

Scientia Canadensis
*Canadian Journal of the History of
Science, Technology and Medicine*



Volume 41, Number 1, 2019



Volume 40, Number 1, 2018

CSTHA | AHSTC

Canadian Science and Technology
Historical Association

l'Association pour l'histoire de la science
et de la technologie au Canada

***DIVERSITY AND TENSION:
SCIENCE, TECHNOLOGY AND
CANADIAN REGIONALISM IN
HISTORICAL PERSPECTIVE***

***DIVERSITÉ ET TENSION :
SCIENCE, TECHNOLOGIE ET
RÉGIONALISME CANADIEN DANS UNE
PERSPECTIVE HISTORIQUE***

**XXI Biennial Conference
1–3 November 2019**

University of King's College
Halifax, Nova Scotia

Friday, November 1

Registration/Brewery Tour 5:15–7:30pm

Alexander Keith's Brewery (1496 Lower Water St)

Saturday, November 2

Registration 8:30–10:00am

KTS Lecture Hall

Session I 9:15–10:30am

Coffee break

G. Peter Wilson Common Room

Session II 10:45–12:00pm

Lunch/Business Meeting

Prince Hall

Session III 1:30–3:00pm

Coffee break

G. Peter Wilson Common Room

Session IV 3:15–4:45pm

Keynote 5:00–6:30pm

Banquet 7:00–10:00pm

King's Boardroom

Sunday, November 3

Session V 9:00–10:30am

Session VI 10:45–12:00pm

*All sessions will take place in the KTS Lecture Hall

Saturday, November 2

Session I (9:15–10:30am)

Pioneers, Margins and Minorities

Mary Innes, University of King's College

"The Care and Protection of Feeble-Minded Persons': Eugenics in Nova Scotia"

Megan Krempa, University of King's College

"Isolated in time, place, and memory: a history of female engineers in Canada"

Katherine Crooks, Dalhousie University

"'Lizzie' of the Labrador, 'Anauta' in America: Performing Expertise and Racial Authenticity in North America's Culture of Northern Exploration, 1905-1940"

Chair: Dorotea Gucciardo, King's University College

Saturday, November 2

Session II (10:45–12:00pm)

History of Scientific Disciplines

Cédric Blais, Adam Gemmink, Noah Kay, Megan Krempa, Antoine Mercier, Cameron Yetman, and Mélanie Frappier

“Digging up the past: Reflections on the role of provenance studies in the history of science”

Raphael Pelletier, Université du Québec à Montréal

« Balbutiements et tensions : histoire comparée du rapport à la spécialisation durant la phase d’institutionnalisation de la géographie savante au Canada (1947-1964) »

Erich Weidenhammer, University of Toronto Scientific Instruments Collection

“Hydrometallurgy and the Canadian Landscape”

Chair: Mahdi Khelifaoui, Université du Québec à Montréal

Session III (1:30–3:00pm)

Transport and Geography

Patrick John Mansujeto, University of the Philippines

“Aerial Assimilation: Introduction of Aviation in the Philippines during the American Colonial Period”

Etienne Faugier, Lyon University

« L’automobilisme dans la région de Québec, 1890-1960 : entre résilience et adaptation »

Heather Green, Saint Mary’s University

“Auxiliary Technologies of Mining: Environmental Impacts of the Yukon Ditch”

Blair Stein, Clarkson University

“The AEA Silver Dart and Canadian Technological Identity”

Chair: Sean Nicklin, University of Ottawa

Saturday, November 2

Session IV (3:15–4:45pm)

Technology and Energy

Dorotea Gucciardo, King's University College

"'Since the Hydro Came': Electricity in Urban Canada, 1860 to 1940"

Mahdi Khelfaoui, Université du Québec à Montréal

"The 'Peaceful' Uses of a 'Risky' Technology: How U.S. Nonproliferation Policies Affected the Canadian Isotopes Industry"

