



Developing Standards Professionals Across Borders

14 August 2014

Chateau Laurier, Ottawa, Canada



2014 ICES Conference Program

8:00 a.m. Registration

Coffee and continental breakfast served.

8:30 a.m. Welcome and Opening Remarks

Speaker: *Erik Puskar, ICES Chair, USA*

8:45 a.m. Welcome from Conference Host — Standards Council of Canada

Speaker: *John Walter, CEO, Standards Council of Canada (SCC), Canada*

9:00 a.m. Contributed Papers Panel: Developing Standards Professionals

Moderator: Angelo Lampousis, City College of New York, City University of New York

Speakers:

Claude Y. Laporte, École de Technologie Supérieure (ÉTS), Canada

An Innovative Approach in Developing Standard Professionals by Involving Software Engineering Students in Implementing and Improving International Standards

One way to develop standards professionals is by having professional graduate students involved in the application and improvement of international standards. At the École de technologie supérieure (ÉTS), a 7,500-student engineering school of Montréal, International Software Engineering Standards are introduced and used in Software Quality Assurance and Software Process Improvement courses and industrial projects conducted by professional graduate software engineering and IT students. A project to adapt ISO/IEC 29110 to the teaching of software development in a technical college is discussed. Finally, the authors present the results of a study that shows support for the need to educate the next generation of standards professionals to embrace standards initiatives.

Song Mingshun, China Jiliang University, China

Analysis of the Development Status of Standardization

Standardization education is an inevitable choice to meet the needs of economic and social development and improve the level of developing standardization talents. This paper analyzes the development status of standardization education from the perspectives of the construction of standardization science discipline and standardization talents training system, as well as international cooperation for standardization education, and finally reaches the corresponding conclusion.

Toshiaki Kurokawa, Design Thinking Research & Education, Japan

T-model for Education about Standardization (EaS)

This paper explores the need for another approach to EaS. "T-model for EaS." is a collaborative course with other professional courses rather than to present the EaS as a separate and independent course.

Andrew L. Russell, College of Arts & Letters, Stevens Institute of Technology, USA

Standardization, the Humanities, and Design: Strategies for Student Engagement

One way to interpret our conference theme of "Developing Standards Professionals Across Borders" is as a call to move across the disciplinary boundaries (or borders) that all universities have. Typically, if students learn about standards at all they encounter the subject as part of an engineering or science curriculum. But as we all know, standards have a deep significance that

stretches beyond the realms of science and engineering and into economics, history, philosophy, and to the very core of our sense of identity. This recognition informs the first part of our paper, which describes a new course called "Standardization and Society" that is being offered for an upper-level Humanities credit at Stevens Institute of Technology.

H.J. de Vries, Associate Professor of Standardisation, Rotterdam School of Management, Erasmus University, The Netherlands

Building a Community of Standards Professionals

People working in certain areas get education and in many cases are members of a professional society. Typically, such a society enables its members to share knowledge and experience, and it contributes to further development for the field. One may wonder, to which extent such professional societies do or should function for the field of standardization? This paper aims to answer this question.

10:30 a.m. Networking Break

Coffee and refreshments will be served.

10:45 a.m. Proposed System of Definition and Classification of Standards

Speaker: *Donggeun Choi, Korean Standards Association, Korea*

Donggeun- will present a proposal developed as part of the current APEC Subcommittee on Standards and Conformance (SCSC) education project, "Inspiring Next Generation of Standards Professional Development."

11:15 a.m. Lightening Round

Interested attendees may report on any new standards education developments in their country, region or organization.

12:00 p.m. Networking Luncheon

Keynote Speaker: *Bonnie Rose, President, Standards, CSA Group*

"More Fung than Frankenstein: The Making of a Standards Professional – Why it Matters and What We Should Do?"

1:30 p.m. Panel: Perspectives of Young Professional and Students

Moderator: *Lisa Rajchel, ANSI, USA*

Speakers:

Lu Hao, Georgetown University, USA

James Lepp, BlackBerry Ltd., Canada

Keith Jansa, Standards Council of Canada (SCC), Canada

Mark Ramlochan, ULC Standards, Canada

Panelists will discuss their first introduction to standards in their academic and/or professional careers, opportunities and challenges and how they have enhanced their skills and knowledge in standards, to meet perceived employer expectations.

