







UBC Sustainability Initiative Symposium: Our Campus as a Living Lab Symposium Program

What does it mean to say our campus is a laboratory for sustainability? How is the University community making it so? In what ways can we all contribute to a sustainable future, on our campus and in the wider world?

On September 27, the UBC Sustainability Initiative on the Vancouver campus will engage the university community – students, staff, faculty, residents and partners – in addressing a key UBC sustainability goal: exploring and exemplifying sustainability by utilizing our campus as a living laboratory.

The Campus as Living Laboratory concept brings together people involved in teaching, learning, research, and partnerships with those involved in campus operations and administration to find solutions to today's sustainability challenges.

The Symposium is a one-day event involving up to 300 students, faculty, staff and other community stakeholders. Through multiple sessions and opportunities for conversation, participants will explore the concept and practical application of our campus as a living laboratory through two themes:

- Our campus life, and
- Our campus systems.

The overarching objective of the symposium sessions is to inform the audience and engage them in considering how we might best integrate our activities in teaching and learning, research and partnerships and operational sustainability across campus and in its constituent communities.

Date: September 27, 2010, 8:30 am to 4:30 pm. Reception to follow. Location: UBC Vancouver, Grad Student Centre (Thea Koerner House)

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Symposium Agenda

8:00 to 8:30 Registration and continental breakfast

8:30 to 8:45 Welcome and opening remarks

Presenter: David Farrar, Provost and Vice President Academic, UBC

8:45 to 9:00 Overview of day and our campus as a living lab

Presenter: John Robinson, Executive Director, UBC Sustainability Initiative

9:00 to 10:00 Breaking down the walls that divide us: SEEDS and PICS as models of cross-cutting initiatives

UBC's SEEDS (Social, Economic, Development Studies) program and the Pacific Institute for Climate Solutions (PICS) reach across traditional boundaries to address sustainability issues. In SEEDS, the Vancouver campus is a living lab where undergraduate and graduate students, faculty and staff work together on applied, accredited research projects that address real-life campus sustainability issues. PICS focuses on supporting research that cuts across disciplines to address climate related issues. In this session, representatives of SEEDS and PICS will share their program successes and challenges, and discuss opportunities for the UBC community to further engage in the programs.

Moderator: George Hoberg, Professor, Department of Forest Resources Management, UBC

Presenters: *Liska Richer,* Instructor, Coordinator, SEEDS Program, UBC *Tom Pedersen,* Executive Director, Pacific Institute for Climate Solutions

10:00 to 10:30 Coffee Break

10:30 to 12:00 Concurrent Sessions (choose one) Our Campus Life:

Sustainability in our classrooms and beyond

If it takes a village to raise a child, it most certainly takes a community of engaged students, committed faculty and dedicated staff to foster an exceptional learning environment that advances a civil and sustainable society. In this session, we consider how those involved in sustainability are addressing that lofty UBC goal. Speakers representing UBC students, the UBC Sustainability Initiative's Teaching and Learning office, and the UBC Farm/South Campus Academic Plan will share their perspectives on the unique ways in which sustainability is being addressed in courses, clubs, campus planning and activities.

Moderator: *Nicholas Coops*, Director, Teaching & Learning, UBC Sustainability Initiative

Presenters: *Jean Marcus,* Associate Director, Teaching & Learning, UBC Sustainability Initiative

Spencer Rasmussen, UBC Vancouver Senate Student

Representative At-large

Angela Willock, Director, Common Energy, UBC

Andrew Riseman, Associate Professor, Plant Breeding

& Agroecology, UBC Faculty of Land and Food Systems

Our Campus Systems: Meeting our 2015 goals

When UBC reached the Kyoto targets of reducing Greenhouse Gas Emissions (GHG) in core academic buildings by six percent, it was only the beginning. We are now revving our (hybrid) engines in the push to reach the next goal of reducing GHG emissions by 33 percent by 2015. Learn how three campus initiatives – continuous optimization, the Nexterra Biomass Gasification Combine Heat and Power Plant, and the Steam to Heating Water Conversion and New Campus Central Heating Plant – will accelerate sustainability and position UBC as a leader in integrated clean energy systems.

