

From the President

New Presidential Business to Move Ahead

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Promises, plans and actions

In my presidential address in Toronto, I announced three major foci of my work as president for ISIE over the next two years. After discussing them at ISIE's Council Meeting in June, some progress has been achieved in generating specific objectives and taking first steps towards their realization. The three foci are to work on clarifying the intellectual claims and aims of industrial ecology, to extend the society's membership regionally as well as in terms of academic discipline and subject matter, and to bear a larger share in the financial responsibility for the Journal of Industrial Ecology.

For a clarification of the intellectual claims and aims of Industrial Ecology, we will make an attempt to jointly write an article for a major journal (beyond JIE) exploring the potential tasks and the intellectual promises of IE as a field. This proposal met strong approval from the Council, and **Edgar Hertwich** has agreed to take a lead in this process. Any industrial ecologist interested in contributing should contact him, as he has taken the responsibility to design such an article and bring together a group of authors willing and able to develop it.

As far as the second focus is concerned, the extension of the Society's membership, I proposed taking several approaches.

The first approach that I termed *recovering old friends* should find new ways to deal with a problem well known to most voluntary associations: that former members are, in principle, willing and interested in staying members but forget to pay

their membership fees and forget about not having paid them. There should be a better solution for the problem of reminding them, that is not as time consuming for our small staff. **John Ehrenfeld** will seek professional advice on this.

The second approach is directed at *rooming with close relatives*. We believe there exist a number of smaller groups, informal or formal associations that have come into being through some initiative or event and share goals very similar to ISIE. Often, these groups wish to maintain a certain identity and independence, but they may welcome a professional umbrella like ISIE. For ISIE to provide such an umbrella, the formation of topical and/or regional chapters appears to be the best solution. In 2006, the Council agreed on bylaw changes concerning the formation of chapters that should make them attractive for new groups. These bylaw changes have yet to be agreed upon by the Members of the Society. At the 2007 Council meeting, **Daniel Mueller** presented a proposition for the ConAccount group to become a chapter of ISIE that was welcomed by the Council and is going to be finalized as soon as the Members agree to the change in bylaws.

The third approach has a more long term and more fundamental target: ISIE should make an attempt at establishing a program of *greening growing giants*. This is not simply an approach towards winning new members for the Society, but an ap-

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Inside...

- J. Kronenberg authors a new book
- R. Isenmann discusses IE in German
- K. Cockerill describes sustainability on campus
- R. Lifset introduces new JIE editors
- Student Chapter news

The industrial ecology community is able to organize itself well, it is able to produce high quality scientific contributions, and it is able to lead very interesting discussions across a wide range of issues.

proach that combines topical issues, professional networking and new financial tools. The "growing giants" have in common that they undergo rapid industrialization, the environmental impacts to be felt not only by their own populations, but worldwide, and despite rapid economic growth they have in common a relatively low income that does not easily allow participation in professional organizations and activities at the OECD price levels. Otherwise, countries like Brazil, China and India are very different and their pathways into industrial economies may be very different. To help find such pathways other than just replicating the historical transformation, and not as detrimental environmentally as the forerunners, is the key topical challenge of this program. **Sangwon Suh** has agreed to coordinate it, and he is in the process of outlining a business plan for it. Members interested in joining this effort should contact him.

With all three approaches taken together, I hope we will be able to reach a target of increasing ISIE's membership by 50% during my presidency. This is really worth trying, as the financial situation of the Society is such that it could not possibly shoulder any additional financial burden on behalf of the Journal (as I had over-optimistically announced in my presidential address) or any other activity it might find useful. Thanks to the changes initiated by **Reid Lifset**, it seems the need to financially support the Journal is not so urgent any more, but without a substantial improvement of the society's income any proactive policy is bound to fail. Therefore, a financial committee under the leadership of **John Ehrenfeld**, supported by **Roland Clift** and me, will in the near future work out a new business plan for the Society.