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2:30 p.m. Panel: Senior and Mid-Career Perspectives

Moderator: *Nitin Aggrawal, San Jose State University, USA*

Speakers:

Newell Hampson-Jones, BSI Standards Limited, United Kingdom

Glenn Parsons, Ericsson, Canada

Daniel Saputra, Education Development Center of Sriwijaya University, Indonesia

Jianchao Zeng, Food and Drug Administration, USA

Panelists will discuss the opportunities and challenges spanning their career with respect to standards and standardization, with a focus on education, professional development, and marketplace expectations.

3:30 p.m. Break

Refreshments will be served.

3:45 p.m. Breakout Sessions on Career Perspectives

Breakout groups will review the perspectives presented in the previous two panels and discuss ways to overcome some of the challenges or build upon successes. Breakout groups will report back to the entire group.

4:45 p.m. Closing: Final Thoughts and Looking Forward to 2015

Speaker: *Dongguen Choi, Korean Standards Association, Korea*

5:00 p.m. ICES Annual Membership Meeting

Convener: *Erik Puskar, ICES Chair, USA*

6:00 p.m. — 7:30 p.m. Joint ICES/World Standards Cooperative (WSC) Reception

Location: *Courtyard Restaurant, 21 George Street*

Come network with your colleagues and view the Contributed Posters.

Poster Session

The Paradox of Safety Standard Setting, *Lu Hao, Georgetown University, USA*

ASTM International, Providing a Pathway Between Experienced and Emerging Leaders, *Jim Olshefsky, ASTM International, USA*

Benchmarking Education about Standardization in the United Kingdom: A Study of Teaching Practice and Depth of Learning, *Newell Hampson-Jones, British Standards Institution; Gill Whitney, Suzette Keith, Nallini Selvaraj, Middlesex University; and Martin Maguire, Colette Nicolle, Loughborough University, United Kingdom*

Standards in Strategic Context: A Teaching Website

Jeffrey Strauss, Northwestern University, USA

Standards, Cool n' Fun: A Partnership Approach in Building Awareness of the Importance of Standards and Standardization, *Nunu Wisnuaji, Director, ISTU Trisakti University, Indonesia*

Speaker Biographies

Nitin AGRAWAL is an assistant professor of business in the Department of Information Systems at San Jose State University. He has published several papers in highly respected peer reviewed journals, like *MIS Quarterly*, *Decision Sciences*, *IJEC*, and *Electronic Markets*. He is a member of the Association of Information Systems. Nitin is an active researcher in standards and standardization; his research includes organizational and governance, intellectual property, transactional, and economic issues in standardization. Nitin has a Ph.D. in Business Administration from Texas Tech University.

Donggeun CHOI joined the Korean Standards Association (KSA) in 2000 where he is chief researcher. He holds a Ph.D. in Technology and Innovation Management from Sungkyunkwan University of Korea. He is the Vice Chair of ICES. He has published research articles and policy reports on standardization (governance, patents, education) and technology innovation.

Henk DE VRIES is Associate Professor of Standardisation at the Rotterdam School of Management, Erasmus University. His research and teaching focus is on standardisation from a business point of view. Henk is President of the European Academy for Standardisation (EURAS), Special Advisor to the International Federation of Standards Users IFAN, and Immediate Past President of the ICES. He is co-author of more than 300 publications in the field of standardization.

Lu HAO is currently an Institutional Research Analyst at Georgetown University. Lu graduated from Georgetown in 2014, with a Masters Degree in Communication, Culture and Technology (CCT.) Her concentration was globalization and standards, social development, and institutional studies.

Newell HAMPSON-JONES is BSI's Education Development Manager, creating and leading the company's education strategy in the UK and abroad. Newell is a Global Management MBA graduate, with distinction, from Grenoble Graduate School of Business in France and holds a BA (Hons) in English from Anglia Ruskin University, Cambridge. His specialties include understanding and communicating complex ideas and policies, writing and managing growth-focused strategies, public speaking, and stakeholder and change management. Newell represents the UK on CEN/CENELEC's Joint Working Group on Education about Standardization.

