

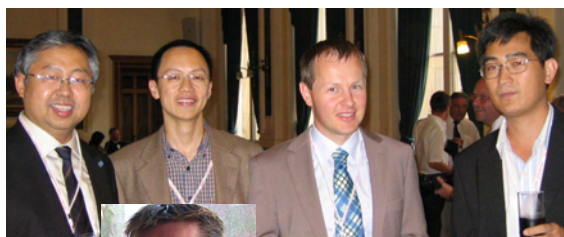
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ISIE News



International Society
for Industrial Ecology

This is
Volume 10
of ISIE News!



*What a wonderful
decade it has been.*

ISIE and IE News

A Note from the President and Program Coordinator

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

Melanie Quigley (melanie.quigley@yale.edu)

It's probably too far into 2010 to wish everyone "Happy New Year", but let's wish for a successful and productive year anyway, to follow what turned out to be a rather good year for ISIE.

Membership rose to a record of nearly 500 which puts the Society onto a sound basis for the future. We now need to ensure that everyone remembers to renew their subscription, so please "nudge" any of your colleagues who might have forgotten. The problems with the process for joining or renewing subscriptions seem to have been resolved so it can all be done via the web address: <http://www.is4ie.org/join>. The newly established Membership Committee, chaired by Heinz Schandl (of CSIRO, Canberra) will be pushing to expand our membership further so you will be hearing more about this over the year.

Our thanks to those who voted for the new members of the Council. The proportion of members who voted is better than in some supposed democracies (including elections to the European Parliament in the UK, where the turnout is always pathetic) but we will be reminding you in good time for next year's elections. The vote gave the improbable result that three candidates for the two vacancies polled exactly the same number of votes. One of these was Paulo Ferrão (of IST, Lisbon) who politely stood aside in favour of the other two candidates: Tsuyoshi Fujita (Tokyo University) and Helga Weisz (Potsdam Institute for Climate Impact Research). However, Paulo will in any case continue to help the Society, not least in bringing his experience in organizing the confer-

ence in Lisbon in 2009 to the organization of the next Conference.

General consensus seems to be that the ISIE Conference in Lisbon was a success – good contributions with some new interest areas emerging, and good opportunity to meet. Following our usual two-year pattern, the next full ISIE Conference will be in San Francisco on 20th to 23rd June 2011. The Organizing Committee will be chaired by Arpad Horvath (University of California Berkeley). Again in our usual way, we have the Gordon Research Conference this year, July 11th to 16th, again at Colby-Sawyer College in New

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Hampshire, chaired by Reid Lifset (Yale University) and Sangwon Suh (University of Minnesota).

Two new subject sections were formed in 2009: one on Material Flow Accounting (the genesis of this section was the CONACCOUNT network which had grown up in Europe) and one on Environmentally Extended Input/Output Analysis. Added to the existing Industrial Symbiosis section, we now have three foci for subject-specific activities. The Council will be considering whether we have enough potential interest to set up more sections, and we are open to suggestions. Contact the ISIE Office (melanie.quigley@yale.edu) for help with the process to establish subject sections.

Given the expanding membership and emergence of subject foci, we are considering how best to

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ISIE News

Note continued

complement our program of events by co-sponsoring meetings with other organizations. In September 2009, ISIE co-sponsored the biennial conference on Life Cycle Management in Cape Town, we are planning also to be involved in the next LCM Conference in Berlin (29th-31st August 2011) and we are sponsoring the ISIE Asia-Pacific Meeting "Strengthening industrial ecology for the Asia-Pacific region" and the associated ISIE MFA-ConAccount Meeting "Material Flow Analysis (MFA) for the future" (November 7-9, 2010) in Tokyo, Japan. July saw the launch of the Korean Society for Industrial Ecology, not formally part

of ISIE but clearly a body with which we intend to cooperate.

One of the things which encourages us is that the industrial ecology message is starting to get heard, to the point where the ideas and even the words "industrial ecology" are sometimes mentioned in the popular media and in policy circles. As well as talking to each other, we are starting to talk to the rest of the world. As the ISIE Mission puts it, we exist "to promote the use of industrial ecology in research, education, policy, community development and industrial practices."

