

ISIE News

International Society For Industrial Ecology

Happy New Year to All of Our Members

Special points of interest:

- · Letter from the incoming president
- Goodbye note from the former ISIE Newsletter editor
- · ISIE election results
- JIE News
- News from around the Globe
- Industry Corner
- Members News
- Open Positions
- Conferences

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Letter from the Incoming ISIE President, by Greg Keoleian

Dear ISIE members,

Happy New Year! I expect 2011 to be another exciting year for ISIE building on the many achievements of 2010. We wish to extend our deep appreciation and special thanks to Roland Clift, ISIE President from 2009-2011. Roland served both formally as President and informally as an executive director during that time (due to budgetary reasons no executive director position was appointed after John Ehrenfeld). I served as the President Elect during his tenure and can report first hand on the tremendous energy and effort Roland invested in the Society.

Fortunately, the position of Executive Director was reestablished by the previous Council in December. I pleased to announce that Roland Clift has been appointed, with unanimous approval by the new Council, as Executive Director of ISIE for a two year term. There is a very modest salary which should be considered more an honorarium.

Special thanks to Council members and Officers that have finished their terms (including Secretary Kristan Cockerill, Treasurer Chris Kennedy – re-elected, Council members Sangwon Suh and Marian Chertow – who remains a member of Council in her new role as President-elect, and Past-President Marina Fischer-Kowalski) and to the nominating committee, all candidates, and the encouragingly large number of members that voted in the elections!

Congratulations to new members of the Council and Nominating Committee! (see list in the newsletter) There was a tie for the Secretary position and a decision was made to appoint both Clint Andrews and Anthony Chiu for special assignments to support the Student Chapter and young ISIE professionals. We have an outstanding and diverse leadership team for the Society and excellent administrative support with Melanie Quigley in the Yale Office and Heather Shaw employed by the University of Surrey as Roland's PA.

Our industrial ecology field is growing at an exponential rate and the Society will continue to play a key role in the development and application of methods, tools and solutions for advancing sustainability. This is evidenced in part by the large number of abstracts submitted for the 2011 ISIE conference in Berkeley June 7 – 10. Arpad Horvath (conference chair), the program committee and ISIE staff have been working on creative solutions to accommodating a much larger audience.

Roland Clift and I have begun to outline priorities and goals for the next year and will discuss implementation plans during our first quarterly council meeting. Here are few key areas of focus: growing society membership, strengthening the Society's student chapter, providing guidance for IE faculty seeking tenure, and refining ISIE conference hosting policies and guidelines.

Recently I was asked to provide a one sentence description of ISIE as part of a brief announcement of my position as President of ISIE for the University of Michigan. I turned to two logical sources and combined concepts from the ISIE website and the Journal of Industrial Ecology. How does one convey the essence of the Society in one sentence? Here is my synthesis: "The Society is an interdisciplinary forum of scientists, engineers, policymakers and advocates that advances systems based analysis methods, tools and solutions for improving the sustainability of technology, product and service systems, and economies." What would you say?

Greg Keoleian



"Industrial ecology is, of course, much more "than chemical engineering outside the pipe" but the enthusiastic reception of the lecture confirms that this is a good way to explain what we do to the chemical engineering community."

LA CONTRA

"Si quiere ser ecológico: camisas de nailon'



ISIE in the News: Roland Clift

It's Chemical Engineering, Jim. But Not As We Know It

The international chemical engineering community has an annual award lecture, the Danckwerts lecture, named to commemorate Peter V. Danckwerts who was the second professor of chemical engineering at the University of Cambridge, foundof the journal ing editor "Chemical Engineering Science", and originator of some of the theoretical approaches which are central to chemical engineering (including dence time theory, which has applications in material flow accounting). The lecture is sponsored by the European Federation of Chemical Engineering (EFCE), the American Institute of Chemical Engineers (AIChE) and Elsevier (publishers of Chemical Engineering Science).

The 2010 Danckwerts lecture was given in November at the AIChE Annual Meeting in Salt Lake City by the President of ISIE. Roland Clift. The title of the lecture, whose text will be published in "Chemical Engineering Science", was "Chemical Engineering Outside the Pipe: Industrial Ecology and Sustainability".

Roland interprets this as significant recognition for industrial ecology:

"The previous Danckwerts lecturers have all been more-orconventional chemical engineers. The fact I was invited to give the 2010 Danckwerts lecture means that the chemical engineering community has recognised not just the existence but the significance of industrial ecology." The lecture was "concerned with explaining the emerging field of Industrial Ecology and why it represents a new and important area for application of the skills of the chemical engineer... Chemical engineering principles can be applied to managing material and energy flows and transformations in an economy or an industrial sector or a company - i.e. to industrial ecology - as much as to flows and transformations in pipes and vessels."