Moderator: Orion Henderson, Director, Operational Sustainability, Campus Sustainability Office, UBC

Presenters: *Andrew Collins,* Associate Director, Project Services, UBC

James Tansey, Academic Director, Research and Strategic Partnerships, UBC Sustainability Initiative

Jeff Giffin, Alternative Energy, Special Project Manager, UBC



Symposium Agenda

12:00 to 1:00 Lunch and keynote address

A promise, a path and pushing the envelope: Our campus as a living lab

Presenter: Pierre Ouillet, Vice President, Finance, Resources and Operations, UBC

1:00 to 2:00 UBC as an agent of change for sustainability

UBC provides a natural hub where the University, business and government can come together to partner and participate in the search for ideas and solutions to our planet's sustainability challenges. This session showcases UBC's work on strategic alliances and collaborations with industry and community partners. Panelists from the City of Vancouver, BC Hydro and the National Research Council - Institute for Fuel Cell Innovation (NRC-IFCI) will share their perspectives on the value and opportunities inherent in their partnerships with UBC and what that means to their organizations.

Moderator: Brent Sauder, Director, Strategic Initiatives, Office of the Vice President Research & International, UBC

Presenters: Gail McBride, Senior Manager, Innovation & Conservation Leadership, BC Hydro Sean Pander, (Acting) Sustainability Manager, Office of the City Manager, City of Vancouver Maja Veljkovic, Director General, National Research Council Canada - Institute for Fuel Cell Innovation Dan Wayner, NRC Vice-President, Physical Sciences

2:00 to 2:30 Coffee Break

2:30 to 4:00 Concurrent Sessions (choose one) Our Campus Life:

Living in the laboratory

If our campus is a living laboratory, then there is an army of residents living in the lab. In this session, speakers representing U-Town, the University Neighbourhoods Association and the Residence Sustainability Coordinators program will share their perspectives on the infrastructure and opportunities, at present and in the future, for campus residents to participate in sustainability initiatives.

Moderator: *Erica Frank,* USI Fellow, Professor, School of Population and Public Health, UBC

Presenters: Kera McArthur, Associate Director, Communications, Campus & Community Planning, UBC

Ralph Wells, Sustainability Manager, University Neighbourhoods Association

Theresa Fresco, Student Coordinator for the Residence Sustainability Reps Program, Campus Sustainability Office, UBC

Deb Baldarelli, Residence Coordinator and Sustainability Committee Chair at Totem Park residence, UBC

Our Campus Systems: Getting aggressive: Pushing past 33 percent

"We believe it's important to set ambitious standards to address the realities of climate change and show it can be done." So said President Toope in early 2010 when announcing UBC's aggressive GHG emission reduction targets. In this session, attendees will learn how smart technologies and systems, waste-to-energy projects, and water initiatives can contribute as part of an integrated approach to UBC's GHG emission reduction targets for 2020 and beyond.

Moderator: *John Metras*, Managing Director Infrastructure Development, UBC

Presenters: Steve Cockcroft, Academic Director, Research and Strategic Partnerships, UBC Sustainability Initiative

Kristina Welch, Manager, Green IT, ISIS: A Research Centre at the Sauder School of Business, UBC

Hadi Dowlatabadi, Canada Research Chair Professor, Institute for Resources, Environment and Sustainability, Liu Institute for Global Issues, UBC

Gunilla Oberg, Director, Institute for Resources, Environment and Sustainability, UBC

4:10-4:30 Blueprints and big ideas: The road ahead

Presenter: John Hepburn, Vice President, Research and International, UBC

4:30 to 5:30 Reception, no-host bar



Symposium Moderators and Presenters

8:30 - 8:45

Welcome and Opening Remarks



David Farrar, Provost and Vice President Academic, UBC

David Farrar is the Provost and Vice President Academic at UBC as well as a Professor of Chemistry. Dr. Farrar came to UBC in 2002 from the University of Toronto. In 2003 he was appointed UBC's Vice-Provost, Students, with responsibility for all central enrolment, student affairs and student services activities. He was concurrently appointed Deputy Provost in 2004.

