

ISIE News

Volume 5 Issue 1 (March 2005)

Inside....

Brad Allenby in the new President's Corner
New student website and profiles
Jouni Korhonen on a new Finnish Forum
New ISIE leadership
Website Reviews

New News for 2005

New is Good!

Kristan Cockerill (kristanc10@earthlink.net)

A new year, a new look, a new President.

To kick off the new volume of **ISIE News**, I want to welcome the latest ISIE members:

A.M.M. Ansems, Netherlands
John Armstrong, USA
Leo Breedveld, Italy
Xinxin Bu, China
Yasuhiro Fukushima, Taiwan
Uwe Hansen, Germany
Jessica Lin, USA
Mark Myles, USA
Alexander Pennock, USA
James Russell, United Kingdom
Myriam Saade, Switzerland
Jonah Spiegelman, Canada
Fabio Vancini, USA
Gabriel Vivas, Venezuela
Qiong Zhang, USA
Anita Zuolinschi, Norway

As this list reveals, we continue to grow and do so with solid representation from throughout the world. This bodes well for our Society - which is itself still quite new.

One column over begins the message from our new President, Brad Allenby. Inside is abundant news about industrial ecology and ISIE.

Enjoy all that is new!

The President's Corner

Brad Allenby (Braden.Allenby@asu.edu)

As I take over the Presidency of our Society, I find much to celebrate. Perhaps most important from my perspective is the healthy and growing Society that our first President, Tom Graedel, and John Ehrenfeld have nurtured (with help from many of you). We owe both of them a large debt of gratitude – one which will no doubt be continuing, as John remains our steadfast Executive Director and I intend to call on Tom's wisdom with what he will no doubt come to regard as obnoxious regularity. I am also personally delighted with our new President-elect, Marina Fischer-Kowalski; she is an excellent choice given her personal strengths and unwavering support of industrial ecology. More than that, of course, I think her selection by the membership, combined with an increasingly global agenda for our Society and such events as the recent Gordon Conference on Industrial Ecology held in Oxford, UK, represents the continuing broadening and deepening of a field that, at least at first, seemed to some of us to be a touch too centered in the United States. Along those lines, the growing maturity and importance of industrial ecology in Asia is also a promising trend, one that our Society should support and celebrate.

Among the other initiatives that we have recently started is to reinvigorate the Society's committee structure, a process that remains ongoing. Our purpose here is quite transparent. Any organization that relies primarily on a few individuals, whether they are in leadership positions or not,

Continued on page 6

International Society for Industrial Ecology

205 Prospect Street, New Haven, CT 06511-2189 USA

What's New in ISIE?

Committees Get to Work

There are now four well-populated committees ready to serve the ISIE membership. Thank you to all of the committee members who have agreed to serve! If you have ideas for any of these committees, they'd love to hear from you. Just drop a note to the committee chair.

Awards Committee

Clinton Andrews (Chair) cja1@rci.rutgers.edu
Susan Boehme
Susanne Kytzia
Saul Lemkowitz
Rene van Berkel
Duan Weng



Don't miss ISIE 2005.

Register by 1 April to get the early bird discount. See the conference website for more information.

<http://www.isie-2005.org>

See you in Stockholm!

<http://www.is4ie.org>

Education and Human Resources Committee

Helge Brattebo (Chair)
helge.brattebo@ntnu.no
Jack Azar
Bhavik Bakshi
Lauren Basson
Andrew Mangan
Markus A. Reuter
Hongtao Wang

Finance Committee

Mak Dehejia (Chair) mdehejia@aol.com
Robert Pfahl
Donald Rogich
Thomas Swarr

Meetings Committee

Rene Kleijn (Chair) kleijn@cml.leidenuniv.nl
Anup Bandivadekar
Diana Bauer
Joule Bergerson
Edgar Hertwich
Sinichiro Nakamura
Helga Weisz

Results of the 2004 ISIE Election

President-Elect—Marina Fischer-Kowalski

Treasurer—Mak Dehejia

Council

Matthias Ruth
Yuichi Moriguchi

Nominating Committee

Jun Bi
Ned Gordon

IE Education Update

Industrial ecology continues to be popular in academia. On the ISIE website, see the updated listing of programs offering degrees and/or research opportunities relevant to industrial ecology.

Industrial Ecology News

The Industrial Ecology Forum of Finland

Jouni Korhonen (jouni.korhonen@uta.fi)

To the best of my knowledge, Finland is the first country to establish a national organization for industrial ecology. We call it the Industrial Ecology Forum of Finland and work is still in its early days. The Forum has conferences twice a year and we already have about 150 members who actively exchange information in our electronic discussion channels.