The following web site includes a short interview with Roland:

http://ow.ly/3osXy

The full lecture is available at:

http://apps.aiche.org/ chemeondemand/popup.aspx? url=/aicheconferences/2010AnnualMeeting/ AIChE A10 16208 207014.mp4

Roland was also interviewed in September 2010 for the Span-"La newspaper Vanguardia" and for the Europapress agency while he was visiting a conference on eco intelligence held in Barcelona.

P.S. Someone, unknown, has set up a Roland Clift page in Wikipedia. To whoever did this, Roland would just like to say "Get a life".

The following website includes the coverage of Roland's lecture on the AIChE blog:

http:// chenected.aiche.org/ sustainability/professorroland-clift-on-industrialecology-andsustainability/







"Continuity gives us roots; change gives us branches, letting us stretch and grow and reach new heights." ~Pauline R. Kezer

ISIE News has had editorial continuity for many years and it is time to change, to branch out, and to explore new ideas. Making the decision to step down as editor was difficult, but it is an appropriate move for me and for the newsletter.

I have thoroughly enjoyed working with the ISIE Council, staff and Society members to produce the newsletter. My co-editors – Edgar Hertwich, Scott Matthews, Ray Cote, and Anthony Chiu, as well as several representatives from the Student Chapter – have been marvelous. Their support made the newsletter possible.

The Society is fortunate to have Vered Doctori Blass taking on the editorial duties. She brings a new perspective and energy to ISIE News. I know that the newsletter is in good hands! Finally, thank you to all of the ISIE members who contributed to and read the newsletter. Your input is always valued and I do hope that we have provided value to you through ISIE News.

Kristan

ISIE Updates—Corporate Membership

New Corporate Membership:

Gold Silver

Bronze

ISIE now offers corporate memberships under the following conditions:

Background Conditions

Subject to approval in each individual case by majority vote of Council, a commercial, governmental or non-governmental organisation may become a supporting member of ISIE. In considering approval, Council will consider, inter alia, whether the organisation has shown sufficient commitment to furthering and applying industrial ecology. Organisations wishing to become supporting members must commit to two years of membership, and continuation will be reviewed by Council at each renewal of membership.

Grades of Membership

Three grades of membership are available. At each grade, an organisation in supporting membership will provide a minimum annual sum to the Society and receive membership for a specified number of named individuals, each of whom will receive the full benefits of membership including receipt of a printed copy and electronic access to the Journal of Industrial Ecology and electronic access to the Society's newsletter and website. In addition, an organisation in gold or silver membership will be receive free registration for two people, who need not be the named individual members, at the ISIE's biennial conference falling within

the two-year period.

1. Gold supporting member:

- Minimum annual dues: \$10,000.
- Number of members: 10

2. Silver supporting member:

- Minimum annual dues: \$5,000.
- Number of members: 5

3. Bronze supporting member:

- Minimum annual dues: \$1,500.
- Number of members: 2

ISIE Election Results, December 2010

President-elect: Marian Chertow

Secretary: Exactly equal votes: Clint Andrews and Anthony Chiu – both considered elected.

Treasurer: Chris Kennedy

Council Members: Heinz Schandl and Valerie Thomas

Nominating Committee: Roland Geyer and Keisuke Nansai

Council Members

Position	Last	First
President	Keoleian	Greg
President-elect	Chertow	Marian
Immediate Past President	Clift	Roland
Secretary	Andrews	Clint
Secretary	Chiu	Anthony
Treasurer	Kennedy	Chris
JIE Editor in Chief	Lifset	Reid
Council Member	Hashimoto	Seiji
Council Member	Cervantes	Gemma
Council Member	Schandl	Heinz
Council Member	Tsuyoshi	Fujita
Council Member	Thomas	Valerie
Council Member	Weisz	Helga

Nominating Committee

Congratulations to everyone

Position	Last	First
Past President	Clift	Roland
Member	Matthews	Deanna
Member	Steinberger	Julia
Member	Hertwich	Edgar
Member	Nansai	Keisuke
Member	Geyer	Roland

and thank you for serving the ISIE community!

New Subject section: Sustainable Urban Systems

The new Sustainable Urban Systems (SUS) section at ISIE was formally launched in January 2011. The SUS section is seeing a lot of activity, with more than 75 potential interested members, many of whom stood for Board office and participated actively in recent board elections. The SUS list of potential members includes those already active in Industrial Ecology, plus new interested members drawn from urban planning, architecture, infrastructure engineering, public affairs and social sciences. It is exciting that potential members come from diverse fields as well as from many nations in Asia, Australia, EU and North America.