Dr. Farrar received his undergraduate and master's degrees from U of T, and his doctorate from the University of Western Ontario. He has authored or co-authored over 80 technical papers, holds five patents, and has supervised over 25 graduate students and postdoctoral fellows.

8:45 to 9:00

Overview of day and our campus as a living lab



John Robinson, Executive Director, UBC Sustainability Initiative

John Robinson is Executive Director of the UBC Sustainability Initiative and a professor in the Institute for Resources, Environment, and Sustainability as well as the Department of Geography. His own research focuses on the intersection of sustainability, social and technological change, behaviour change, and community engagement processes.

Dr. Robinson is a Fellow of the Trudeau Foundation, a member of numerous sustainability related boards, and has been a Lead Author in the last three reports of the Intergovernmental Panel on Climate Change, which won the Nobel Peace Prize in 2007.

Major current projects include the Centre for Interactive Research on Sustainability, now under construction at UBC ,and the Greenest City Conversations project.

9:00 to 10:00

Breaking down the walls that divide us: SEEDS and PICS as models of cross-cutting initiatives



George Hoberg, Professor, Department of Forest Resources Management, UBC George Hoberg is a Professor in the Department of Forest Resources Management at UBC where he teaches courses on sustainable energy and forest policy. He received a BS from UC Berkeley, and his PhD from MIT.

A political scientist by training, Dr Hoberg's research interests include energy policy, forest policy, and more generally the design of policies and institutions to promote sustainability. He is co-author of the forthcoming book *Canadian Tenure Policies and Sustainable Forest Management* and has written books on BC forest policy, US environmental policy, toxic substances regulation as well as editing two books on comparative Canada-US policies and the US influence on Canada.

He blogs at http://greenpolicyprof.org/wordpress



Liska Richer, Instructor, Coordinator, SEEDS Program, UBC

Liska Richer co-manages the UBC SEEDS (Social, Ecological, Economic, Development Studies) Program within the Campus Sustainability Office. Since 2004, she has worked as a Project Coordinator, instructor and co-investigator on a jointly initiated SEEDS program's UBC Food System Project with the Faculty of Land and Food Systems.

Liska has worked extensively with campus stakeholders in developing interdisciplinary and community-based action research curriculum, and in working to create a more sustainable campus community. She has a BA in Sociology and is currently a PhD Candidate in UBC's Faculty of Land & Food Systems.



9:00 to 10:00 cont'd.



Tom Pedersen, Executive Director, Pacific Institute for Climate Solutions

Dr. Pedersen was appointed Director of the Pacific Institute for Climate Solutions in 2009. His previous positions included Dean of Science (2003-2009) and Director of the School of Earth and Ocean Sciences at the University of Victoria (2002-2003).

Dr. Pedersen holds a degree in geology from UBC and a PhD in marine geochemistry from the University of Edinburgh. He is also a fellow of the Royal Society of Canada and a fellow of the American Geophysical Union. He is an internationally recognized authority on ocean chemistry, has published extensively in the field of paleoceanography, and has longstanding interests in climate change issues and the application of government policy to climate-change mitigation and adaptation.

10:30 - 12:00

(Session 1) Our Campus Life: Sustainability in our classrooms and beyond



Nicholas Coops, Director, Teaching & Learning, UBC Sustainability Initiative

Nicholas Coops is a faculty member in the Faculty of Forestry specializing in the application of remote sensing (viewing the Earth from above) imagery to environmental issues. He teaches remote sensing at both the undergraduate and graduate level, and leads the Integrated Remote Sensing Studio (IRSS), a team of 15 researchers and students developing new, innovate approaches to spatially model environmental phenomena.



Jean Marcus, Associate Director, Teaching & Learning, UBC Sustainability Initiative
Jean manages the USI Teaching & Learning Office and oversees the coordination, support and enhancement of sustainability education at UBC. Jean received her Ph.D. in Biology from the University of Victoria and came to UBC in 2004 for a postdoctoral fellowship in marine conservation.