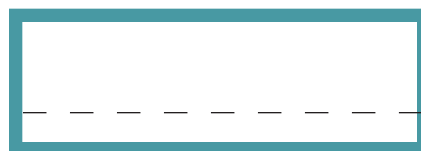
I chair the Forum and Ms. Riina Antikainen from the Finnish Environmental Institute is the secretary. We have members from all sectors in the Finnish society, including universities and research institutes; the government, local and regional authorities; and industry. Finnish industry provides a fruitful ground for learning about industrial ecology tools and approaches in practice. The cornerstone of our national economy, the forest industry, is one of the most important forest industries in the world. It is very advanced in terms of using renewable biomass waste or by-product derived fuels and raw materials and the annual cuttings of our vast forests are lower than the annual growth. Energy technologies, such as co-production of heat and power, are also among the most advanced in the world. Within the Forum we hope to continue to cooperate with industry and we believe the experience from Finland should be communicated to an international audience.

The Forum has had three conferences and participation has gone up from 40 to 60 and then to 100 in our last meeting, which was held at Statistics Finland in November 2004. The idea for this conference and for our future conferences is to have keynote presentations from different parties working on industrial ecology, cleaner production, environmental management and related themes. We try to have different keynotes every time. To secure diversity, we also try and have each conference in a different organization and hopefully in a different city. Obviously, this will be a challenging task in a small country. So far the response and the experience has been very active and positive.

We are also delighted that the 11th Annual International Sustainable Development Research Conference with Special Streams on Industrial Ecology and European Environmental Policy has accepted our offer to arrange a special symposium on the Industrial Ecology Forum of Finland, This is an excellent opportunity to learn from international colleagues in industrial ecology and identify possibilities to establish cooperation between the Forum and these international colleagues.

Additionally, the Forum looks forward to establishing a cooperative relationship with ISIE. We are a small society and working with ISIE will be crucial for our development. I believe we offer ISIE something important with our "small country perspective" which contributes to developing diversity in ISIE and in industrial ecology.

The Industrial Ecology Forum of Finland has about 150 members who actively exchange information.



Website Reviews

Cleaner Production in China

www.chinacp.com/eng

Xu Zhongqiang (Xzh330214@dal.ca)

The website, Cleaner Production in China, developed by the National Development and Reform Commission, is aimed at furnishing readers with China's cleaner production policy and legislation as well as existing and planned activities in China in relation to cleaner production. It is also of interest to users in China who want to obtain information about cleaner production in other countries, as it provides fast and reliable hyperlinks to other websites.

The website contains a wide range of related information. Aside from aforementioned legal and

policy issues, it also gives a detailed description to organizations involved with cleaner production in China, concepts and tools, and a host of case studies. The website developers appear to be making every effort to keep abreast of the advances in theory and practice of cleaner production and related topics both at home and abroad. Industrial ecology is its own section with a number of papers and links.

Unlike many other Chinese websites, the English version of this website is highly professional and accurate, reflecting editor competency in both content and language. The website is user-friendly and with the help of conspicuously colored letters and careful layout is readily navigated. Links are easily identified and accessed.

Business and Sustainable Development: A Global Guide

www.bsdglobal.com

Andrew Newbould (andrew.newbould@accesswave.ca)

The Business and Sustainable Development (BSD) website developed and hosted by the International Institution for Sustainable Development "explains the strategies and tools that companies can draw on to translate an aspiration of sustainability into practical, effective solutions." An easily navigable site, with no advertisements and pop-ups, the BSD homepage branches from six main categories into numerous topics, with ample information on tools/strategies such as industrial ecology, sustainable banking and green procurement. The section on industrial ecology encompasses by-product synergy and addresses topics such as zero emissions processes, design for environment and environmentally conscious manufacturing. Some topics also have links to applicable case studies and related web-based resources. A complete list of case studies can also be viewed either alphabetically, by country or by sector. Despite evidence that the website has been updated recently, the "In the news" section feels dated, as the most recent article is from May 2002. However, the majority of the information presented is pertinent and useful to any companies interested in learning about tools or strategies that could lead to sustainable business.

