

ISIE Update

A New Year Brings Change

Roland Clift (R.Clift@surrey.ac.uk)

Another year, a new President (for ISIE as well as the USA), new Council members and Officers (p. 3) so you may be interested in some of the things which will be happening this year.

Since its inception, the ISIE has been dependent on John Ehrenfeld as Executive Director, supported by the administrative and editorial office at Yale. John has decided to take his well-earned retirement after the Lisbon meeting in June. This means that we have to make some changes to the way the Society is organized. With the Council's agreement (which is actually to say that nobody suggested otherwise) Marina Fischer-Kowalski, as outgoing President, John, and I, as incoming President, decided to try to run ISIE without an Executive Director but with more administrative support – a part-time assistant to the President (Heather Shaw at the University of Surrey) in addition to the office at Yale where Melanie Quigley is taking over from Beverly Chevalier. All this is intended to ensure that ISIE members recognize the new names.

The change means that we will have to expect more effort from the Society's elected members – but I think/hope they knew this when they stood for election!

More important than the organization is the agenda. In the eight years since its inception, ISIE has become widely recognized with a wide geographical coverage (although there is still an annoying misperception which I sometimes hear expressed in Europe that it is a US-based society!). The formation of subject-based sections is a natural development which has worked well in

other scientific societies. In addition to the ISIE conference in Lisbon in June, we are co-sponsoring a conference on Life Cycle Management in Cape Town in September (p. 2).

Longer term, where should the Society focus its efforts? My personal view is that we need to put some attention into defining the disciplinary base which constitutes Industrial Ecology – and there will be a workshop on this topic at the Lisbon conference. Industrial Ecology (and the ISIE) has self-organized because people with diverse academic backgrounds recognized that they had common interests and could benefit by working across the conventional disciplines. Around the world, there are a few courses in Industrial Ecology which are high quality and high profile. My very preliminary review of them suggests that they have come about from differing origins by differing routes; the extent to which they cover the same material and approaches remains to be explored. Personally, I would like to see an expansion in the number of educational programs; for example, Universities with large general engineering Schools might include an Industrial Ecology stream.

However, to promote this, we will need some idea of the "core syllabus" – the skills and knowledge base which we expect people working in Industrial Ecology to have. That, and a drive to expand the membership base, are my main objectives for the next two years.

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ISIE 2009

Lisbon, Portugal 21-24 June

The program is being finalized and keynote speakers will be:

- John Ehrenfeld, ISIE Executive Director
- Jan Rotmans, Erasmus University, Netherlands
- Leith Sharp, Harvard University, USA
- Robert Socolow, Princeton University, USA

The conference planners have put together a wonderful social program (including dinner at the Electricity Museum!) to accompany the technical sessions. To learn what awaits you in Lisbon see the conference website at <http://isie2009.com>

See you in June!

ISIE Co- Sponsors 4th International Conference on Life Cycle Management

Harro von Blottnitz

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LCM2007, the 3rd International Conference on Life Cycle Management, bore testimony to a significant uptake of Life Cycle Thinking in many OECD- and especially EU-based companies. Recognizing that, nevertheless, environmental pressures are still accelerating on a global scale, the organizers of LCM2009 issued a call for contributions to the theme "The Global Challenge of Managing Life Cycles" in late 2008, and are now compiling a program. The meeting will be in Cape Town and conference registration will open in March. LCM2009 will be hosted by the University of Cape Town, endorsed by the UNEP-SETAC Life Cycle Initiative, and co-sponsored by ISIE. Pre Consultants of the Netherlands are the lead commercial sponsor.

For more information, go to
<http://www.lcm2009.org>

<http://www.is4ie.org>

Farewell Beverly! Welcome Melanie!

Since 2002, Beverly Chevalier has been the backbone of support for ISIE. Over the last 3 years, Beverly has been working on her Master's Degree in Social Work. In a few months, she will graduate and pursue a new career. Beverly has been an invaluable asset to the Society and has provided much appreciated support for the Council and Society members. She joined us at a time when the Society was still going through birthing pains and then contributed greatly to getting us through our adolescence. She leaves us with a solid base on which to grow. She will be greatly missed and we wish her the best of luck in her future endeavors!