Next meetings, and organizing responsibilities

In the future, a rhythm of biannual conferences of the Society as a whole, and in the years in between, conferences of topical or regional chapters will be followed. This should allow each member to attend one industrial ecology event annually, <http://www.is4ie.org>

and prevent events from competing with each other. Accordingly, the following conferences are scheduled:

2008

ConAccount Conference in Prague, date unknown, organized by **Tomas Hak**

Asian Regional Meeting on Industrial Ecology in Japan, back-to-back with the Ecobalance conference, organized by **Yuichi Moriguchi** (supported by **Tsujoshi Fujita**) and **Yi Chian** (supported by **Spencer Lei**).

Gordon Conference on Industrial Ecology in New Hampshire, Colby Sawyer College, August 17-22, presided over by **Faye Duchin**.

2009

ISIE Biannual Conference in Lisbon, autumn, organized by **Paolo Ferrao** with the support of **Claudia Binder**, **Shinichiro Nakamura** and **John Ehrenfeld**.

Some concluding remarks

The Toronto conference really spurred my enthusiasm for the community of industrial ecology: quite obviously, it is able to organize itself well, it is able to produce high quality scientific contributions, and it is able to lead very interesting discussions across a wide range of issues. Despite this wide range of issues, and despite the very multicultural background of the participants, there seems to be mutual interest and understanding. According to my personal impression as a frequent participant in international scientific conferences of a similar scope, these abilities are quite extraordinary and exceed most of my experiences.

I wish to express my gratitude to the many people who gave support to the Society and these ideas of moving it forward, and so readily assumed various responsibilities to put the ideas to practice. I hope in a common effort we really will be able to move forward.

ISIE Member News

Graedel and Matthews Earn ISIE Awards

Congratulations to **Tom Graedel**, ISIE's first President, on being awarded the Society Prize at the June meeting in Toronto. This award acknowledges Tom's outstanding contributions to industrial ecology. In his career Tom has distinguished himself in both the private and academic sectors. He is well known in the ISIE community and beyond for his research on stocks and flows of materials in industrialized society, especially in large cities and in environmentally-sensitive regions. He has published ten books and more than 260 technical papers. He is also a member of the U.S. National Academy of Engineering and is the Clifton R. Musser Professor of Industrial Ecology in the School of Forestry and Environmental Studies at Yale University.

Also in Toronto, the Laudise Medal was awarded to **H. Scott Matthews**. This award honors a young scientist or engineer who has significantly contributed to industrial ecology. Scott is the Research Director of the Green Design Institute and a faculty member in the Departments of Civil and Environmental Engineering and Engineering & Public Policy at Carnegie Mellon University. His research interests include valuing the socio-economic implications of environmental systems and infrastructure. He has long been active in ISIE, and currently serves as the Conference Reports Editor for the ISIE News. *Well deserved, Scott!*

New IE-Relevant Books

Kronenberg, Jakob. 2007. *Ecological Economics and Industrial Ecology: a Case Study of the Integrated Product Policy of the European Union*, Routledge. ISBN: 9780415423311.

Research into how products are made, how they are used, what happens to them at the end of their useful lives and the environmental impact of each of these phases is the basis of product-oriented environmental policies and specifically the Integrated Product Policy (IPP) of the European Union. This book offers a new way of looking at environmental policy, concentrating on the conceptual background of ecological economics and industrial ecology.

Kronenberg offers both an introduction to the relationship between ecological economics and industrial ecology and a selection of recommendations for a product-oriented environmental policy, based on his detailed case study of the IPP. This holistic approach to economy-environment interactions contributes greatly to the development of a consistent body of knowledge regarding sustainable development.

This book will be of interest to academics and policy makers alike, specifically those engaged with the concepts surrounding sustainable development and the rationale for more restrictive environmental policies.