The recently elected Board Members of the SUS section are Anu Ramaswami (Chair) from the University of Colorado Denver, USA; Xuemei Bai (CSIRO, Australia); Helge Brattebo (Norwegian University of Science and Technology); James Keirstead (Imperial College, UK) and Chris Kennedy (University of Toronto, Canada). Chris Kennedy was instrumental in initiating this section in the Fall of 2010 and encouraging many members to run for Board positions. The SUS Board had its first meeting on January 24, 2011. A working description for the SUS section was proposed as below, and will be

"The Sustainable Urban Systems section of the ISIE is concerned with applying methods of industrial ecol-

finalized in due course:

ogy towards the sustainable development of cities, their supporting hinterlands, and the networked infrastructure that connects them. This is an applied, cross-cutting section in which various IE methods, such as LCA, MFA, EIO, complex systems theory and thermodynamics, are applied at the urban scale and integrated with social actors (people) who shape urban systems. Issues addressed include (but are not limited to): developing urban infrastructure for low carbon cities; urban waste management and material recycling; urban transportation; green buildings; sustainable water and nutrient management; urban energy systems; resilient cities; adapting cities to climate change, provision of infrastructure for the urban poor, informing sustainable policy development and promoting sustainable behaviors in cities . Practical solutions to these issues are informed through study of urban ecology, urban metabolism, and the dynamics of city growth and interdependency between social actors, institutions and the biophysical system flows. Membership of the section is broad ranging, including: urban planners, architects, geographers, engineers, economists, environmental scientists, policymakers, social scientists and others."

Immediate objectives for the SUS section are to formally grow a diverse and active membership body, organize the first SUS workshop around the ISIE Berkeley conference in June 2011,

and create multiple platforms for Section members to share knowledge with each other and with urban sustainability practitioners and policymakers in the field.

For more information, about the section please contact Anu Ramaswami at Anu.Ramaswami@ucdenver.edu

Those interested in joining the SUS section who are not already members of the ISIE should join the Society via http://www.is4ie.org/membership

To learn more about ISIE topical sections please visit

http://www.is4ie.org/ topicalsections

Industrial Symbiosis Eco-Industrial Development Section Update, Peter Lowitt

After a successful conference in Tokyo and Kawasaki our attention turns toward the upcoming ISIE Conference in Berkeley, California next June, 2011.

There is a conference track devoted to industrial symbiosis and eco-industrial development. Arrangements are underway to have a IS Research Symposium prior to the main conference. We hope to provide more information on this forthcoming event in this column, on our web site and via email as it becomes available.

ELECTION: We hope to conduct elections prior to the forthcoming ISIE Conference in Berkeley. Regular up-

dates are provided to section members. These include information on recent publications, conferences and calls for papers as well as news about eco-industrial development projects from around the globe.

For more information, please contact Peter Lowitt at

peterlowitt@devensec.com

Proposal for a new Subject section: Life Cycle (Sustainability) Analysis

BACKGROUND: A new Subject Section is being formed within the ISIE, to focus on life cycle assessment (LCA) as currently existing and on life cycle sustainability analysis (LCSA) as a direction in which LCA is likely to develop. This section is intended for those working in the field of LCA and LCSA and also for those interested in bringing various life-cycle based tools together and linking them to appropriate questions and ap-

plications. We believe the new section will provide a platform for IE scholars already working in this field and may draw new perspectives and scholars to the field of IE.

NEXT STEP: The constituting meeting of the Section will take place in conjunction with the ISIE conference 2011. Section bylaws and representatives will be decided at the constituting meeting. Jeroen Guinée, Leiden University, the Netherlands

and Greg Norris, Harvard School of Public Health, Harvard University, Cambridge, MA, USA will act as chairs and liaison points with the ISIE council until officers have been elected for the Section.

MEMBERSHIP: ISIE members interested in joining the new Subject Section are invited to indicate their interest by sending an expression of interest email to Melanie Quigley: melanie.quigley@vale.edu

Student Chapter Update, Catherine Izard

The student chapter has had a busy summer as it transitioned to a new leadership board for 2010-2011. The new board members are Catherine Izard (Carnegie Mellon Univ.); Vivian Lee (Univ. British Colombia); Ankit Aggarwal (Technical Univ. Munich); Susan Spierre (Arizona State); Geoff Gilpin (Western Norwegian Research Insitute); and Dexin Luo (Georgia Tech).

This summer, we also hosted several events at the Gordon Research Conference and Gordon-Kennan Research Seminar at Colby Sawyer College. In particular, we are pleased to announce the results of the biannual Gordon Research Conference student poster competi-

tion. There were over 40 very impressive entrants, demonstrating the quality and breadth of work done by industrial ecology students. The winners were:

- Katherine Rostowski (Stanford Univ.): "Industrial Ecology Principles in Biodegradable Plastics Production and Evaluation."
- Yiwen Chiu (Univ. Minnesota): "Water Consumption in the Energy Sector Under the Effects of Climate and Population Change."
- José Alfaro (Univ. Michigan/ Clemson): "Benefits of Using Industrial Ecology in Community Development Projects."