In 2008, Jean began to actively work on advancing sustainability education across campus in her role as Project Manager of the Academic Programs Working Group of the President's Advisory Council on Sustainability. Jean is also a Scientist in Residence with the Vancouver School Board, and teaches various ecology and conservation biology courses.



Spencer Rasmussen, UBC Vancouver Senate Student Representative At-large Spencer Rasmussen is a student leader in the UBC sustainability movement. His first three years on campus were spent helping build Common Energy, a student organization which aims to bring UBC beyond climate neutral. Spencer has held various roles with goBEYOND, a province-wide, youth-led initiative with similar objectives. Most recently, he was elected as a student representative at-large to the UBC-Vancouver Senate with a mandate of advancing sustainability at this university. Spencer will eventually complete a degree in political science and economics.



Angela Willock, Director, Common Energy, UBC

Angela Willock wears many sustainability hats. As a student activist, she is currently the Director of Common Energy UBC and the UBC Campus Organizer for goBEYOND. As a university employee, she works at the Centre for Teaching, Learning and Technology as both the Undergraduate Assistant for sustainability education initiatives and Sustainability Coordinator. As a student, she is working on a self-directed Sustainable Communities undergrad degree in the Faculty of Land and Food Systems. This year she will undertake a SEEDS project with the goal of working towards a bottled-water-free UBC.



10:30 to 12:00 cont'd.



Andrew Riseman, Associate Professor, Plant Breeding and Agroecology, Faculty of Land and Food Systems, UBC

Andrew Riseman is an Associate Professor, Plant Breeding and Agroecology. He is also the USI-UBC Farm Liaison, the Academic Director for Centre for Sustainable Food Systems-UBC Farm, a researcher at the UBC Botanical Garden, and an Associate Member in the Department of Botany. Andrew's areas of research include the breeding of crops for sustainable production systems and/or the development of urban agricultural technologies compatible with attractive and livable communities.

Andrew has a strong interest in student-centered, active pedagogies and in developing learning objects and technologies that help create enhanced learning environments. Originally from Philadelphia, Andrew completed his doctorate at Penn State followed by a post-doc position in Denmark.

10:30 - 12:00

(Session 2) Our Campus Systems: Meeting our 2015 goals



Orion Henderson, Director, Operational Sustainability, Campus Sustainability Office, UBC Orion is the Director, Operational Sustainability at the University of British Columbia. In this role, he directs the activities of the Campus Sustainability Office (CSO). The Office is responsible for facilitating the identification and implementation of sustainability initiatives in the planning, development and operation of the campus lands and facilities, for engaging the community in sustainability initiatives, and for creating incentives for sustainable behaviours among staff, faculty, and students. Orion develops strategic plans for the CSO and is responsible for directing the development, planning, managing, monitoring and evaluation of CSO programs.

Orion received his Bachelor of Engineering in Chemical Engineering from CIT, Ireland and his Master of Science in Environmental Technology from Imperial College, England.



Andrew Collins, Associate Director, Project Services, UBC

Andrew Collins is a Chartered Surveyor, a Fellow of the Canadian Institute of Quantity Surveyors and a registered Professional Quantity Surveyor. He is responsible for UBC's Infrastructure Development group, Project Services, the department that is tasked with providing design, construction and commissioning of capital projects for modernizing, renewal and changes to the existing infrastructure on campus and key projects within the sustainability stable of capital works.

Projects within his group include Nexterra bio-energy; continuous optimization; changes to the district heating system; and the UBC Renewal program. Andrew is also project manager for the Smart Energy System initiative.



James Tansey, Academic Director, Research and Strategic Partnerships, UBC Sustainability Initiative

James Tansey is the Executive Director of the Incubator for Social Innovation and Sustainability (ISIS) and leads the Sauder School of Business's activities on sustainability and social innovation. James' research activities cover a number of areas including social enterprise, climate change, and the social impacts and acceptability of new technologies.

James received his PhD in Environmental Sciences from the University of East Anglia in 1999. Prior to joining UBC, he was based in the UK as a lecturer in Science and Technology Studies with the Said Business School in Oxford, where he was also deputy director of the James Martin Institute for Science and Civilization.



10:30 to 12:00 cont'd.