New Editor, Columnist and Editorial Board Members

Reid Lifset (reid.lifset@yale.edu)

Makarand ("Mak") Dehejia, former vice president of the International Finance Corporation, the commercial arm of the World Bank, joins **Arnold Tucker** as book review editor. Mak is a widely known expert on use of technology in developing countries. He is also known to the IE community for his work as the treasurer of the ISIE. He replaces **Tom Theis** of the University of Illinois at Chicago. Dr. **Bo Weidema** and colleagues from Aalborg University in Denmark have taken over the authorship of the JIE's periodic column on LCA in Europe from **Helias Udo de Haes**. Helias retired from his work on LCA at the Institute for Environmental Science at Leiden University (CML). Bo is a leader in the LCA community. He founded 2.-0 LCA consultants and is an external professor at Aalborg University. **Gjalt Huppes**, the head of the Industrial Ecology Program at CML, has also joined the editorial board.

Getting Close to the Launch of JIE's Web-based Submission and Peer Review System

Reid Lifset (reid.lifset@yale.edu)

The JIE editorial office has been working hard this summer to configure ManuscriptCentral, a web-based system for submission and peer review. This system automates manuscript submission and allows for easy administration, editing and reviewing. The editorial office is in the midst of testing the new system. If all goes well the new system will go "live" this Fall.

Quotable

To the extent that the complex interaction of economic, ecological, social, and political factors makes prediction hazardous, the best prophets are those who allow for uncertainty: who do not sell the future like a patent medicine but persuade mankind to make continual running adjustments to what, after all, is a continually changing future.

Rudolf Klein, Commentary, 1972

IE in Education

Sustainability on Campus**Kristan Cockerill** (kristanc10@earthlink.net)

There has recently been tremendous attention focused on sustainability at US universities. Fall 2007 issues of both *Newsweek* and *Time* highlight the push to make universities models of sustainability. Last fall an issue of *The Chronicle of Higher Education* focused on university sustainability programs. These articles cover projects and programs that range from increasing energy efficiency and recycling rates to building self-sustaining, off-the-grid facilities. These various articles reflect that programs are often student initiated, and this has alerted administrators to the value of sustainability in both the academic and operational arms of a campus.

The Association for the Advancement of Sustainability in Higher Education (AASHE) offers numerous examples of increasing activity on US campuses to promote sustainability. For example, the AASHE Bulletin features several ads in each issue for positions focused on campus sustainability. (<http://www.aashe.org>)

Additionally, as of this writing, more than 340 university presidents have signed the American College and University Presidents Climate Commitment, agreeing to take the necessary steps to make their campuses carbon neutral. (<http://www.presidentsclimatecommitment.org>)

Finally, there are several "report cards" being promulgated that focus on how well universities meet various sustainability criteria. These include:

- Grist magazine's ranking of the 15 most "green" colleges and universities. The ISIE "home campus", Yale University ranks 12th. (<http://www.grist.org/news/maindish/2007/08/10/colleges/index.html>).
- The Beyond Grey Pinstripes Index which assesses business school programs. (<http://www.beyondgreypinstripes.org>)
- The Sustainable Endowments Institute's College Sustainability Report Card which evaluates energy use, buildings, food, and university investments for the richest US universities. (<http://www.endowmentinstitute.org/sustainability>)

These reports provide an incentive for universities to increase their sustainability efforts.

Increasing IE in the German Speaking World**Ralf Isenmann**

(ralf.isenmann@innovation.uni-bremen.de)

Since its launch, industrial ecology has evolved to have a growing impact on government agendas, business applications, and higher education programs. In contrast to other European countries, however, in the German speaking world industrial ecology appears only to a limited extent. So far, German universities do not provide higher education programs for industrial ecology like those in Trondheim (Norway) or in Leiden, Delft, and Rotterdam (The Netherlands). Further, except for

some institutes like The Wuppertal Institute, there is no institutional infrastructure with specialized research teams, departments, or chairs at German universities. Thus, no intellectual home exists like the School of Forestry and Environmental Studies at Yale University, in the Germanic countries.

That industrial ecology has received as yet only passing attention in Germany may be surprising in light of some statistics. According to the ISIE's membership statistics, Germany is one of the most well-represented European countries. Further, a review of the programs from ISIE conferences show that German speakers at the Leiden Conference 2001 and in Michigan 2003 repre-

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German continued

sented about 5% of the speakers. The statistics reveal that a number of researchers are active in Germany. The institutional infrastructure, however, seems to be still in a premature stage, compared with other European countries and the USA where industrial ecology has a longer tradition and deeper organizational roots in government, business management, and education.