Continued on page 5

Do you have a favorite IE-related website? Share it with us!
Send a writeup to Website Editor, Ray Cote,
Raymond.Cote@Dal.ca

<http://www.is4ie.org>

More Website Reviews

Eco Industrial Solutions

www.ecoindustrial.ca

Elizabeth McGhie (el330364@dal.ca)

The purpose of this website is to give key information on a small Canadian firm. The firm is noteworthy to ISIE because the two key people are industrial ecologists who graduated from Dalhousie University. The company is focused on eco-industrial development (EID). The site is simple and straightforward; geared to educating about industrial ecology and eco-industrial networking (EIN) and attracting prospective clients. The website contains information on the consultants associated with the company, background information on eco-industrial networking, and a series of fact sheets on projects with which the company is involved. These projects undertaken with partners, together with the communities themselves, include Hinton Alberta EIP, Tilbury B.C. EIP, Maplewood, B.C. EIN and Ross EIP in Regina Saskatchewan.

There is no visible date identifying the last update of the site although the projects appear to be current. The majority of the links are to company projects, although there are also links to other groups including the Eco-Industrial Development Council. Additionally, there is a link to EIN workshops undertaken by the group. Some sections of the website are still under construction.

Job Listings



Research Positions, University of Surrey, Centre for Environmental Strategy

Chair and Director of the Centre for Environmental Strategy, University of Surrey, School of Engineering

Brownfields Conference Project Manager, The International City/County Management Association

Brownfields Conference Assistant Project Manager, The International City/County Management Association

Project Manager, Domestic Technical Assistance Team, The International City/County Management Association

Life Cycle Management Specialist, First Environment, Inc.

For more information, see the ISIE website

<http://www.is4ie.org>

Interesting questions continue to arise about defining the boundaries of industrial ecology.

More President's Corner

will be inherently fragile. Moreover, especially in a complicated field such as ours, it is patently absurd to think that a small group, no matter how qualified, will be wiser than the broader membership as a whole. Thus, we want to develop a robust and functioning committee system that encourages volunteers to help conceptualize and run their Society, and contribute to the underlying intellectual aspects of industrial ecology. Along with this, we are trying to move towards a strongly distributed governance structure. Thus, we are encouraging those who are exploring forming working groups with other organizations, and experimenting with local chapters of the Society. Obviously, we need to be careful as we do so: we have sparse resources, and particularly as a young organization we don't want to run the risk of fragmentation rather than productive decentralization. All of us who have the privilege to serve as Society officers certainly welcome your feedback as we go forward – communication becomes ever more important as we continue to change and evolve.

Perhaps equally as important from a President's perspective, we continue to make progress in stabilizing our finances. Finances are always an important issue for any new society, a truism that is especially valid these days, when resources are tighter in many institutions. Accordingly, I would ask all members to set a personal goal of recruiting an extra member a month for our Society; our dues are quite reasonable, and that's where we want to keep them. While you are at it, encourage your institutions and the libraries with which you work to subscribe to the Journal; we all want a publication of record so we can place our articles there, but if we are going to keep that healthy, we need to pay attention to the demand side as well.

On the substantive side, the field continues to grow and blossom, which is a good thing. Interesting questions continue to arise about defining the boundaries of industrial ecology – how do social sciences intersect with industrial ecology?

Is the organizational and cultural dimension of a firm part of industrial ecology, or just the material fluxes with which the firm is involved? Are there scale limits to industrial ecology – does it include earth systems engineering and management? Does it include studying technology systems, such as nanotechnology, biotechnology, ICT (information and communication technology), and cognitive sciences – the so-called NBIC convergence? How will industrial ecology continue to integrate lessons from biological systems, such as ecological complexity – and for that matter, the understanding of complexity in general, especially the reflexive and difficult complexity of human systems?

These questions may be understood as continuations of dialogs that have been going on for awhile in the field. But a new and interesting twist seems to be evolving, of industrial ecologists studying industrial ecology itself. This is a great opportunity: watching a new field grow, especially from the perspective of the sociology of science and technology, is a unique opportunity. For some of us, it leads into strange new worlds of post-modernist deconstruction that are questionable at best; for others, it is an opportunity for unique and interesting insights. My personal view is that such research and contemplation is quite valuable, especially as some industrial ecologists struggle with exactly how their work fits into a highly conflictual and ideological policy and intellectual arena, but I don't insist upon it.

So in broad scope I see a field of continuing intellectual growth with virtually unlimited research challenges. The daily headlines reaffirm the importance of the kind of information we seek to develop. Our Society is well-launched and more of its functions and promise are moving into the capable hands of the membership. While we can't afford to rest on these laurels, it is satisfying to know they exist, even as we turn our combined efforts to a most promising future.