The student chapter continues to be on the lookout for funding, conference, and research opportunities for students. Please send any announcements that you would like distributed to the Student Chapter, Catherine Izard at

cizard@andrew.cmu.edu.

The next general meeting of the student chapter will be held at ISIE Berkeley. We look forward to seeing everyone there.

More information about the student chapter can be found at: http://www.is4ie.org/students



the Bog Hike, GRC 2010

JIE News, Reid Lifset

Much is happening with special issues of the JIE, ranging from recent publication of an issue on information and communication technology (ICT) to several calls for papers. ISIE members are urged to contribute their papers! Also, changes are being made to the limits on the length of submissions.

Do you receive the JIE table of contents alerts? If not, be sure to sign up to receive these emails or RSS feeds so that you always have the latest in industrial ecology research

Special Issues

Environmental Applications of Information and Communication Technology – published

This special issue, published in October (volume 14, #5), presents research on a range of topics related to environmentally beneficial applications of ICT, complementing an earlier special issue that focused on impact (volume 6, #2). Eric Masanet, of the Lawrence Berkeley National Laboratory, and Scott Matthews, of Carnegie Mellon University served as editors. Research from the special issue has been featured on a variety of important environmental news websites and Swedish radio. The issue is available here.

Industrial Symbiosis – deadline passed.

Research in and development of industrial symbiosis has, as ISIE members know, been accelerating around the world. This special issue aims to compile and disseminate state of the art research, especially that which links empirical research with theory building for industrial symbiosis.

Abhishek Agarwal, of the Robert Gordon University (UK), SHI Han, of the City University of Hong Kong (Hong Kong, China), Donald Lyons, of the University of North Texas (USA), and Rachel Lombardi, of the University of Birmingham (UK), are serving as co-editors of the special issue. The deadline for submissions for this special issue was *November 30, 2010.*

Meta-analysis of LCA – deadline extended (January 15, 2011)

An important challenge in making of use of LCA findings has

been the inconsistencies in methodological choices (e.g. system boundaries, co-product allocation) and focus across studies. A body of literature on meta-analysis of LCAs is emerging that attempts to clarify the impacts of a particular technology, process, product, or material, and produce more robust and policy-relevant results through synthesis of extensive research. This special issue seeks to explore the ability of meta-analyses of LCAs to advance understanding in areas of extensive existing literature. Support for this special issue is provided by the U.S. Department of Energy through the National Renewable Energy Laboratory. Garvin Heath of the U.S. National Renewable Energy Laboratory, Joyce Cooper of the University of Washington, and Miguel Brandão of the European Commission's Institute for Environment and Sustainability, will serve as co-editors of the special issue. The previous deadline of December 1, 2010 has been extended to January 15, 2011.

Greening Growing Giants – deadline April 30, 2011

This special issue will focus on rapidly industrializing economies-"Growing Giants"-and discuss approaches for "Greening Growing Giants". Papers are sought that attempt to answer important questions on global, national, and urban levels regarding resource use and supply, and environmental impact in the context of rapid industrialization. Submissions from industrializing countries are especially welcome as are submissions based on papers from the ISIE Asia-Pacific Meeting in Tokyo in November, 2010.

Seiji Hashimoto of the National Institute for Environmental Studies (Japan), Sangwon Suh of the University of California, Santa Barbara (USA), Xuemei Bai, of the Commonwealth Scientific and Industrial Research Organization (Australia), and Marina Fischer-Kowalski, of the SEC - Social Ecology (Austria) are the co-editors of this special issue. The deadline for submissions is April 30, 2011.

Extended Producer Responsibility – deadline June 1, 2011

This special issue will explore the current state of extended producer responsibility (EPR), a policy strategy that makes producers responsible for the end of life management of their products. Submissions examining the efficiency and effectiveness of EPR, its origins and development, new approaches to its use and implementation and its future prospects are sought. Naoko Tojo of Lund University (Japan), Atalay Atasu of Georgia Tech (USA), and Reid Lifset of Yale University (USA) will serve as editors for this special issue. The deadline for submissions is June 1, 2011.

Limits on Length of Submissions

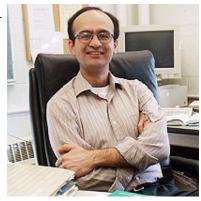
The JIE is changing the way that it defines the limit to the maximum length of submissions. Previously, the limit had been 7,000 words including references. Some authors have found this confusing, not realizing the limit was meant to include references. To avoid this problem, the limit is being changed to 6,000 words, excluding references. Additional details can be found in the Author Guidelines available on the JIE homepage (in the menu on the left). Because references lists in most submissions exceed one thousands words, this represents a modest increase in the allowable length.