Jeff Giffin, Alternative Energy, Special Project Manager, UBC

Jeff Giffin is the Alternative Energy Special Project Manager for UBC Utilities and a Clean Energy Engineering Masters Candidate. His interests lie in combining innovative new technologies to solve age-old problems. He is highly involved in the UBC/Stantec Alternative Energy Feasibility Study and the UBC/Nexterra Advanced Biomass Research and Demonstration project.

Presently Jeff is working with UBC Project Services to deliver the steam to hot water conversion which will save an estimated 24 percent of the natural gas consumed by the steam plant and provide enhanced opportunities for future clean energy research and campus as a living laboratory projects.

12:00 - 1:00 A promise, a path and pushing the envelope: Our campus as a living lab



Pierre Ouillet, Vice President, Finance, Resources and Operations, UBC

Pierre acts as Chief Financial Officer, with oversight of a \$2 billion operating budget. Pierre is responsible for managing UBC's Infrastructure, Building Operations and Ancillary businesses including Student Hospitality, the Bookstore, Parking, and Security. He has oversight over Campus and Community Planning for both the Academic Precinct and U-Town. Pierre is also a Board Member on UBC Investment Management Trust and UBC Properties Trust.

Prior to joining UBC, Pierre held several leadership positions for Best Buy International, was an Associate Principal with McKinsey & Company, and was an aerospace engineer in France and the US.

Pierre has a Master of Science from University of Maryland, a Master of Business Administration from INSEAD and is a Certified General Accountant.

1:00 - 2:00 UBC as an agent of change for sustainability



Brent Sauder, Director, Strategic Initiatives,
Office of the Vice President Research & International, UBC

As UBC's Director, Strategic Partnerships, Brent is responsible for forging Industry-UBC partnerships that realize solutions to industry challenges and further UBC's research and technology demonstration missions. Brent resumed his employment at UBC after a two-year appointment as Assistant Deputy Minister, Technology Research and Innovation, in the BC government.

In his 25 years in the research and innovation sector, Brent has served as Director, Office of Research Services at UBC; led the B.C. Advanced Systems Institute; and held management/research positions at MacMillan Bloedel and the Forest Engineering Research Institute of Canada. Brent is a member of the Governance Committee for the BC Innovative Clean Energy Fund and Chairman of NSERC's Synergy Awards for Innovation Selection Committee. Brent received his Bachelor and Master of Forestry degrees from UBC.



1:00 to 2:00 cont'd.



Gail McBride, Senior Manager, Innovation and Conservation Leadership, BC Hydro As Senior Manager, Innovation and Conservation Leadership, Gail McBride's strategic priorities are advancing world leading energy efficient policies, practices and technologies in BC; transformation of the industrial sector toward sustainable energy productivity; and embedding energy conservation in BC Hydro's business. She has leadership responsibility for several groups in Power Smart including Technology Innovation, Codes & Standards, Industrial Marketing and BC Hydro's Lead by Example team.

Prior to BC Hydro, Gail held management positions at GenoLogics Life Sciences, McKesson Medical Imaging, H.A. Simons Ltd. (now AMEC), and the BC government. She has an MBA and B.Sc. Agriculture from UBC.

Gail is currently on the boards of the Canada Green Business Council and The Minerva Foundation for BC Women.



Sean Pander, (Acting) Sustainability Manager, Office of the City Manager, City of Vancouver

Sean Pander is a professional engineer with a graduate degree in Resource Management from UBC and over 15 years of experience in the energy and sustainable development fields. In his current role as the Sustainability Manager for the City of Vancouver, he is responsible for overseeing the development of Vancouver's plans to become the greenest city in the world by 2020, with a focus on fostering strategic partnerships and implementation alignment.



Maja Veljkovic, Director General of the NRC Institute for Fuel Cell Innovation Maja Veljkovic has served as Director General of the NRC Institute for Fuel Cell Innovation (NRC-IFCI) since 2001. Throughout her tenure at NRC, Mrs. Veljkovic has worked with an extensive network of industrial and academic researchers throughout NRC and across Canada, as well as private sector companies.

