

2011 ISIE Biennial Conference in Berkeley - a Success!

Special points of interest:

- ISIE Conference Summary
- ISIE Sections update
- JIE News
- Industry Corner
- Members News
- Conferences

Dear ISIE Members,

First, we wish to thank the organizers for an outstanding conference! Arpad Horvath, chair of the conference, provided us with a great venue, accommodated over 500 participants and over 400 oral presentations and 100 posters and also delivered some sunny California weather for the week. The Clarke Kerr campus was a beautiful setting for the event. We also wish to recognize the conference co-chairs: Eric Masanet, Scott Matthews, Stephanie Hellwig and Yuichi Moriguchi; Arpad's Berkeley team; and Melanie Quigley at ISIE. We also want to thank the Technical Committee who did a great job soliciting abstract submissions, reviewing abstracts and chairing sessions at the conference.

The Society is growing in numbers, in scholarship and its impact. We had the largest number of abstract submissions and conference participants. The quality of the oral presentations and posters was excellent. This was evidenced both in the sophistication of presentations focused on tools and methods and in their applications to diverse systems ranging from transportation to buildings and food systems.

The ISIE Council met the day before the conference to discuss how best to foster growth in the Society. The ISIE Sections are clearly one mechanism to expand both in breadth and depth across key topics in the industrial field. All six Sections were very active during the conference by holding mini symposia, workshops and planning meetings. We wish to thank Peter Lowitt (Eco-Industrial Development/Industrial Symbiosis), Arnold Tucker (Environmentally Extended Input Output), Daniel Mueller (Material Flow Analysis), Jereon Guinee (Life Cycle Sustainability Assessment) and Henrikke Baumann and Frank Boons (Organizing Sustainable Production and Consumption) for meeting with the Council and organizing activities at the conference.

Another very positive sign about growth was the large number of students which comprised over 40% of the participants this year! Our students represent the next generation industrial ecology professionals and will be the future leaders of the society and they are an impressive group! The Student Chapter convened a large planning meeting during the conference and also organized a special workshop following the conference which was sponsored by the National Science Foundation.

The site for the next conference was announced during the closing session. The conference has oscillated back and forth between Europe and North America. We were pleased to receive and accept an excellent proposal from a strong Asia Pacific team represented by Korea, China and Japan. They will host the conference in Ulsan, Korea! The ISIE leadership met with Prof. Moon and Prof. Park from Korea and other organizers of the 2013 Conference to start the planning process. Marian Chertow, ISIE President Elect, introduced Mr. Lee at the closing plenary and he provided a nice overview about Ulsan and give an enthusiastic welcome to everyone. Ulsan is the leading industrial hub in Korea which makes it an excellent site for our meeting and chance for us to tour some of their industrial facilities. We look forward to seeing you all in 2013!

Roland Clift, Executive Director

Greg Keoleian, President

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ISIE Prizes Awarded

Two ISIE awards were presented at the 2011 conference in Berkeley: The Laudise Young Researcher Prize and the Society Prize.

The 2011 recipient of the Laudise Young Researcher Prize was Anders Stromman. Anders is an Associate Professor in the Department of Energy and Process Engineering at the Norwegian University of Science and Technology.

"The Laudise Prize is awarded outstanding achievements in industrial ecology by a researcher under the age of 36, endowed by AT&T in memory of Robert Laudise." Anders' achievements at this early stage of your career have been significant, in particular his re-



search in the areas of hybrid Life-Cycle Assessment, world trade modelling, and bioenergy research.

The Society Prize was presented to Gjalt Huppes. Gjalt is Associate professor and Head of the department IE with the Institute for Environmental Sciences (CML) at Leiden University.

"The Society Prize is awarded for outstanding contributions to the field of industrial ecology. It is the ISIE's highest recognition of professional achievement." His many achievements have greatly contributed to our field, in particular your pioneering research in LCA, SFA, and environmentally extended input/output analysis. In addition, his leadership roles in organizing international conferences, chairing key UNEP committees, and heading the industrial ecology department at CML for two decades have all had a tremendous impact.

Congratulations to both Anders and Gjalt on these well deserved awards!



We thank the Awards Committee including: Roland Clift, John Ehrenfeld, Tom Graedel, Arpad Horvath, Greg Keoleian, and Scott Matthews for their efforts and the nominators that provided the committee with many outstanding nominations.

ISIE Annual Student Poster Competition Winners

1st Place:

Jennifer Baka, Yale University.
"Potential changes in Biomass Flows due to India's Biodiesel Policy: A Comparative Material Flow Analysis of the *Jatropha curcas* and *Prosopis juliflora* Economies in Tamil Nadu, India"

2nd Place:

Jooyoung Park, Yale University.
"Re-defining the Concept of Waste For Closed-Loop Material Economies"

3rd Place:

Carl Lam, University of California, Davis.
"Linking materials flow analysis with environmental impact potential: Dynamic consequences of technology transition on projected e-waste in the U.S."