LCA Expert Bhavik Bakshi Named Vice Chancellor of TERI

Dr. Bakshi has recently accepted a part-time appointment as the Vice Chancellor and Professor of Energy and Environment at TERI University (http://teriuniversity.ac.in) in New Delhi, India. In this capacity, he will be leading the first multidisciplinary academic program in India that is directed toward sustainability. He will also establish a research group in India while maintaining his activities at Ohio State. This will foster greater interaction between students and researchers in the two countries, and enhance their ability to address global problems related to the sustainability of human activities.

To learn more about Professor Bakshi's work, please visit http://www.chbmeng.ohio-state.edu/people/bakshi.html

Congratulations Bhavik!



New Appointments - Congratulations to Everyone!

Professor Robert Anex accepted a new position at the Center for Biorenewable Chemicals (CBiRC), University of Wisconsin – Madison, USA.

Dr. Vered Doctori Blass joined the Alfred Akirov Institute for Business and the Environment, the Recanati Graduate School of Business Administration, Tel Aviv University Dr. Weslynne Ashton joined the Stuart School of Business, Illinois Institute of Technology Dr. Ming Xu and Dr. Shelie Miller joined the School of Natural Resources and Environment at the University of Michigan

Publications

Helmut Haberl invited as IPCC lead author

Helmut Haberl of the Institute of Social Ecology Vienna was invited as 'lead author' for the IPCC's 5th assessment report scheduled for 2014. He will be part of the Working Group III (Adaptation and Mitigation), chapter 11 'Agriculture, Forestry and Other Land Uses'.

Plenty of energy, not well shared.

Research highlight in Nature 886, Vol 467, 21 October 2010 on the Ecological Economics article written by Julia K. Steinberger and J. Timmons Roberts "Analysis From constraint to sufficiency: The decoupling of energy and carbon from human needs, 1975– 2005" - doi:10.1016/j.ecolecon.2010.09.014

SIE Members Contribution: Industrial Symbiosis, Prospects and Challenges

The October –December issue of the Energy Manager (A quarterly energy magazine from the Society of Energy Engineers and Managers), India was devoted to the theme of Industrial Sym-

biosis: Prospects and Challenges.

The issues includes ten articles and few ISIE members contributed including Marian Chertow from the US (Conserving resources: The case for industrial symbiosis in India), Han Shi from Hong Kong (Developing a ramie ecoindustrial park in China) and Ines Costa from Portugal (Developing industrial symbiosis: a Portuguese case study).

The full table of content is available at here





Industry Corner, by Michael Brown

Industrial ecology is alive and well in industry. Noteworthy is Proctor and Gamble's recent announcement of its new Sustainability Vision (http://www.pg.com/en_US/sustainability/index.shtml) that calls for using 100% renewable or recycled materials for all products and packaging, zero consumer waste going to landfills, powering their factories plants with 100% renewable energy while emitting no fossil-based CO₂ or toxic emissions, delivering effluent water quality that is as good as or better than influent water quality with no contribution to water scarcity, and having zero manufacturing waste go to landfills. Based on their increasing use of life cycle assessment, P&G is designing products to maximize the conservation of resources, particular during consumer use, which they and others have identified as the largest impact stage across the life cycle of their product family.

Also noteworthy are the recent releases of a number of life cycle based tools, particularly for the apparel and footwear industry. The Outdoor industry Association's Eco-index (http://www.ecoindexbeta.org/) provides a framework for data collection and evaluation across supply chains and allows for benchmarking of performance to pursue best practices and for product footprints using consistent methods and potentially a common database approach. Nike put its internal Environmental Apparel Design Tool on its website (http://www.nikebiz.com/responsibility/nikeenvironmentaldesigntool) with supporting data and an explanation of the methodology. The Tool evaluates waste, energy, toxics and water in materials and manufacturing and gives companies a way to address the significant components of a product's environmental impact. And based on an LCA of two of its signature products (Levi 501 denim and Dockers khaki pants), Levi Strauss & Co. has begun a consumer education campaign to save energy by washing their jeans in cold water (http://www.levistrauss.com/sustainability/planet/water).

Key assistance on life cycle issues and methodologies was provided to the Outdoor Industry association by the <u>Zero Waste</u> Alliance, to Nike by Brown and Wilmanns Environmental, LLC, and to Levi Strauss & Co. by Industrial Ecology Consultants.

Mike Brown

Brown and Wilmanns Environmental, LLC

ZeroWIN Project Survey, Ruediger Kuehr

As thought and pioneering leader on sustainable development, the ZeroWIN Consortium through the United Nations University (UNU) invite you to participate in this survey on policies towards new and innovative approaches for the prevention of waste in the automotive, construction, electronics and photo-voltaic industries in the European Union.

