruptive technologies, even before they become technically feasible. Furthermore, development of these new technologies will require fundamental research on several fronts, including pure mathematics.

Hajime Machida honours Ivo Rosenberg (photo courtesy Y. Yuminaka)

On Wednesday, the symposium organized a Special Session in Honour of Ivo Rosenberg and his life-long work in mathematics and multiple-valued logic. Hajime Machida gave an invited address on Ivo Rosenberg's contributions to ISMVL. It was obvious to audience members that Hajime must have spent countless hours reading and re-reading Ivo's work! Later in the day, Lucien Haddad, Maurice Pouzet, and Sebastian Kerhoff presented a touching tribute. Technical contributions and personal tributes by dozens of authors were collected into a book for symposium attendees. The special session was videotaped, and a copy of the book was autographed by audience members, to be presented to Ivo Rosenberg for his 77th birthday.

Of course, not all matters were technical. Monday's excursion featured a horse-drawn carriage ride through the streets of downtown Victoria and Beacon Hill Park. Part of Tuesday's banquet was dedicated to Kenneth C. Smith, who recently celebrated his 80th birthday. Later on, George Tzanetakis, Canada Research Chair in Computer Analysis of Audio and Music at the University of Victoria delighted the audience with a historical overview of music technology.

The Outstanding Contributed Paper Award for ISMVL 2011 was presented to Dmitry Zhuk from Moscow State University for his paper entitled "The Lattice of the Clones of Self-Dual Functions in Three-Valued Logic." Marek Perkowski from Portland State University, well known for his greater-than-life presence at ISMVL, received the Long Term Contribution Award, in recognition of his outstanding contributions and

service to the MVL community, his research work on logic synthesis, and his graduate supervision of an ever-growing list of MVL researchers. This year, the Technical Committee introduced a new award, to be known as the Kenneth C. Smith Early Career Award for Microelectronics Research. The inaugural award was presented to Masanori Natsui, Assistant Professor at Tohoku University, for his recent research contributions to ISMVL, most notably demonstrated through his paper: "Process-Variation-Resilient OTA Using MTJ-Based Multi-Level Resistance Control," co-authored with Takaaki Nagashima and Takahiro Hanyu.

Enjoying the streets of Victoria (photo courtesy Y. Yuminaka)

As usual, Yasushi Yuminaka served as the symposium's unofficial "photographer-in-residence." He has kindly posted his pictures on the following website.

https://picasaweb.google.com/102039363427363356265/105_PANA?authuser=0&authkey=Gv1sRgCKOPocj6kKfhFg&feat=directlink

During the Plenary Meeting, led by newly elected Technical Committee Chair Elena Dubrova, members awarded the ISMVL 2014 symposium to Bremen, Germany. Rolf Drechsler will serve as General Chair and Robert Wille will serve as Program Chair. Takao Waho gave us some glimpses into plans for ISMVL 2013 in Toyama, Japan, which will coincide with the 30th anniversary of the first ISMVL ever held in Asia. The ISMVL 2013 website is already up and running:

http://mvl.jpn.org/ISMVL2013/

All roads lead to Rome, but clearly they go through Toyama on the way! The Technical Committee and the ISMVL 2013 symposium organizers look forward to seeing everyone next year in Japan.

Multiple ways to enjoy multiple-valued logic (photo courtesy Y. Yuminaka)

written by V. Gaudet