Section Update - EEIO

The Environmentally Extended Input Output Section has held their first election and here are the results:

Chairperson:

Arnold Tukker

Board Members:

Troy Hawkins

Klaus Hubacek

Shinichiro Nakamura

Call for abstracts:

ISIE Asia-Pacific Meeting

Strengthening Industrial Ecology for the Asia-Pacific Region

and

ISIE MFA-ConAccount Meeting

Material Flow Analysis for the Future

7-9 November 2010

Tokyo, Japan

<http://www.isieapmfa.info/index.html>

Deadline: 31 May 2010

Section Update - EIDC/IS

Peter Lowitt (MDFAPLowitt@Massdevelopment.com)

The Industrial Symbiosis Section continues to work on drafting its by-laws. Once these are in shape the nomination committee will begin its work and we hope to have these tasks completed by mid year.

Our communications committee has begun listing Industrial Symbiosis and Eco-Industrial events from across the globe on our section website. These include announcements such as the Industrial Estates Authority of Thailand plans to create 42 Eco-Industrial Towns within the next decade, the launch of the Deli-Mumbai-Eco Industrial Corridor in India, and the City of Reno, Nevada launching plans for an urban Eco-Industrial Park on a former downtown brownfield site. Another eco-industrial project under discussion is in the Appalachian area of the Florida Panhandle. A Scottish eco-industrial project is in the works in the Western Isles and NISP continues to be featured in various news stories in the UK af-

ter the timely publication of its five year progress report and the row it caused because the current government has reduced its funding. Travis County Texas has an eco-industrial project in the works as does a park in British Columbia, being developed by the Osoyoos Indian Band's Development Corporation.

Additionally upcoming conferences, such as the 2010 Sustainable Development Conference in Hong Kong, which has a industrial symbiosis/Eco-Industrial Networking/Eco-Industrial Development track and a number of our section members associated with it, including Abhishek Agarwal, Tracy Casavant, Professor Yong Un Ban, and Professor Geng Yong.

With the recent COP 15 event there has been a flurry of interest in eco-industrial development, including the publication of Professor Marian Chertow's piece on IS as part of the UN COP 15 publication. Rene Van Berkel also published a piece "From Waste to Profit" in Making It Magazine, a UNIDO publication.

Renew your ISIE membership now...

<http://www.is4ie.org/join>

...and remind your colleagues to check their status too!

ISIE News

11-16 July

Colby-Sawyer College, New Hampshire, USA

2010 Gordon Research Conference on Industrial Ecology

*Information on applying, submitting poster abstracts
and the preliminary program are at:*

<http://www.grc.org/programs.aspx?year=2010&program=industeco>

JIE News

New Subject Area Editors

Reid Lifset (reid.lifset@yale.edu)

The JIE is pleased to announce the addition of several subject-area editors to its masthead. The number of submissions has increased significantly and the new associate editors will help speed up the review and publication of these papers.

Michael Hauschild, professor and head of the section of Quantitative Sustainability Assessment in the Department of Management Engineering at the Danish Technical University in Lyngby, Denmark joins Miguel Brandão (Institute for Prospective Studies of the European Commission), David Pennington (also from the EU's IPTS) and Philippa Notten (The Green House, Capetown, South Africa) as a subject-area editor for life cycle assessment.

Donald Lyons, associate professor of geography at the University of North Texas in the US and Rachel Lombardi, research fellow sustainable urban regeneration at the University of Birmingham in the UK will serve as the subject-area editors for industrial symbiosis. Heinz Schandl, Senior Science Leader, Social and Economic Sciences Program, CSIRO Sustainable Ecosystems at Australia's

Commonwealth Scientific and Industrial Research Organization joins Seiji Hashimoto, Senior Researcher in the Sustainable Material Cycles System Section at the Researcher Center for Materials Cycles and Waste Management at the National Institute for Environmental Studies in Japan as editor for material and substance flow analysis. Claudia Binder has stepped down from her role as MFA editor to make time to build her research group at her new position as head of the Institute of Systems Sciences, Innovation and Sustainability Research, at the University of Graz in Austria. Ester van der Voet, of the Institute of Environmental Sciences (CML) at the University of Leiden, in the Netherlands, formerly serving as MFA editor has shifted to being an editor at large. Valerie Thomas, the Anderson Interface Associate Professor of Natural Systems at the School of Industrial and Systems Engineering at the Georgia Institute of Technology in Atlanta, USA has also joined the editorial team as an editor at large.