This influential survey is to inform recommendations for both industry and policymakers interested in stimulating shared benefits from policy development and more

effective implementation.

Based on your background and current activities, we would very much like to gather your views in this important research.

To access the survey, please either visit the following Web site: http://www.surveymonkey.com/s/KG83YLD

In return for your kind contribution to this survey, you will receive a report of the survey findings in spring 2011. These results of the survey will also be incorporated into a

policy analysis report for the European Commission and inform the further activities of the ZeroWIN Project (www.zerowin.eu).

For questions or comments: Contact: Ruediger Kuehr & Claudia Luepschen, United Nations University Tel.: +49-228-815-0213/4 & Fax: +49-228-815-0299 www.unu.edu

Thank you very much, The UNU Team



Recent Conferences

Ester Boserup Conference 2010 - A Centennial Tribute, Marina Fischer -Kowalski

From November 15th to 17th, 2010, the Institute of Social Ecology brought together numerous international researchers in Vienna to explore "Long-term trajectories in population, gender relations, land use, and the environment" during the Ester Boserup Conference. A forthcoming retrospective of Boserup's life and work in the Proceedings of the National Academy of Sciences (PNAS) by B. L. Turner II and Marina Fischer-Kowalski is a sign of the high-profile attention this conference is receiving. The detailed conference programme and further information are available at www.boserup-conference.org.

ISIE Asia-Pacific Meeting & MFA ConAccount Meeting, November 7 –9, 2010 in Tokyo, Seiji Hashimoto & Yuichi Moriguchi

Jointly organized Asia-Pacific & MFA ConAccount Meetings were held in the pleasant autumn in Japan. We expected synergy of hosting two meetings and we believe that our intention was successfully accomplished.

A rapid economic growth is expected in the Asia-Pacific region, while a significant reduction of greenhouse gas emissions and resource consumption is required for sustainable globe. We believe that industrial ecology approaches such as MFA will become increasingly important for Asia-Pacific region. This is the second ISIE meeting, particularly addressing the region, as well as the first MFA ConAccount section meeting and the first ConAccount meeting outside of Europe. We believe that the joint meeting facilitated communications between participants and established new research networks for this important field.

We had 155 participants from 27 countries, including 30 participants from 10 developing countries. We think that we had significant number of participants from developing world but further efforts will be required for their substantive involvement in our society. 104 presentations were made in 24 parallel sessions, such as Eco-Industrial Parks and Industrial Symbiosis, Urban Metabolism, Past & Future Trend of Materials Demand, and Waste Management. The session of Japanese Drum called *Wadaiko* and Japanese martial arts called *Iai-Do* performed by organizing committee members also won popularity. We were very glad to hear that participants enjoyed our performances.

Chinese colleagues offered to host next ISIE Asia-Pacific Meeting in China in 2012. We hope to see you again in China!



The second Australasian Industrial Ecology Conference, September 2-3, 2010, Sydney, Australia

The theme was recovering resources, basically industrial symbiosis. The scope of content was broader than last year and most of the topics were absolutely fascinating. Gary Foster from NISP in the UK and Jorgen Christensen from Kalundborg both gave terrific key note speeches. We also had Professor Hiroki Hashizume from Tama University in Japan give a key note speech on the challenges of managing waste in that country.

A prominent lobby group here called the Australian Council of Recycling (ACOR) was relaunched at the conference under its new CEO. The Director of Sustainable Programs at the NSW Department of Environment, Climate Change and Water gave a very interesting presentation on what the department is planning for the next five years.

A couple of speakers talked about some technology that has been developed here for using scrap plastic and rubber in steel making. Prof. Veena Sahajwalla from the University of NSW, who invented the process, presented the academic side of the project and Paul O'Kane from OneSteel gave a very amusing description of its practical development and its current operation.

The 10th American Center for Life Cycle Assessment (ACLCA) Conference

The American Center for Life Cycle Assessment (ACLCA) held its tenth conference (LCA X) November 2 to 4 in beautiful Portland, OR. This annual conference brings together both life cycle practitioners and other interested stakeholders from around the world, drawing attendees from academia, government, and industry. Attendees discuss the state of practice, sharing new methods and tools as well as challenges to be overcome. This conference successfully featured a student poster competition for the first time.

This year's theme was Bridging Science, Policy, and the Public. The introductory plenary session contrasted LCA's roots in single product impact assessment with the current analysis of broader, more complex systems of products and services. Parallel sessions covered a wide variety of subject areas, which included: energy systems LCAs (including fossil- and bio-based transportation and electricity), consequential LCA, building performance and analysis, LCI database developments, uncertainty and variability in LCA, and product labeling. The closing session reminded practitioners to practice LCA intelligently; taking advantage of the current state of technology, including data sharing and high computing power, while keeping sight of the purpose and the capacity of LCA to answer questions.