ISIE Student Chapter

Starting up/finishing up: student perspectives on IE education

Hilary Grimes (grimeshg@clarkson.edu)

Stephanie Gerson (sgerson@stanfordalumni.org)

Some of us have been doing this academic thing forever, others may have just received their acceptance letter to an IE program. In whatever stage we ISIE students are in, from each other we can all learn about industrial ecology research directions, the trends arising in academic programs, and what it is that attracts new students and keeps current ones interested in the fields related to IE(or not)! The "call for input" posted on the student chapter listserv to address these questions and curiosities received an overwhelming response. Due to limited space, we are only able to present a few submissions; others sent to the new student column editor, Stephanie Gerson will appear in the next issue of ISIE News. And all of them will appear in the new student chapter website described at the end of this column, so please continue submitting.

Stephanie Gerson (sgerson@stanfordalumni.org)

My name is Stephanie, and I have a confession to make. Ironic as it is, your new co-chair of the ISIE News is not actually a student ...yet. In fact, I'm still deciding whether or not to pursue graduate studies in IE. I've spent the past year introducing myself to the field - joining ISIE, reading the Journal of Industrial Ecology (and submitting a letter or two to the editor), and researching graduate programs. This process of discovery will hopefully prove useful to those of you at similar starting points (or give students further along a chance to reminisce).

My interest in IE emerged from a fascination with biomimicry – an umbrella term encompassing all forms of design inspired by the natural world. I am most interested in applying biomimicry to agricultural and industrial systems, and accordingly, plan to pursue graduate studies in either agroecology or industrial ecology.

To gain some knowledge of the IE field(s), in addition to poking through back issues of JIE for the 'state of the research', I reviewed the list of graduate programs listed on the ISIE webpage. I contacted several and am currently corresponding with a student in the MSc program in Industrial Ecology at Leiden University in the Netherlands, which is the program I'm considering applying

<http://www.is4ie.org>

to. I've been in touch with the founder of Indigo Development, a local Industrial Ecology consulting firm (fortunate for me that there is a local Industrial Ecology consulting firm) in Oakland, California. We discussed the possibility of an apprenticeship, which would allow me to experience how IE manifests itself in a work environment. I still consider myself a newcomer to the field with much to learn before starting my academic process. Being the student column editor for the ISIE newsletter ought to be a great way to learn from all of you.

Alexander Rudolph Marin Sablowski

(wskibr@yahoo.com.br)

I'm from Brazil and hold a bachelor's degree in Forestry Engineering from the Federal University of Viçosa. I've completed a MSc in Natural Resource Conservation and Management from the University of Brasilia, and am currently pursuing a PhD in this same program. My first contact with industrial ecology was in my MSc study, in which I evaluated the efficiency of "Mass Flow Account" and "Energy Flow Account" tools to describe the environmental and production behaviors of the forestry industry. More specifically, I evaluated the efficiency of these tools to describe such behaviors at one plywood industry in the state of

Continued on page 8

More Student Testimonials

Mato Grosso. Now I'm developing a new line of study, in which I will evaluate the environmental and production behaviors of the pig iron sector in the state of Minas Gerais, using the "Mass Flow Account" tool. I will continue this work at Stuttgart University in Germany.

From my academic experience, I can say that industrial ecology and its concepts have significantly improved the way we evaluate environmental implications of production behaviors in different industrial sectors. This improvement has been achieved through the attainment of increased equilibrium and interaction between the different factors and actors that compose an industrial system, whether the system is composed of a singular industrial cell or a complex of different sectors.

Audrey Ja-Chin Lee (jalee@Princeton.edu)

I'm currently in my 5th year in the Electrical Engineering Department at Princeton University.

Three years into my graduate studies, I decided to change the direction and focus of my research. After taking public policy courses, I felt my scientific training could best be applied to matters of social import. Such a dramatic change so late in my studies was a significant barrier to overcome, but I found it essential then and still, to focus my efforts in an area I feel passion for.

I sought guidance and intellectual and emotional support from peers, professors in and outside my home department, and professionals in science policy. I took a summer position at the Federa-

tion of American Scientists, a non-governmental organization in Washington, DC, to cement my decision to pursue science policy. After a successful, motivating experience there, I returned to my PhD program reinvigorated and determined to finish. I found an invaluable mentor in Dr. Valerie Thomas and after much discussion, we identified a research topic I found both technically and socially interesting. As interdisciplinary projects are abnormal in my department, I found my course increasingly difficult and I now have two research advisors and a collaborator in industry.

My current studies focus on the use of x-ray fluorescence to detect and manage toxic heavy metals in plastic consumer products. This has wide implications for monitoring the distribution of cadmium and lead in plastics and their emission when incinerated at end-of-life. I plan to enter into a policy career upon completion of my doctoral degree.