To better promote industrial ecology in the German speaking countries, several initiatives have been started, with a core located at the University of Bremen in the Research Center for Sustainability Studies and at the University of Kaiserslautern. (<http://www.artec.uni-bremen.de/>) This initiative includes lectures, seminars, publications, and institutional cooperation. Examples include:

- The lecture series "Industrial Ecology – Perspectives and Approaches Towards a Sustainable Design of Industrial Systems", 2005 (<http://www.industrialecology.de/>)
- The European Students of Industrial Engineering and Management seminar, "Vision of Cycles: The Industrial Ecology Way to Sustainability", 2005 (<http://www.estiem.org/>)
- The symposium "Industrial Ecology in Germany", 2006 (<http://ie2006.de/>)
- Isenmann, R., Hauff von, M. (eds.). 2007 "Industrial Ecology: Mit Ökologie zukunftsorientiert wirtschaften". Elsevier. This is one of the first books focused on industrial ecology available in German. The book features 21 contributions from industrial ecology scholars. (<http://www.elsevier.de/artikel/1046182>)
- Gleich von, A., Gößling-Reisemann, S. (eds.): "Industrial Ecology – nachhaltige industrielle Systeme gestalten". Teubner. Forthcoming October 2007. (<http://www.teubner.de>)
- "Industrial Ecology Management", a special track in the forthcoming VHB-Conference, Academic Section: Environmental Management, 2007 (<http://www.sustainability.at>).

This latest effort taking place at the Vienna Uni-

<http://www.is4ie.org>

versity of Economics and Business Administration is important because it is a first step to make industrial ecology more visible in Business Administration and Management Science. Additionally, this will help establish industrial ecology in the professional institutional context of VHB. The VHB (Verband der Hochschullehrer für Betriebswirtschaft) is the German Academic Association for Business Research, which pursues the development of business administration as an academic discipline at universities. Because the VHB is the leading Association for professional academic teachers and lecturers in the German speaking area, such an event could be a good starting point for fruitful cooperation.

A special highlight in Vienna will be the keynote by ISIE President, **Marina Fischer-Kowalski**, demonstrating that the ISIE and its promoters support these efforts to help grow and institutionalize industrial ecology on a broad, interdisciplinary, and international basis.

Are your dues **due?**

Check your status on the ISIE website.

Stay active!

Student Chapter

ISIE 2007 – Student Events Summary**Vered Doctori** (vdoctori@bren.ucsb.edu)**Ming Xu** (Ming.Xu.3@asu.edu)**Troy Hawkins** (trh@andrew.cmu.edu)

ISIE 07 was a great conference providing many opportunities for networking and informal meetings. Here is a summary of the events that the ISIE Student Chapter organized to contribute to the meeting.

Poster Competition

This year we had 16 students participating in the poster competition. Prizes included a one year ISIE membership and \$100, \$150, and \$200 US. Here are the winners:

1st place: **Scott A.C. Flemming**

Title: "Considering Human Factors Perspectives on Sustainable Energy Systems"

2nd place: **Ramsey Wright**

Title: "Exploring the Ecological Analogy: Testing Connectance and Biodiversity for use in Industrial Ecology"

3rd place: **Paulina Jaramillo**

Title: "Comparative Life Cycle GHG Emissions of FT-Liquid Fuels from Coal and Natural Gas"

Thanks to the judges, Dr. Reid Lifset, Dr. Ester van der Voet, Dr. Soumya Chatterjee, for their hard work during the poster sessions and after. Thanks to Jason Rouch and Matthew Eckelman from Yale University for organizing the competition.