Keith JANSA joined SCC in 2011 as the program manager of international standards development before being promoted in 2012 as the manager of sector engagement and standards development innovation. More recently, he has been appointed as the manager of standards solutions and sales. Keith brings considerable experience to his current positions, having been a manager for an industry association standardization program at the Canadian Electricity Association (CEA) and a standards specialist at Underwriters Laboratories of Canada. He has participated in over thirty (30) national and international standardization committees during his young career. Keith has a degree in Health Sciences from the University of Ottawa with a concentration in Philosophy.

Toshiaki KUROKAWA is founding member of ICES Founder, and currently conducting design thinking research and education based in Machida, Tokyo, Japan, providing educational services for standardization professionals, college students, and elementary school children. In 2013, compiled Skill Standards for Standardization Professionals with his colleagues at Study Group on Skill Standard for Standardization (SG-SSS) in the Institute of Image Electronics Engineers of Japan (IIEEJ). Toshiaki has been engaged in standardization through his career at IBM and SCSK (formerly CSK) Corporation, mostly in the ICT area. He has also worked at Toshiba Corporation, Institute for New Computer Technology (ICOT), National Institute of Science and Technology Policy (NISTEP) and the Kanazawa Institute of Technology. He has published papers on education about standardization, cloud computing and design thinking. His research interest covers other areas such as requirement engineering, software testing, ontology and service design.

Speaker Biographies

Angelo LAMPOUSIS has significant experience in implementing standards-based curricula. He developed graduate and undergraduate courses in environmental site assessments, health, and safety for the Department of Earth & Atmospheric Sciences of City College of New York of the City University of New York (CUNY). Angelo is as a member of ASTM committee E50 and the task group responsible for developing ASTM E1527-13, Practice for Environmental Site Assessments, and on the Committee on Education for the American National Standards Institute. He received a B.S. in Agriculture from Aristotle University, Greece, a M.Phil. in Earth and Environmental Sciences, and his Ph.D. in Environmental Geophysics from CUNY's Graduate School & University Center.

Claude Y. LAPORTE retired from the Canadian military in 1991. He then worked for eight years with a defense contractor and a transportation enterprise. In 2000, he joined the École de Technologie Supérieure, a 7,500-student engineering school of Montréal, where he teaches software engineering. He was awarded an honorary doctorate by the Universidad de San Martin de Porres in 2013. He is the co-author of two French books on software quality assurance, published in 2011 and one English textbook, on the same topic, to be published in 2014. He is a member of INCOSE, IEEE, and PMI and a member of the professional association of engineers of the Province of Québec (Ordre des ingénieurs du Québec). He is the Project Editor for ISO/IEC JTC1 SC7 Working Group 24.

James LEPP, is the Standards Manager, for BlackBerry Ltd. After completing a B.A.Sc. in Computer Engineering at the University of Ottawa in 2004, James started his career testing mobile email software at Research In Motion. More recently James has been involved in both implementing products to meet technical and interoperability standards as well as the process of creating those standards.

Glenn PARSONS is an internationally known expert in mobile backhaul and Ethernet technology. He is a standards advisor with Ericsson Canada, where he coordinates standards strategy and policy, including network architecture for LTE mobile backhaul. Over the past number of years, Glenn has held several management and editor positions in various standards activities including IETF, IEEE, and ITU-T. He has been an active participant in the IEEE-SA Board of Governors, Standards Board, and its Committees since 2004. He is currently involved with mobile backhaul standardization in MEF, IEEE, and ITU-T and is vice-chair of IEEE 802.1. He is a Technical Editor for IEEE Communications Magazine and has been co-editor of several *IEEE Communications Society Magazine* feature topics. He graduated in 1992 with a B.Eng. degree in Electrical Engineering from Memorial University of Newfoundland.

Erik PUSKAR is the Manager for Global Standards & Information within the Standards Coordination Office at the National Institute of Standards & Technology (NIST). Erik provides technical information related to standards and supports Federal agencies by monitoring developments in standards and conformity assessment internationally. He oversees the U.S. WTO TBT Inquiry Point and Standards Information Center and leads the Office's impact assessment efforts as well as NIST's initiative on standards education. Erik is vice-chair of the ANSI Committee on Education and serves on ANSI's International Policy Committee. He is currently chair of the ICES. Erik holds a degree in economics from Rutgers University and a Masters Degree in Public Management and Policy from Carnegie-Mellon University.