We welcome Melanie Quigley as the new Program Coordinator. Melanie will add supporting ISIE to her duties as the Program Coordinator for the Yale Center for Industrial Ecology and Industrial Environmental Programs. Melanie has a BS in Anthropology and Business and has experience doing outreach for the International Boreal Conservation Campaign and worked in philanthropy for The Nature Conservancy.

more ISIE Update

Save the Date!

2010 Gordon Research Conference and Graduate Research Seminar

Reid Lifset (Reid.Lifset@yale.edu)

The Gordon Research Conference on Industrial Ecology has been set for 11-16 July 2010 once again at Colby Sawyer College, in New London, New Hampshire in the US. Reid Lifset of Yale University and Sangwon Suh of the University of Minnesota are the chair and co-chairs respectively. Information about the program will be available late this summer at <<http://www.grc.org/programs.aspx?year=2010&program=industeco>>

This year, for the first time, there will be a companion conference, the Gordon Research Seminar (GRS), just prior to the GRC. The GRS is a two day meeting organized by graduate students and post-docs and held in conjunction with a related GRC. The GRS, also at Colby-Sawyer College, will begin the weekend immediately prior to the GRC—10-11 July. Dexin Luo of Georgia Tech is the chair of the GRS and Venkatesh Govindarajan of NTNU is the co-chair. Because this is the first time that the IE community is holding a GRS, the Gordon conference organization is providing US\$5,000 toward support for graduate student participation. For more general information, see <<http://www.grc.org/students.aspx>>

Information about the program for the GRS on IE will posted on <http://www.grc.org/programs.aspx?year=2010&program=grs_indust>

Mark your calendars!!

New ISIE Leadership

The ballots for the latest ISIE election have been counted and here are the results:

President Elect: **Greg Keolian**

Treasurer: **Chris Kennedy**

Secretary: **Kristan Cockerill**

New Council Members:

Seiji Hashimoto

Gemma Cervantes

New Nominating Committee Members:

Marina Fischer-Kowalski

Amy Landis

Congratulations everyone and a strong *THANK YOU* to the outgoing officers and committee members. Your willingness to serve is what keeps ISIE moving forward.

Conference Reports

First ISIE Regional Meeting: Asia-Pacific International Workshop on Industrial Ecology

Shizuka Hashimoto

Tsuyoshi Fujita (fujita77@nies.go.jp)

The Asia-Pacific International Workshop on Industrial Ecology was held in December 2008, in Kawasaki, Japan. The workshop included discussions on developing industrial ecology theories and practices, mainly focusing on the Asia-Pacific region. This was the first regional meeting organized for the ISIE following a proposal put forward during the 2007 Conference in Toronto. There were more than 100 international participants that included researchers and practitioners in both public and private sectors.

Representatives from the organizing institutions; ISIE, Tsinghua University of China, the National Institute for Environmental Studies of Japan, and the City of Kawasaki opened the workshop. Key-note speakers were Raymond Cote, *Industrial ecology, Industrial Symbiosis and Eco-industrial Parks* and Yuichi Moriguchi, *Progress in IE Studies, Networks and Policy Applications - Experiences of Material Flow Analysis in Japan and Beyond*. These were followed by a panel discussion on the progress and challenges of IE in this region. This discussion highlighted the region as being an arena in which IE would play a central role in improving existing industrial and social systems. It also identified challenges such as an unstable financial situation, limited available information and changing regulation that could hamper IE applications.

The session *Material and Energy Flow Analysis and Industrial Ecology* focused on macroscopic approaches, theories, methodologies and practices. In this session, the characteristics of dynamic modeling such as differential equations, and static analysis such as MFA, were discussed as a means of describing the flow of materials. Future development of material flow modeling envisaged included 1) linking material accounting to stock

accounting and 2) combining MFA, IOA and LCA. International trade of recyclables vs. relocation of eco-towns or transfer of recycling technology was also an issue that would need to be dealt with in the Asia-Pacific region.

Circular Economy Policy and Socio-economic Systems of Industrial Ecology focused on socio-economic methodologies and policy applications. This session clarified that differences in environmental regulations and dynamics among the various jurisdictions were uncertainties for EIP/EIC planning; these might be dealt with by utilizing a scientific database and models if properly disaggregated. The role of government and markets for location/relocation of eco-industrial park (EIP)/clusters were also discussed in this session based on experiences in China, India and Japan.