Mrs. Veljkovic came to NRC after 21 years in the private sector as a senior engineer, R&D manager and Senior Advisor, Upgrading Research Program at Syncrude Canada. Mrs. Veljkovic holds a M.Sc. in Chemical Engineering from the University of British Columbia (1976).



Dan Wayner, NRC Vice-President, Physical Sciences

Dr. Dan Wayner is NRC Vice-President, Physical Sciences. His current portfolio includes seven NRC research institutes in the fields of astrophysics, chemical process and environmental technology, information technology, microstructural sciences, molecular sciences, national measurement standards and nanotechnology. He also oversees NRC's Fuel Cell and Hydrogen National Program.

Dr. Wayner received a PhD with distinction from Dalhousie University in 1984. Following a postdoctoral position with K.U. Ingold at NRC in the area of organic free radical chemistry, he joined NRC in 1986, serving as Director General of the NRC Steacie Institute for Molecular Sciences (NRC-SIMS) from 2003 to 2010.



2:30 - 4:00 (Session 1) Our Campus Life: Living in the laboratory



Erica Frank, USI Fellow, Professor, School of Population and Public Health, UBC Dr Erica Frank, MD, MPH is a professor in the School of Population and Public Health at UBC, and a Canada Research Chair. She is the founder and principal investigator of the "Healthy Doc = Healthy Patient" initiative (delineating and building on the relationship between physicians' personal and clinical practices); founder and director of Health Sciences Online (www.hso.info, creating a global virtual health sciences university); past president of Physicians for Social Responsibility; and a USI sustainability fellow.



Kera McArthur, Associate Director, Communications, Campus & Community Planning, UBC Kera McArthur is the Associate Director of Communications, Campus and Community Planning, UBC, where she leads communications, consultation, public engagement and community development initiatives. Kera spent several years as a Vancouver-based consultant running communications, research, and fundraising programs before moving to the public sector. Most recently, Kera worked at one of Vancouver's largest public relations and social media companies where she developed and managed integrated social-marketing campaigns.

Kera is a member of the board of Think City, a local non-profit organization focused on urban policy and citizen engagement. Kera was also a student-elected member of the UBC Board of Governors in 1997/98. Kera is passionate about public engagement and community development and brings that passion to her role at UBC.



Ralph Wells, Sustainability Manager, University Neighbourhoods Association

Ralph Wells is the Sustainability Manager for the University Neighbourhoods Association (UNA). He is responsible for developing sustainability initiatives for the residents and businesses of the UNA neighbourhoods. These initiatives include campus as a living laboratory projects in partnership with UBC, such as a campus-wide waste audit project currently underway.

Prior to joining the UNA, he worked as a Research Associate for UBC, where his responsibilities included work on the development and application of a framework for sustainable forest management. Ralph received his master's degree from the School of Resource and Environmental Management at Simon Fraser University in 1996.



Theresa Fresco, Student Coordinator for the Residence Sustainability Reps Program, Campus Sustainability Office, UBC

Theresa Fresco is currently the student coordinator for the Residence Sustainability Reps Program at the UBC Campus Sustainability Office. Following her passion for student engagement, she is also an active member of the student body representing the Planning Student Association on AMS Council and sitting on the steering committee for the goBEYOND Project, a student-run climate action organization that helps universities across BC and globally go beyond carbon neutral. She is currently pursuing her Masters in Planning at UBC's School of Community and Regional Planning, focusing on water, climate change and development issues in the Philippines.



2:30 to 4:00 cont'd.



Deb Baldarelli, Residence Coordinator and Sustainability Committee Chair at Totem Park residence, UBC

Deb Baldarelli is a recent UBC Psychology graduate and works as a Residence Coordinator at Totem Park Residence. Deb has always had an interest in sustainability, but it was her recent involvement with the UBC Farm that catalyzed and inspired her to further develop the sustainability program within RezLife and Student Housing. She is especially looking forward to working with the UBC Campus Sustainability Office and the Totem Park "Doing it in the Dark" energy competition.