We welcome them and especially welcome their contribution to helping the JIE keep up with the growth in the field!

Urban Metabolism Research Helps Establish New Carbon Financing Mechanism for Cities

Chris Kennedy (christopher.kennedy@utoronto.ca)

Late last year, the World Bank agreed to loan several hundred million dollars to the City of Bangkok, of which \$70 million was specifically tied to managing the city's greenhouse gas (GHG) emissions. This loan is the first attempt at a new financing mechanism that the Bank has been developing for cities. The objective is to encourage developing world cities to grow with lower carbon footprints.

Bangkok was chosen as the first city for the mechanism, largely because ISIE member Aumnad Phdungsilp had studied Bangkok as part of a comparison of emissions for ten global cities. At over 10 tons of carbon dioxide equivalents per capita per year, Bangkok's emissions are similar in magnitude to many western cities. A paper comparing greenhouse gas emissions for ten cities or city-regions: Los Angeles County, Denver City and County, Greater Toronto, New York City, Greater London, Geneva Canton, Greater Prague, Barcelona, Cape Town and Bangkok, was pub-

lished in Environment, Science and Technology in September 2009. It was on the basis of this paper that the World Bank made the investment in Bangkok.

Many of the authors of the paper are familiar to the industrial ecology community. Seven are ISIE members: Julia Steinberger, Barrie Gasson, Miroslav Havránek, Anu Ramaswami, Gara Villalba Mendez and Chris Kennedy, as well as Aumnad.

It was mainly through their more fundamental studies of urban metabolism that the group came together. The actual emissions of carbon dioxide, methane and other greenhouse gases that are directly emitted from a city are legitimate components of the urban metabolism in themselves. The greenhouse gas emissions that are attributed to a city are, however, usually broader in scope including some emissions that are produced outside of urban boundaries, e.g., from electricity generation or disposal of exported waste. (For further upstream emission see the work of Anu Ramaswami and others.) Whether the GHG emissions occur inside or outside of city boundaries, their calculation requires measures of energy consumption, material flows and wastes – all of which are quantified in the urban metabolism.

Mark your calendars

ISIE 2011

conference to be held

20-23 June

San Francisco, California, USA



ISIE 2011

Conference Reports

The Australian Industrial Ecology Network

Robin Branson (robinbranson@bigpond.com)

Within six weeks of the symposium on industrial symbiosis at Kalundborg in Denmark and the ISIE conference in Lisbon, Portugal, I attended the inaugural Australian Industrial Ecology Conference in Sydney. The event had a very unusual 'angle'. Whereas the meetings in Europe had been organized predominantly by and for people associated with academia to discuss academic issues, which I understand is typical of gatherings on industrial ecology, it seemed that the meeting in Sydney was their perfect antiphon. It was organized by people in industry, for people in industry and government and had a strong emphasis on what can be done in practice. The principal themes were industrial symbiosis and the influence of government regulations and there was a focus on the cement industry, as a sort of ambient case study, given its capacity to support industrial symbiosis both in Australia and overseas.

The conference was convened under the auspices of the Waste Management Association of Australia (WMAA) and chaired by Garbis Simonian, Managing Director of Weston Aluminium, a company he set up in the mid 1990s to process aluminium smelter waste for re-use. The conference was held over two days and all sessions were plenary except one specifically intended for representatives of state and local government authorities who met with nominees from the private sector to discuss issues of mutual interest.