Case studies from Australia, China and Japan were featured in *Eco Industrial Parks as an Emerging Practice in Industrial Ecology*. These revealed the complexities of exchange networks for materials, energy and water, which too often make comparative assessment of EIP performance difficult. Participants agreed on the importance of assessment, for example of the economic benefits and efficiency indicators, of different EIPs.

The final session summarized the workshop discussions and anticipated actions necessary to further develop IE research and application. There was shared anticipation for actions such as developing a firmer societal basis for knowledge platforms, networks and systems for the institutionalization of IE. Organizing a regional chapter of ISIE that would involve researchers and practitioners from many Asia-Pacific countries was a strategy expected to encourage such actions. Given the growing importance of the Asia-Pacific region in IE, this workshop might be a watershed meeting in the history of ISIE.

more Conference Reports

International Seminar on Energy and Resource Productivity

Vered Doctori-Blass (vdoctori@bren.ucsb.edu)

The University of California, Santa Barbara hosted a two-day seminar on Energy and Resource Productivity in November 2008. The seminar speakers were mainly members of the United Nations Panel for Sustainable Resource Management. Additional speakers included professors from the sponsoring organizations, the UCSB Institute for Energy Efficiency and the Donald Bren School of Environmental Science and Management. Additionally, representatives from industry offered presentations. Proudly, many ISIE members were among the speakers including Thomas Graedel, Marina-Fischer-Kowalski, Yuichi Moriguchi, Stefan Bringezu, Roland Geyer, Sangwon Suh, Edgar Hertwich. The full program is available at <http://www.bren.ucsb.edu/events/UNEP_seminar.htm>

The prevailing theme was how to improve efficiency and productivity to “decouple” economic growth from increased resource use. Presentations covered extractable resources and impacts on energy, water, and soil. The agenda featured eight main topics and for each topic, a panel of 2-3 presenters addressed the issues from different perspectives, concluding with a discussion.

More than 150 participants attended. The proportional mix of professors, students, and local industry and community members illustrated the interest of such groups in this important subject. The international participation and the broad sense of how these issues relate to each other provided an excellent opportunity for participants to better understand the complexity in setting targets and achieving sustainable resource management schemes for developed and developing countries.

The seminar ended with closing remarks from Jacqueline Aloisi de Larderel, the former director of the UNEP Division of Technology, Industry and Economics. She addressed a question raised dur-

ing the conference about why we are not doing a better job with resource productivity and energy efficiency. Her comments suggested that this raises issues of how to communicate the benefits of “decoupling.” She also suggested that selling the concepts are important, as are selling the efficient technologies and products. But perhaps more importantly, we need to sell the needed changes in behavior.

Informally, seminar participants and speakers indicated that the seminar was very productive and informative. The structure of the sessions was designed to build upon each other’s contributions and to conclude about big-picture policy implications for sustainable use of resources in the coming future.

The seminar was possible because of generous support from a UC Discovery Grant.

Report from LCA VIII: Calculating Consequences Beyond the Box

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The American Center for Life Cycle Assessment holds an annual conference that brings together business, government and academia, to discuss new applications of life cycle assessment and new results and methods. The September 2008 conference in Seattle had 225 attendees, including LCA practitioners from US, Canada, Europe, Asia, and Latin America; non-US participants made up 22% of the attendees. To the authors, there seemed to be significantly more participation from businesses and consultants. We feel that more of these participants have emerged in the past year (the conference organizing committee reports that 28% and 18% of attendees were from industry and consulting, respectively- only up 2% total from the InLCA/LCM 2007 Conference).

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more Conference Reports

LCA VIII continued

The 2008 conference included many interesting presentations in the areas of fuels, uncertainty, carbon footprint, education, rebound effects, food, etc. See the website for a complete list of presentations <<http://lcacenter.org/LCA8/program.html>>. Interesting highlights from the conference include multiple organizations' plans for open source LCI databases. Examples include OpenLCA, Earthster, Brightway, and NREL.

The first LCA Certified Professional (LCACP) examination was held at the conference. The examination was based on a criteria list of information an LCA Professional is expected to know that was developed by the examination committee. Nineteen people passed the exam and became the first group of certified LCA professionals. The first LCACPs were awarded certificates at the closing plenary of the conference. The experienced LCA professionals involved in the development of the exam were also awarded LCACP certificates by the virtue of their experience in the LCA field. The LCACPs are expected to remain active in the field and gather continuing education units to maintain certification.