A complete list of topics, presenters, abstracts and presentations are available here: http://lcacenter.org/LCAX/program.shtml.

Upcoming Conferences

- WasteSafe 2011 International Conference on Solid Waste Management in Developing Countries, 13-15 February 2011, Khulna, Bangladesh http://www.wastesafe.info/
- The 7th International Energy from Waste Conference, February 16-17, 2011 http://www.recyclingwasteworld.co.uk/public/RWW%20EfW%20London%202011-web.pdf
- International Sewage Sludge Conference, March 3-5, 2011, Budapest http://www.acrplus.org/Budapest-2011_es
- The 22nd POMS conference, April 29-May 2, Reno Nevada http://www.pomsmeetings.org/ConfEvents/016/
 There will be a one day mini conference by the College of Sustainable Operations
- ISIE 2011 Conference, Berkeley, CA June 7-11, 2011 http://isie2011.berkeley.edu scholarships information is available at: http://www.is4ie.org/2011scholarships
- Ecocity World Summit Montreal 2011, August 22-26, 2011 http://ecocite2011.com/accueil/default_e.asp

New IE Research Centers and Programs

Ecology, LCA and Systems Sustainability, University of Maine

A recently formed Research Group for Industrial Ecology, LCA and Systems Sustainability (IELCASS) has been established since January 2009 by Dr. Anthony Halog, an Assistant Professor of Industrial Ecology and Systems Sustainability at the University of Maine.

The research mission of IELCASS is to provide cutting-edge research and training in the field of industrial ecology, systems sustainability and resilience through cross-disciplinary, life cycle thinking, integrative, and quantitative analyses. IELCASS has been undertaking transdisciplinary, integrative, innovative research to develop practical tools for quantifying and improving the sustainability and resilience of products and processes which maximize resource and energy efficiency and minimize ecological life cycle impacts. The group focuses on

understanding the dynamic interactions fundamentally and holistically, drawing on elements of systems analysis & engineering, industrial ecology, ecological economics and engineering, process simulation and optimization, network and complexity science and methods.

If you are interested to work with Dr. Halog, please visit the IELCASS website at http://ielcass.tripod.com/ilss/ or his faculty website at http://forest.umaine.edu/faculty-staff/directory/anthony-halog/ for further information.

Erasmus Mundus Master's program in Industrial Ecology (MIND)

MIND is a new two-year program offering a unique Industrial Ecology course for selected 25 students. MIND will start with study year 2011/12 and scholarships both for students and scholars are available. The MIND consortium consists of seven universities.

namely University of Graz (Austria), Chalmers University of Technology (Sweden), Delft University of Technology and Leiden University (both The Netherlands), Asian Institute of Technology (Thailand), Rochester Institute of Technology (U.S.) and Waseda University (Japan). MIND is supported by the Erasmus Mundus program of the European Commission. Detailed information is available via www.emmind.eu.

For more information please contact Dr. Ralf Aschemann, ralf.aschemann@uni-graz.at

Open Positions

Position: Post-Doctoral Research Associate, and a PhD student

Focus: evaluating the economic and environmental sustainability of systems of technology for the production of biobased chemicals and fuels from biomass

Where: The Biosystems Analysis Group at the University of Wisconsin-Madison

For more details, please contact Dr. Robert Anex at anex@wisc.edu

Position: Postdoctoral Fellow in Industrial Ecology: The Future of Nonrenewable Resources

Focus: developing storylines and scenarios for the Criticality Project, a component of the Yale Stocks and Flows Project in cooperation with the Resource Panel of the United Nations Environment Programme.

Where: School of Forestry and Environmental Studies, Yale University, New Haven, CT

For more details, please contact Melanie Quigley at melanie.quigley@yale.edu

Position: Graduate Student

Focus: Life Cycle Analysis (LCA) and Economic Assessment of Short Rotation Willow (*Salix*) Crops for Bioenergy

Where: School of Environmental Sciences, at the University of Guelph,

http://
environment.uwaterloo.ca/
business/faculty/clarke/
documents/
GradstudentpositionwillowLCA.pdf

For more details, please contact Professor Andy Gordon at

agordon@uoguelph.ca

Position: Postdoctoral Fellow in Industrial Ecology: Nickel Scenarios

Focus: developing storylines and scenarios for the future supply and demand of nickel, a component of the Yale Stocks and Flows Project in cooperation with the Nickel Institute.