One purpose of the conference was to assess enthusiasm for establishing a national organization dedicated to developing networks to foster industrial symbiosis. The conference was so successful

that a steering committee was set up to work on establishing a formal organization, also under the aegis of WMAA. That committee subsequently became the elected committee of the Australian Industrial Ecology Network. The central idea of the initiative is to foster the use of industrial waste but the potential has been recognized for broadening the mandate to include a wider range of effort in practical industrial ecology.

The committee plans to run workshops on industrial symbiosis every two months in different parts of New South Wales during 2010 and to set up 'chapters' in Victoria, South Australia, Western Australia and Queensland. Planning is well in hand for the second annual conference, which will be held in Sydney 2-3 September 2010.

The proceedings from the July meeting and information about the next annual conference are available at:

<http://www.austindustrialecology.com.au/>

Urban Metabolism Workshop

Chris Kennedy (christopher.kennedy@utoronto.ca)

Twenty-one people from seven countries attended a January workshop on urban metabolism (UM) organized by John Fernández, Paulo Ferrão, Chris Kennedy, Helga Weisz and other ISIE members. The workshop was held at the Massachusetts Institute of Technology.

On Day 1, each of the attendees described their current or recent research/activities on UM, and participants discussed methodological issues. Helga Weisz led the group through an exercise of

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more Conference Reports

Urban Metabolism continued

mapping core and related activities in UM studies. Further discussions on motivation for studying UM, plus current and potential audiences also took place.

The workshop produced a flurry of ideas for research on UM. Breakout groups, on Day 2, discussed and began drafting five potential outputs from the workshop:

- Paper/article on UM and the urban poor
- Paper on history/development of UM, with relationship to studies of industrial metabolism and societal metabolism
- Effort to combine energy data on global cities from various studies/sources, including a grant proposal and potential paper

- Standard classification system for stocks and flows in UM
- Position paper on UM (summarizing the workshop).

There are several upcoming opportunities for presenting this and other UM work: the 2010 Gordon Conference on Industrial Ecology; ConAccount (Tokyo November 2010); the World Bank's 6th Urban Research Symposium (likely spring 2011); and the ISIE annual conference in 2011.

It would seem that UM research is flourishing!

Training Strengthens ASEAN LCA Network

Rungnapa Tongpool (rungnapt@mtec.or.th)

The 2nd Training Program on Industry and Environmental Protection for the Association of Southeast Asian Nations (ASEAN) - Life Cycle Assessment (LCA), organized by the Association for Overseas Technical Scholarship and Thailand's National Metal and Materials Technology Center (MTEC), was held in Chiang Rai, Thailand, in late 2009. There were 40 participants, representing public and private sectors, from eight countries. Program goals included capacity building on LCA, strengthening the ASEAN+ LCA Network and forming a joint project within ASEAN.

The main foci were LCA applications on food, biofuel, carbon footprint and eco-design together with the development of a Life Cycle Inventory (LCI) database. The participants also attended

the 2nd International Conference on Green and Sustainable Innovation, hosted by Chiang Mai University and MTEC. Moreover, Suwirun, an organic tea farm and Doi Kham Food Products Co. Ltd. hosted site visits for participants.

At the end of the training, participants presented ideas for joint projects relating to LCI/LCA to be pursued in 2010. Besides Thailand, which had already established an LCA network in 2001, participants from Indonesia, Lao, the Philippines, and Myanmar expressed their intention to establish networks within their countries. Those LCA networks will be linked through the ASEAN+ LCA Network website to be established soon. Because the first two training programs have been so successful, planners expect to coordinate a 3rd ASEAN LCA training in the near future.

Student Chapter

The ISIE Student Chapter is being reinvigorated and results of the recent election are in. The ISIE Student Chapter Advisory Committee reports that the number and quality of nominees received was high and that bodes well for the Chapter's future.

The very strong slate of candidates made voting difficult, but the result is a capable and diverse board. Those elected are a geographically distributed group of students at various stages in their work with a range of interests related to Industrial Ecology. The new board and the Advisory Committee do hope that those who were not elected will continue to seek ways to apply their skills to the activities of the Student Chapter and perhaps serve as Board Members in the future.