The next LCA conference will be held in Boston from September 29 to October 2, 2009. Information on this and future LCA conferences can be found at <<http://www.lcacenter.org>>

"ERIA LCA Network" launched in ASEAN

Anthony Chiu (anthonysfchiu@yahoo.com)

A training program on for the Association of Southeast Asian Nations (ASEAN) with a special focus on Life Cycle Assessment (LCA) was implemented in Bangkok, Thailand in September 2008. The Association for Overseas Technical Scholarship, Japan, in cooperation with the Focus Center of LCA and Eco Product Development under the National Metal and Materials Technology Center, Thailand, organized the training. The "trainers" included Atsushi Inaba, University of Tokyo; Cham-
<http://www.is4ie.org>



Participants in the ERIA LCA Network training.

niern Vorratnchaiphan, Thailand Environment Institute; and Pongvipa Lohsomboon, Agricultural Research Development Agency Thailand. They disseminated information about LCA, Eco Labeling, Carbon Footprint, Eco-efficiency, Factor X, to forty participants from diverse Asian countries. The participants also received hands-on training on LCA software from ISIE member Katsuyuki Nakano of Japan Environmental Management. Thumrongrut Mungcharoen, MTEC Thailand and Chen Sau Soon, Sirim Berhad Malaysia offered case studies on LCA work. There was also a field trip to Bit Wise Thailand, an air-conditioner manufacturing plant, where Akajate Apikajornisin, Eco Group Thailand, discussed how to utilize LCA concepts to evaluate product redesign options.

The training program ended successfully and participants selected "ERIA LCA Network" as the name for a network of the participating countries. The network will operate via steering committee, and will have an annual meeting to collaborate on LCA and environmental initiatives. Information will eventually be disseminated via the network website. Participants were encouraged to submit project proposals to the Economic Research Institute for ASEAN and East Asia (ERIA) to seek funding.

IE Opportunities

EU Joint Research Centre Seeks LCA Reviewers

The European Commission's Joint Research Centre, Institute for Environment and Sustainability, is planning a number of independent peer reviews on reports and papers related to life cycle assessment. This includes topics such as waste management, sustainability indicators, and LCI/LCIA methodological issues.

The reviewers will be selected from the general list of independent experts and registration is open for experts globally.

For more information go to

<<https://cordis.europa.eu/emmf7/index.cfm?fuseaction=wel.faq>>

If you are interested in being a potential reviewer, please register at

<<https://cordis.europa.eu/emmf7>>

Joint Research Centre Offers Training Opportunity

The European Commission Joint Research Centre, Institute for Environment and Sustainability has launched an open call for trainees with 21 available positions. In-service training enables trainees to acquire personal experience and to put into practice the knowledge they have acquired during their studies, professional careers or to prepare a thesis for an upper level degree.

For more information go to <<http://ies.jrc.ec.europa.eu/call-for-trainees>>

The training focuses on life cycle assessment in support of sustainable consumption and production. The training location is the Joint Research Center in Ispra, Italy.

Applications must be submitted online and the deadline is 28 March 2009.

Higher Education Sustainability Act Provides for Green Learning

Kristan Cockerill (kristanc10@earthlink.net)

In 2008 the US Congress passed the Higher Education Sustainability Act. This creates a federal funding program designed to help colleges and universities develop academic programs and practices on sustainability. The act also instructs the Department of Education to gather sustainability leaders from public and private sectors to collaborate on developing sustainable practices.

International Reference Life Cycle Data System available online. Go to
<http://lca.jrc.ec.europa.eu/EPLCA/Deliverables/ILCD_handbook.htm>

Conference/Exhibition Listings

9th International Automobile Recycling Congress IARC 2009
11 – 13 March 2009, Munich, Germany

4th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment, and Management 2009
12-15 March 2009, Manila, Phillipines

The 24th International Conference on Solid Waste Technology and Management
15-18 March 2009, Philadelphia, US

7th International Conference on the Human Dimensions of Global Environmental Change The IHDP Open Meeting 2009
26-30 April 2009 Bonn, Germany

III International Conference on Life Cycle Assessment of Latin America (CILCA 2009)
27-29 April 2009, Chile