Lisa RAJCHEL joined the American National Standards Institute (ANSI) in 1983 as an Assistant Program Administrator and currently holds the position of Sr. Director, International Secretariats and Training and Education. In her current role, Lisa is responsible for the oversight and management of twenty-three (23) international standards committees working on the development of more than 1,000 active standards projects distributed over twelve (12) distinct technical areas. Lisa serves as the international secretary for ISO/IEC Joint Technical Committee 1 (JTC 1) on Information Technology and ISO/IEC JTC 1/SC 37 on Biometrics. Lisa also serves as staff liaison for ANSI's Committee on Education and is responsible for the Institute's education and training activities, including outreach to and engagement of universities.

Speaker Biographies

Andrew L. RUSSELL is an Associate Professor in History and Director of the Program in Science & Technology Studies in the College of Arts & Letters at Stevens Institute of Technology in Hoboken, New Jersey. His teaching includes courses on American history, the history of science and technology, the history of business and innovation, and policy aspects of information and communication technologies. He is the author of *Open Standards and the Digital Age: History, Ideology, and Networks*, and he has published over a dozen articles and book chapters on standardization in the Bell System, the American system of voluntary standards, the Internet-OSI standards war, and digital cellular networks in the United States and Europe. He is the Reviews Editor for *IEEE Annals of the History of Computing*, and Chair-Elect (2014) of SIGCIS, an international collective of computing historians.

Mark RAMLOCHAN is a Project Manager with ULC Standards, a standards development organization accredited by the Standards Council of Canada. For the past six years, he has been leading the development of National Standards of Canada on a wide range of subjects, from fire protection equipment to batteries for electric vehicles. Mark holds a Bachelor's degree in Mechanical Engineering from Carleton University

Bonnie ROSE, President, Standards, CSA Group, works with 8,500 expert technical committee members and a portfolio of 3,000 standards and codes in 54 technology areas for Canada and North America. Bonnie provides direction for comprehensive education and training programs and regularly participates at the international and North American standards forums. Bonnie is also a member of the Board of Directors for the Electrical Safety Foundation International Canada (ESFi) and the American National Standards Institute (ANSI).

Daniel SAPUTRA is a Professor of Food Process Engineering at Sriwijaya University, South Sumatra, Indonesia. Daniel also holds an administrative position as Chairman of Education Development Center, Sriwijaya University, South Sumatra, Indonesia. He has published numerous papers internationally and in Indonesia, and holds four (4) Indonesian patents. Daniel has a BS from Bogor Agricultural University, Indonesia, in Agricultural Engineering, a MSC from the University of Kentucky, USA, in Food Process Engineering and a Ph.D. from the University of Kentucky, USA, in Food Process Engineering.

Mingshun SONG has a Ph.D. in Management Sciences from Zhejiang University, China. Currently, he holds a post as Professor & Vice President of China Jiliang University. His research focuses on quality management and standardization. He has participated in different national and international congresses (the China National Technical Committee for Quality Management Standardization, ISO/CASCO/WG33, ICES, and others). He has published different journal articles in his field of research, including *ISO Focus*, *the Journal of Asian Quality*, and *China Standardization*.

Nunu WISNUAJI is a faculty member at the School of Environmental Engineering and the graduate school of Management of Quality and Standardization at Trisakti University-Indonesia. Nunu is also the Executive Director of The Institute for Standardization Trisakti University. Nunu conducts research and development at the graduate & post graduate school of Service Management, Trisakti University.

Jianchao ZENG works at the Center for Device and Radiological Health (CDRH), U.S. Food and Drug Administration (FDA), Department of Health and Human Services (DHHS). Jianchao coordinates CDRH standards activities for medical devices safety in the areas of radiology, software/informatics, nanotechnology, and general specialty task groups (STGs).

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Thank You to the ICES Planning Committee Members

Erik Puskar, NIST (Chair)
Julianna El-Sabeh, Standards Council of Canada (Local Arrangements)
Angelo Lampousis, City College of New York (Contributed Papers Review Chair)
Brian Murphy, ULC Standards
Jim Olshefsky, ASTM International
Deborah Prince, UL
Karen Reczek, NIST
Jeffrey Strauss, Northwestern University
Gabrielle White, Standards Council of Canada (Local Arrangements)

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ICES 2015

Tentatively set for:

Thursday 23 April - Friday 24 April 2015

Incheon, Korea

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