Student Development Session

The student development session took place on June 17. The attending students were encouraged and challenged by a panel of professionals working in the field of industrial ecology. Panelists included **Ramesh Ramaswamy**, Resource Optimization Initiative; **Robert Lucacher**, Mervyns LLC; **Diana Bauer**, U.S. Environmental Protection Agency; and Professor **Brad Allenby**, Arizona State University. Drawing from a number

of projects in which he has participated in India, Ramaswamy encouraged students by providing examples of how applying basic industrial ecology techniques to system-wide problems has yielded surprising results. He used the example of a major city facing serious a serious water supply problem which discovered through MFA that a large percentage of its water was being lost from compromised infrastructure. Diana Bauer provided a summary of funding and post-doctoral opportunities available through the U.S. EPA. Rob Lucacher challenged students to communicate and promote the principles of industrial ecology using language familiar to business professionals. Finally Brad Allenby further challenged students to look beyond the traditional areas of industrial ecology to the frontiers of the field such as information flows and technological infrastructure.

ISIE Student Chapter Meeting

The Student Chapter had its annual meeting on June 19. President, **Vered Doctori**, briefly described the development of the student chapter during the past year and upcoming activities. She solicited ideas for the upcoming year and for student participation at the Gordon Research Conference. The leadership of the student chapter was transferred to **Ming Xu**, a doctoral student at Arizona State University in USA. A new system of leadership was also formed to have two people leading the Student Chapter, the formal President and the President Emeritus.

Student Chapter Members

A short survey is available online. Results will help us to continue improving ISIE services to student members. Use this link to access the survey: <http://tinyurl.com/2npmkq>

Resume Book Display

As in past years, the Student Chapter encouraged students to make their resumes available dur-

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Student Chapter continued

ing the meeting. This year 15 students included resumes in the book. We would like to hear about your experiences in the job search. Send comments to **Troy Hawkins** (trh@alumni.cmu.edu).

General Student Chapter Update

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

The Student Chapter has been successful in the past few years. As most of you know, we are trying to improve the leadership system. The President Emeritus will continue to work closely with the new President and Committee Chairs to seek and create more opportunities for the Student Chapter. Vered Doctori and I will serve as the President Emeritus and President until September 2008. I will take responsibility for expanding membership and leading and organizing the Student Chapter activities for the Gordon Research Conference in 2008 I will work with Vered to maintain the communication between the Student Chapter and the ISIE leadership.

Student Chapter Opportunities

The Student Chapter is working to expand the Chair positions to allow for more participation. Several positions are open and are described here.

Communication Chair

Moderate student list serve, post messages to chapter members, and help web chair keep ISIE Students website updated.

Publications Chair

Edit and submit text for Student Chapter section of ISIE News, help with conferences/grants, organize photography of events, and work on outreach efforts with the Fundraising Chair and President.

Fundraising Chair

Search for grant opportunities, work with the President/President Emeritus on long term grant proposals, help secure funding for student conference scholarships, work with Publications/Communications/Website Chairs to communicate with students about funding and scholarship opportunities, and work with Poster Competition Chair to organize prizes.

Conference Chair

Work with President to coordinate conference activities, organize the Professional Development Session at conference, and coordinate with Web Chair for conference updates.

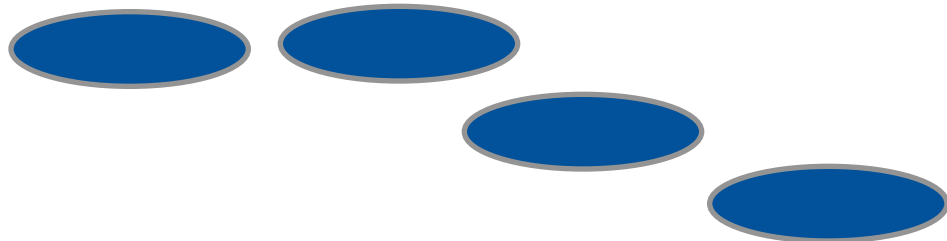
Conference Social Events Chair

Organize social activities for conferences and coordinate with Web Chair for conference updates.

Poster Competition Chair

Organize annual poster competition, register students, recruit/manage judges, arrange prizes, label winning posters and announce winners.