(Session 2) Our Campus Systems: Getting aggressive - Pushing past 33 percent



John Metras, Managing Director, Infrastructure Development, UBC

John Metras is Managing Director, Infrastructure Development at UBC. John and his team of facilities planners and project managers are responsible for the planning, development, renewal and renovation of institutional facilities at UBC's Vancouver and Okanagan campuses - a current capital program of over \$1 billion.

John works closely with campus stakeholders and UBC Properties Trust to help create great spaces for learning, research and community that meet the highest standards for functionality, sustainability, maintainability and minimum life-cycle cost. John is a Professional Engineer with a Master of Business Administration from UBC.



Steve Cockcroft, Academic Director, Research and Strategic Partnerships, UBC Sustainability Initiative; Professor of Materials Engineering, UBC

As one of two Academic Directors, Research and Partnerships in the USI, Steve Cockcroft is charged with securing partnerships with the clean technology sector to both meet UBC's GHG emission targets and aspirations to exploit its physical infrastructure as a living laboratory of clean technology. As an example, Professor Cockcroft was instrumental in securing the Nexterra-UBC Bioenergy Research and Demonstration Project.

The principle goal of Steve's research is to increase the use of light-weight alloys in the transportation sector to reduce energy consumption. He served as Head of the Department of Materials Engineering from 2000 to 2008, as Dean Pro-Tem/Acting Dean of the Faculty of Applied Science in 2008 and as Senior Associate Dean from November 2008 until June 2009.



Kristina Welch, Manager, Green IT, ISIS: A Research Centre at the Sauder School of Business, UBC

Kristina Welch is a graduate of the Masters of Business Administration program at UBC's Sauder School of Business, where she focused on sustainable development, economics, and public policy. Kristina worked with the Sustainability Team for the Vancouver Organizing Committee for the 2010 Olympic Winter Games, where her efforts focused on their GHG emissions inventory program. Kristina is a Manager of Green IT at ISIS, a research centre with the Sauder School of Business. Her current projects focus on the application of Smart Grid systems on campus and the carbon impact and opportunities for green data centres in Canada. She holds an Honours BSc. in Computer Science from The University of Western Ontario.



2:30 to 4:00 cont'd.



Hadi Dowlatabadi, Canada Research Chair Professor, Institute for Resources, Environment and Sustainability, Liu Institute for Global Issues, UBC

Hadi Dowlatabadi studies socio-economic aspects of technology and its impacts on the environment and health. He has published hundreds of papers and helped 35 students complete their PhDs. He is co-founder of Offsetters and co-founder/CTO of Green-Erg Technologies Inc. He is Canada Research Chair & Prof in Applied Mathematics and Global Change at UBC, Adjunct Professor at Carnegie Mellon University, Pittsburgh PA, and University Fellow at Resources for the Future, a think tank in Washington DC. He received his PhD in Physics from the University of Cambridge (1984).



Gunilla Oberg, Director, Institute for Resources, Environment and Sustainability, UBC Gunilla Oberg assumed the position of Professor and Director of the Institute for Resources, Environment and Sustainability at UBC in 2006. Previously, she was the founding director of the Centre for Climate Science and Policy Research at Linköping University in Sweden. In addition to her natural science research, she has led a number of complex interdisciplinary environmental projects. Her projects focus on the use of knowledge in decision-making.

Gunilla is currently spearheading the Integrated Water and Energy Project at UBC, which brings together researchers from engineering, computer science, ecohydrology, ecology, economy and sociology, to focus on sustainable waste water management in close collaboration with industry, municipalities and governmental organizations.

4:10 - 4:30 Blueprints and big ideas: The road ahead



John Hepburn, Vice President Research & International, UBC

John Hepburn completed his PhD at the University of Toronto under Nobel Laureate John Polanyi. He began his academic career at the University of Waterloo, ultimately becoming Chair of Chemistry. In 2001, he became Professor and Head of Chemistry at UBC, with a joint appointment in Physics & Astronomy. He became Dean of Science in 2003 and Vice President Research in 2005, inheriting responsibility for UBC's international portfolio in 2009.

John is internationally renowned for his research in laser spectroscopy and laser chemistry, has received numerous awards and has lectured at conferences and research institutions around the world. He volunteers on several Boards of Directors and Advisory Committees.