The new ISIE Student Chapter Board is:

President:

Catherine Izard

Board:

Yu (Vivian) Li
Geoffrey Gilpin
Susan Spierre
Deixin Luo
Ankit Aggarwal

ISIE Student Chapter Advisory Committee:

Troy Hawkins
Vered Doctori
Ming Xu
Paulina Jaramillo
Amy Landis
Shelly Miller

Daring ideas are like chessmen moved forward. They may be beaten, but they may start a winning game.

—Johann von Goethe

Jobs and Other Opportunities

PetSmart distinguished Professor of Retailing and Consumer Sciences; The University of Arizona, USA

Project Manager; Life Cycle Inventory, Ecoinvent Centre, Zurich, Switzerland

Assistant/Associate/Full Professor; Sustainable production systems, sustainable energy systems, sustainable mobility, or Eco-IT; Rochester Institute of Technology, USA

Postdoctoral positions; Division of Environmental System Analysis; Tsinghua University, China

Assistant/Associate Professor of Management; Business and Society/Social Issues; Loyola Marymount University, USA

Life Cycle Analyst, Quantis, USA

R&D Professional in Sustainable Products and Processes, VITO, Belgium

For details on these and other positions visit the ISIE website
<http://www.is4ie.org>

Postgraduate School of Industrial Ecology II

Edgar Hertwich (edgar.hertwich@ntnu.no)

The Postgraduate School of Industrial Ecology (PSIE) summer school will meet 9 August - 3 September 2010. PSIE targets Ph.D. candidates, young researchers and faculty members from throughout Europe who want to address sustainable production and consumption in their research. The series teaches participants cutting-edge research methods in Industrial Ecology and related disciplines. The 2010 courses will address sustainable consumption and life-cycle assessment/environmental systems analysis.

For information go to: <http://www.ntnu.no/indec/psie>

Conference/Exhibition Listings

International Conference on Solid Waste
Technology and Management
14-17 March 2010, Philadelphia, US

The GLOBE 2010
24-26 March 2010, Vancouver, Canada

Asia Pacific Power and Energy Engineering
Conference
28-30 March 2010, Chengdu, China

Energy and Environment Week
12-16 April 2010, Pittsburgh, US

i-SUP2010 Congress "Sustainable Production"
18-21 April 2010, Bruges, Belgium

Swiss Discussion Forums on Life Cycle Assessment
20 April 2010, Zurich, Switzerland

European Biomass Conference and Exhibition
3-7 May 2010, Lyon, France

Cycle 2010
4-5 May 2010, Montreal, Canada

Alliance for Research on Corporate Sustainability
12-14 May 2010, Cambridge, USA

5th Annual International Symposium on
Environment
20-23 May 2010, Athens, Greece

TBLI Conference Asia
26-27 May 2010, Tokyo, Japan

International Sustainable Buildings Symposium
26-28 May 2010, Ankara, Turkey

16th International Sustainable Development
Research Conference
30 May - 1 June 2010, Hong Kong

2nd International Conference Management of
Technology - Step to Sustainable Production
2-4 June, Rovinj, Croatia

Footprint Forum 2010
7-12 June 2010, Colle val d'Elsa

The 3rd International Conference on Eco-Efficiency
9-11 June 2010, Egmond aan Zee, The
Netherlands

18th International Input-Output Conference
20-25 June 2010, Sydney, Australia

Summer Congress 2010
22-25 June 2010, Sudbury, Canada

***Gordon Research Conference on
Industrial Ecology
11-16 July 2010, New Hampshire, US***

5th Annual International Conference on
Environmental Science and Technology
12-16 July 2010, Houston, US

Sustainable Planning Challenges
3-6 August 2010, Guangzhou, China

Sustainable Landfilling
23-25 September 2010, Vienna, Austria

**Post information about your next
conference on the ISIE website.**



This space available for your input.

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>
Jun 2010 v10n2	14 May 2010
Sep 2010 v10n3	13 Aug 2010
Dec 2010 v10n4	12 Nov 2010

Send submissions to the appropriate editor.

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