Where: School of Forestry and Environmental Studies, Yale University, New Haven, CT

For more details, please contact Melanie Quigley at melanie.quigley@yale.edu

Position: Post Doctoral Fellow

Focus: interdisciplinary fields associated with sustainability projects developed through a unique collaborative of corporate, non-profit, government, and university participants

Where: The NorthStar Initiative for Sustainable Enterprise (NISE), Institute on the Environment, University of Minnesota

For more details, please contact Dr. Timothy M. Smith timsmith@umn.edu

Associate Professor in LCA, Industrial Ecology ,

The School of Industrial Engineering and Management at KTH at the Royal Institute of Technology

For more information about eligibility requirements please contact: Professor Ronald Wennersten, Head of Department, rw@kth.se

Additional Job Postings and Research Opportunities are Posted at: http://www.is4ie.org/jobs

Accreditation of the Industrial Ecology Master Programme (MSc) in the Netherlands

Since 2004, Leiden University in the Netherlands offered already a special track on Industrial Ecology within the master programme on Chemistry. From the start, also Delft University of Technology provided education and research opportunities to this special track. In November 2010, just some weeks ago, the programme received the official decision about the accreditation of the interuniversity Industrial Ecology programme by the Dutch state department on Educational Affairs. This means that the programme has now the Dutch national,

and by that the European, approval that Leiden University and Delft University of Technology have the rights to let their students graduate with a degree in Industrial Ecology (MSc), with the strong ambition to become a joint degree programme within reasonable time.

Within a couple of weeks, the formal starting date of the programme can be announced by the boards of the two involved universities, which will be between February and September 2011. Until now, about 45 students have already obtained a degree from the special track.

At this moment about 50 students are in the programme, and for next year's September intake a new group of more than 30 students can be expected. Traditionally the group of students is for one half of Dutch nationality and for the other half international with backgrounds from various disciplines and from countries on all continents.

For more information on the programme, check the website:

www.industrialecology.nl.



Updates from the Institute of Social Ecology Vienna, by Marina Fischer-Kowalski

New website online! www.sustainabilitystudies.at:

Society is facing multiple environmental challenges, climate change and global change as most demanding, this raises the need for scientific expertise in the field of Sustainability Studies. the web site is a platform designed to bridge scientific and institutional borders and publicize different courses within this field of study in Vienna.

ERC Starting Grant for Karlheinz Erb

Karlheinz Erb of the Institute of Social Ecology Vienna won an ERC Starting Independent Researcher Grant. The highly competitive Starting grants are awarded by the European Research Council (ERC) to research talents with proven potential and are aimed to support up-and-coming research leaders who are about to establish or consolidate a proper research team and to

start conducting independent research in Europe. The research grant for the research project LUISE ("An integrated socioecological approach to land-use intensity: Analyzing and mapping biophysical stocks/flows and their socioeconomic drivers") provides the excellent opportunity to establish an interdisciplinary research team and to contribute significantly to the field of global land-use research over the next 5-years.

We would like to hear from YOU!

The ISIE newsletter is published four times a year. The aim of the newsletter is to keep our members informed about the latest and greatest ISIE news from around the globe.

We can only do it with your help!

Please send us any information you think is worth including in the newsletter and we will find a place for that (conference summary, important publications, job posting, new appointments, etc.).

Please email your contributions to vered@industrialecology.org.il

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WWW.IS4IE.ORG

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Secretary: Clint Andrews and Anthony Chiu

Treasurer: Chris Kennedy

Editor, Journal of Industrial Ecology:

Reid Lifset

ISIE News Editor: Vered Doctori Blass vered@industrialecology.org.il

International Society for Industrial Ecology

The International Society of Industrial Ecology (ISIE) promotes industrial ecology as a way of finding innovative solutions to complicated environmental problems and facilitates communication among scientists, engineers, policy makers, managers and others who are interested in how environmental concerns and economic activities can be better integrated.

ISIE Newsletter Schedule

Publication Date	Submission Date
April 15, 2011	March 15, 2011
July 15, 2011	June 15, 2011
October 15, 2011	September 15, 2011

ISIE Membership Information

Check us out on LinkedIn and Facebook!

Visit our website (http://www.is4ie.org) to connect with other members of the ISIE community, update your profile, access the JIE electronically, join the conversation in the discussion forums and much more. *To access the Members Only pages, visit www.is4ie.org/membersonly*

Consider joining one of the ISIE Subject Sections as part of your membership. The ISIE now hosts five topical sections.

- Material Flow Analysis ConAccount
- Eco-Industrial Development
- Environmentally Extended input Output
- *NEW* Sustainable Urban Systems
- *NEW* Organizing Sustainable Consumption and Production

Information about each section can be found at http://www.is4ie.org/sections. Subject sections are open only to members of the Society. Join as many of these sections as you would like.

To join a section, sign in to the Members Only pages and click the link to "View Profile". You will see a section within your profile to choose which sections you would like to join. You will then be included on correspondence within that section.