Matthew Wiseman, Western University

"Nuclear Anxieties: Fallout Research and the Northern Radiation Study, 1963-70"

Chair: William Knight, Ingenium Canada

Keynote/Conférence d'ouverture (5:00pm)

Margaret E. Schotte, York University

"Diversity and Tension: Insights into Regionalism from Early Modern Navigators"

Early modern Europeans were preoccupied with the problem of safely crossing the oceans. Such trips—for trade, war, and colonial expansion—could end in disaster if the navigator fell ill or relied on outdated maps and instruments on the treacherous seas. Each polity feared that their neighbours were more successful than they were in creating new navigators. In this talk, Margaret Schotte will examine the system first developed in Iberia and then adopted in France, England, and the Netherlands to train mariners.



Her analysis of this pan-European educational model reveals that navigators from different states approached particular tasks—from assessing the speed of their vessels to estimating their position—in unexpectedly diverse ways. Many young sailors developed their skills en route to the Grand Banks and New France, but depending on the port of origin of each vessel they would learn different mathematical approaches or instrumental techniques. Given the significant geopolitical ramifications of these maritime practices, it is crucial to discuss these "national styles of science" in productive ways. By considering economics and intellectual history as well as pedagogy and print culture, Schotte offers a nuanced model to talk about these regional differences.

Sunday, November 3

Session V (9:00–10:30am)

History of Photography

Joan Schwartz, Queen's University

"Perspectives on Regionalism and Photography in Nineteenth-Century Canada"

Joshua Green, Provincial Archives of New Brunswick

"Glass Plate Alchemist: The 19th Century Photography of George Taylor"

Brendan Cull, Queen's University

"How to See, Where to Look: Intersections of Photography and Education in Imagining Québec's Botanical Landscapes"

Shannon Perry, Queen's University

"Trans-Atlantic Conversations: Observing Photographic Technological Change within the Amateur Photographic Press"

Chair: Matthew Wiseman, Western University

Session VI (10:45-12:00pm)

Material Culture

Bertrum McDonald, Dalhousie University

"Navigating Challenges in Scientific Communication: John William Dawson's Experiences with Publishing Scientific Books in the Victorian Period"

Tim Fedak, Nova Scotia Museum

"Letters Across a Great Divide: Tracing Dr. Harding's Footprints and Citizen Science (1840-1860)"

Victoria Fisher, University of Toronto

"What Lives, What Dies, What Tells Our Stories: The formation and fate of Canada's university physics collections"

Chair: Blair Stein, Clarkson University

Margaret E. Schotte

SAILING SCHOOL: Navigating Science and Skill, 1550-1800

Baltimore, MD: Johns Hopkins University Press, 2019.

Throughout the Age of Exploration, European maritime communities bent on colonial and commercial expansion embraced the complex mechanics of celestial navigation. They developed schools, textbooks, and instruments to teach the new mathematical techniques to sailors. As these experts debated the value of theory and practice, memory and mathematics, they created hybrid models that would have a lasting impact on applied science.

In *Sailing School*, a richly illustrated comparative study of this transformative period, Margaret E. Schotte charts more than two hundred years of navigational history as she investigates how mariners solved the challenges of navigating beyond sight of land. She begins by outlining the influential sixteenth-century Iberian model for training and certifying nautical practitioners. She takes us into a Dutch bookshop stocked with maritime manuals and a French trigonometry lesson devoted to the idea that "navigation is nothing more than a right triangle." The story culminates at the close of the eighteenth century with a young British naval officer who managed to keep his damaged vessel afloat for two long months, thanks largely to lessons he learned as a keen student.

This is the first study to trace the importance, for the navigator's art, of the world of print. Schotte interrogates a wide variety of archival records from six countries, including hundreds of published textbooks and never-before-studied manuscripts crafted by practitioners themselves. Ultimately, *Sailing School* helps us to rethink the relationship among maritime history, the Scientific Revolution, and the rise of print culture during a period of unparalleled innovation and global expansion.