If you are interested serving on one of these committees, send an email with your CV to Ming Xu.



welcome *foon ying* *bienvenidos* *dobro pozhalovat* *willkommen* *yo koso*

New ISIE Members

Tooraj Arvajeh, Canada

Christophe Ayer, Russia

Anil Baral, USA

Martin Beermann, Austria

Meutia Chaerani, Singapore

Jon Cullen, UK

Joesph Delfino, USA

Jan Fidler, Sweden

Yasuhiko Hotta, Japan

Daria Milburn, USA

Gideon Richards, UK

Russell Richman, Canada

Robert Stupka, Canada

Emilia Suomalainen, France

Raymond Tan, Philippines

Conference/Exhibition Listings

Bioenergy 2007: International Bioenergy
Conference and Exhibition
3-6 September 2007, Jyvaskyla, Finland

World Congress on Recovery of Materials and
Energy for Resource Efficiency
3-5 September 2007, Davos, Switzerland

Globalizing Lifestyles between McDonaldization
and Sustainability Perspectives: The Case of the
New Middle Classes
4-5 October 2007, Bremen, Germany

World Workplace
24-26 October 2007, New Orleans, USA

International Trade Fair on Environmental
Protection
27-30 October 2007, Hong Kong

12th World Lakes Conference
28 October-2 November 2007, Jaipur, India

Sustainable Innovation 2007
29-30 October 2007, Surrey, UK

The 20th World Energy Congress - Rome 2007
11-15 November 2007, Rome, Italy

2nd National Landfill & Transfer Stations
Conference
19-21 November 2007, Melbourne, Australia

China (Kunming) Environmental Protection and
Renewable Energy Conference
6-8 December 2007, Kunming, China



**Post your meeting on the ISIE website
and you'll see it here next issue!**

Interested?

Sustainable Engineering Prize

Editor's Note: This information was drawn from a Young Engineers press release.

The Resource Efficiency Knowledge Transfer Network is sponsoring the Young Engineer for Britain competition through the Young Engineers charity. There is a 100 British pound prize to be awarded in each of eleven regions.

Successful competitors will demonstrate the most efficient use of energy and raw or recycled materials. For more information, including regional deadlines, go to:
<http://www.youngeng.org>

Promoting Innovation

NineSigma was founded in 2000 to facilitate connections between companies and innovators. NineSigma is at the leading edge of the new model of Open Innovation, whereby companies develop strategies to leverage external innovation so that they may better focus on their internal core capabilities.

A recent request for proposal seeks "Sustainable Packaging Solution(s) for Current Poly Bag Used for Bread Products Stored at Ambient Conditions." The deadline for this request is September 14, 2007. For more information go to:
<http://www.ninesigma.com/mx/30541-03>

IE Jobs

Products Editor, Building Green, USA
Life Cycle Technical Staff, Franklin Associates, USA
Assistant/Associate Professor, Environmental Change Initiative, Brown University, USA
Environmental Protection Specialist, EPA Clean Energy-Environment State and Local Program, Climate Protection Partnerships Division, USA

Assistant Professor, Energy, Materials and Food from Managed Ecosystems, University of California, Berkeley, USA

Associate Professor, Organisational Learning, Technology and Sustainability, Aalborg University, Denmark

To check or post job listings, go to the ISIE website <http://www.is4ie.org>



What's your story?

Send your IE-related info to us for the December issue.

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.

Officers

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President-Elect—Roland Clift

Treasurer—Joule Bergerson

Secretary—Claudia Binder

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Edgar Hertwich

Matthias Ruth

Yuichi Moriguchi

Thomas Theis

Ramesh Ramaswamy

Valerie Thomas

Student Liaison—Ming Xu

Nominating Committee

Diana Bauer

Paulo Ferrao

Jun Bi

Ned Gordon

Tracy Casavant

Sinichiro Nakamura

Executive Director—John Ehrenfeld

Editor, *Journal of Industrial Ecology*—Reid Lifset

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ISIE News Schedule

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Send submissions to the appropriate editor.

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