At the Gordon Conference, I found that many students face similar difficulties navigating between two departments. I am looking forward to the support that the ISIE student chapter has to offer and I hope to use my experiences and the lessons I've learned to help others.

My 'two cents' is to not be afraid to explore "outside" fields, and to talk to people - professors, students, professionals, from various fields and perspectives. Networking was invaluable in helping me find the internship in DC, the company I'm currently collaborating with, interesting classes, career options, and thesis research ideas.

ISIE student chapter members and interested students at any stage in their education can now visit and participate in the growing community of IE students at **www.isiestudents.com**.

Students will find a host of information and opportunities including upcoming activities at the Stockholm conference, tips on obtaining student research funding, opportunities for student sabbaticals and internships, links to other programs in industrial ecology, and, like those above, student testimonials.

Conference/Exhibition Listings

You can be sure that your conference or workshop is listed here. Go to the ISIE website and enter the appropriate information. Your listing will be online and appear in the next **ISIE News**.

Take It Back! 2005

7-9 March 2005, Alexandria, VA, USA

Dissemination, application and assessment of LCA in companies (in German)

18 March 2005, ETH Zürich

The Twentieth International Conference on Solid Waste Technology and Management

3-6 April 2005, Philadelphia, PA, U.S.A.

International Conference on Environmental Reforms in Asian Production and Consumption

14-15 April 2005, Ho Chi Minh City, Vietnam

The 2nd Annual World Congress on Industrial Biotechnology and Bioprocessing

20-22 April 2005, Orlando, Florida USA

Summit 2005: The future of the global forest and paper industry

1-3 June 2005, Vancouver, BC Canada

Life cycle approaches for Green Investment

7 June 2005, EPF Lausanne

ISIE 2005 Conference

12-15 June 2005, Stockholm, Sweden

BIO 2005

19-22 June 2005, Philadelphia, PA, USA

Shaping our Future Energy Systems: ECOS 2005

20-23 June 2005, Trondheim, Norway

7th International Conference of the Russian Society for Ecological Economics:

Globalisation, New Economy and the Environment

23-25 June 2005, Saint Petersburg, Russia

15th International Conference on Input-Output Techniques

27 June- 1 July 2005, Beijing, China P.R.

2nd International Congress and Innovation Fair: Sustainable Management in Action

19-20 September 2005, Geneva, Switzerland

Global Environmental Change, Globalization and International Security:

New Challenges for the 21st Century

9-13 October 2005, Bonn, Germany

S-DEV Geneva 05:

Innovating cities across the world

11-13 October 2005, Geneva Palexpo, Switzerland

SETAC North America 26th Annual Meeting

13-17 November 2005, Baltimore, MD, USA

LCA in Industry: Challenges and Approaches to make it more practical

17 November 2005, ETH Zürich

Spread the news.....

Share your copy of **ISIE News**

with a colleague and encourage them to join!

We want to hear from you (yes, you).
Share ideas, articles, news, photographs, websites,
conference experiences, books, academic programs,
and anything else that you think might interest your
fellow ISIE members.

ISIE is your society and this is your newsletter.
Be heard!

**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

Officers

- President—Braden Allenby
- President-Elect—Marina Fischer-Kowalski
- Treasurer—Mak Dehejia
- Secretary—Kristan Cockerill

Council

- Clint Andrews Suren Erkman
- Barbara Karn René Kleijn
- Yuichi Moriguchi Matthias Ruth

Student Liaison—Jeremiah Johnson

Nominating Committee

- Jun Bi Ray Côté
- Marian Chertow Anthony Chiu
- Ned Grodon Ester van der Voet

Executive Director—John Ehrenfeld

Editor, *Journal of Industrial Ecology*—Reid Lifset

ISIE News Editors

- Kristan Cockerill, Editor: kristanc10@earthlink.net
- H. Scott Matthews, Conference Reports: hsm@cmu.edu
- Ray Côté, Tools & Websites, Raymond.Cote@Dal.ca
- Edgar Hertwich, Tools & Websites,
edgar.hertwich@ntnu.no
- Stephanie Gerson, Student Information,
sgerson@stanfordalumni.org

ISIE News Schedule

<u>Publication Date</u>	<u>Submission Deadline</u>
June 2005 v5n2	13 May 2005
September 2005 v5 n3	12 August 2005
December 2005 v5 n4	11 November 2005

Send submissions to the appropriate editor.

International Society for Industrial Ecology
c/o Yale School of Forestry and Environmental Studies
205 Prospect Street
New Haven, CT 06511-2189 USA
Tel +1-203-436-4835 Fax +1-203-432-5556
is4ie@yale.edu
<http://www.is4ie.org>