IEEE International Symposium on Sustainable Systems and Technology
18-20 May, Tempe, US

The First Symposium on Industrial Ecology for Young Professionals (SIEYP)
17 May 2009, Tempe, US

2009 ISIE Conference

21-24 June 2009, Lisbon, Portugal

Electronics & Battery Recycling '09
24–26 June 2009, Toronto, Canada

15th Annual International Sustainable Development Research Conference
5-8 July 2009, Utrecht, the Netherlands

2009 Academy of Management Annual Meeting
7-11 August 2009, Chicago, US

First International Congress on Sustainability Science and Engioneering
9-12 August 2009, Cincinnati, US

4th International Conference on Life Cycle Management (LCM2009)
6-9 September 2009, Cape Town, South Africa

R'09 Twin World Congress
14-16 September 2000, Nagoya, Japan and Davos, Switzerland

World Recycling Forum
9-11 November 2009, Shanghai, China

3rd International Conference on Eco-Efficiency Modelling and Evaluation for Sustainability
18-20 November 2009, Egmond aan Zee, the Netherlands



Tribute to Ken Green (1946 – 2009)

Friends and colleagues have paid tribute to Professor Ken Green, who passed away on Thursday 12 February after a short illness.

Ken was Professor of Environmental Innovation Management and Deputy Director for Strategy and Management at Manchester Business School. His high profile research included work for DEFRA, the Tyndall Centre, and the Sustainable Consumption Institute.

As a science student at the University in the late 60s – Ken argued that science degrees should include courses on the role of science in society and the dilemmas involved in the application of technology.

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Student Chapter

Student Chapter Awarded Grant for Symposium

Ming Xu (Ming.Xu.3@asu.edu)

Vered Doctori-Blass (vdoctori@bren.ucsb.edu)

In December 2008 the ISIE Student Chapter was awarded an NSF grant to support attendance in the first Symposium on Industrial Ecology for Young Professionals (SIEYP). This symposium is specifically designed for young professionals, including graduate students and post-doctoral researchers. The symposium goal is to provide an opportunity for young professionals to present their ongoing research in industrial ecology and receive constructive feedback. The event will enable young professionals, especially those in the U.S., to establish a national network of IE researchers for ongoing exchange and future collaborations. The symposium program includes a keynote speaker, presentation sessions, posters session, networking breaks, and a reception.

The grant writing and submission was led by PhD candidates Ming Xu from Arizona State University and Vered Doctori-Blass from University of California, Santa Barbara with the support of their professors: Braden Allenby, Roland Geyer, and Eric Williams. The symposium is scheduled a day before the joint international conference for the IEEE International Symposium on Sustainable Systems and Technology (ISSST '09, formally the annual International Symposium on Electronics and the Environment) and the annual International Symposium on Technology and Society (ISTAS '09) at the same location.

For more information contact Vered Doctori-Blass or see
<<http://www.isiestudents.com/SIEYP.html>>

**Have you
explored
the new
ISIE website?**

<http://www.is4ie.org>

*You can update your profile
search the member directory
browse book titles by ISIE members
find a meeting to attend*

Ken Green continued

He joined MBS in 1971 as a research associate, then in 1973 became a lecturer and key figure in the then Department of Liberal Studies in Science. Professor Rod Coombs remembers him from those days as first a PhD supervisor, and then as a collaborator on many projects.

In 1988 Ken moved to UMIST's Manchester School of Management. Professor Jill Rubery remembers Ken's achievements there: "He set up the School's doctoral training programme, applying successfully for ESRC recognition and took a leading role in the 1991 RAE, when it achieved the top grade for research."

Professor Michael Luger, Director of MBS, noted that Ken's natural leadership style and ability to communicate across a wide spectrum made him an invaluable colleague. "Few people represented the spirit of MBS more than Ken - he was steeped in the tradition of UMIST but enthusiastically embraced the merger and post-merger developments. We will all greatly miss his dry humour, wit and positive approach to life."

Ken is survived by his two sons and their families.

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.

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ISIE News Schedule

<u>Publication Date</u>	<u>Submission Deadline</u>
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Jul 2009 v9n2	29 Jun 2009
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Sep 2009 v9n3	14 Aug 2009
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Dec 2009 v9n4	13 Nov 2009
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Send submissions to the appropriate editor.

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