There were 39 entries of very high quality and the judges had a difficult time making the final decision. The poster competition organizers would like to thank the judges, without whom the competition would be impossible: Reid Lifset, Yuichi Moriguchi, Vered Doctori Blass, Matthew Eckelman, Rene Kleijn, Eric Williams and Ramzy Kahhat.



1st place winner



2nd place winner



3rd place winner

Student Chapter Update, Catherine Izard

The student chapter was very active during the recent ISIE meeting in Berkeley, CA. Our activities included an informal student happy hour, a student chapter general meeting, a poster competition, and a one-day Symposium on Industrial Ecology for Young Professionals on the day following the ISIE conference. We enjoyed the chance to meet so many of you in person at the general meeting and are grateful for the valuable feedback provided by meeting attendees. We are working to implement some of the ideas that came out of the meeting, especially those concerning social networking, as quickly as possible.

Elections are coming up! Elections for the student chapter board are this summer. There are three spots for new board members open. Involvement as an ISIE Student Chapter Board Member has many benefits, including: the opportunity to sit in ISIE committees; the chance to build your network through interacting with prominent ISIE members serving on the ISIE Council and other students. Involvement in the board is also a great way to increase understanding of the widespread activities of ISIE and improve your own research and future opportunities through new connections. Elections info was sent via Email.

As usual, we would like to remind students that they can keep in touch with the student chapter throughout the year on LinkedIn (join our ISIE Student Chapter Group). You can find more information and/or join the student chapter by signing up at www.is4ie.org/students. Anyone interested in getting more involved should contact Catherine Izard at cizard@andrew.cmu.edu.



Sustainable Urban Systems (SUS) Section Update, Anu Ramaswami

The newly formed Sustainable Urban Systems (SUS) section held its first workshop on Monday June 6. It was an all day workshop, well-attended fifty participants including academic researchers, practitioners from cities, NGOs and consulting firms and policy makers, drawn from several counties across the globe. The workshop was organized into four sessions wherein participants presented brief synopses of their work as a way for everyone to get to know "who is doing what". The opening session featured Ms Calla Ostrander from the City of San Francisco who gave a overview of what cities need from the SUS community of researchers. The diversity and range of activities related to SUS became apparent from the following three technical sessions that addressed aggregate sustainability metrics for cities, spatially and temporally disaggregated sustainability metrics, as well as exploration of the human dimensions of SUS through linkages with the social sciences. A working session over lunch enabled the participants to provide feedback on the mission, vision and immediate (1 year) and long-term action items of the SUS. A final mission-vision-action document for SUS will be prepared by the SUS board at the end of August, incorporating feedback from the SUS workshop.

Industrial Symbiosis Eco-Industrial Development Section Update, Peter Lowitt

The first meeting of the EIDC/IS section took place at the ISIE conference. The section members elected the board of the section:

Peter Lowitt, Chair

Weslynn Ashton, Secretary

Shi Han, Treasurer.

Marian Chertow, Board member

Ankit Aggarwal, Board member

Rachel Lombardi, Board member



Organizing Sustainable Consumption and Production Section Update, Vered D. Blass

The first meeting of the Organizing Sustainable Consumption and Production Section took place during the ISIE Conference. More than 25 people attended and the main focus was introducing the section idea and brainstorming on activities and directions the section would like to take. A workshop is planned for the section members during June 2012, details will be published once set. In the mean time, if you wish to join the section, please contact Frank Boons (boons@fsw.eur.nl) or Kikki Baumann (Henrikke.Baumann@chalmers.se)

Life Cycle Sustainability Assessment (LCSA) section update, Jeroen Guinée

During the ISIE biennial conference in Berkeley (June 7-10, 2011) the kick-off meeting of the brand new Life Cycle Sustainability Assessment (LCSA) section was held. Around 30-40 conference participants joined this meeting. Jeroen Guinée (preliminary chairman of the LCSA section) presented the proposal of the section as accepted by the Council and then the floor was opened for questions, discussion and suggestions. Particular attention was devoted to identifying needs and special topics for this new section. Participants were asked to provide input on the topics they would like

to be addressed by this section, bearing in mind that the new section is particularly looking for covering topics that are not yet extensively addressed by other ISIE sections or by other societies. A draft list of topics has been developed during the meeting. This list will soon be published as part of the meeting's minutes and then be sent to the Board and section members. Board and section members, particularly those that could not attend the Berkeley kick-off meeting, then will have the opportunity to add upon this list (once more). It was suggested that we then prioritize a selected

number of topics, which a number of section members is interested in to work on, for the first two years of this section. We then will decide more precise working methods and targets for these topics.

Finally, we invite ISIE members with an interest in LCSA, who have not yet signed up for this section, to do so as yet (please mail to Melanie Quigley: melanie.quigley@yale.edu).

We are looking forward to your inputs!

Measuring Carbon Footprint in Supply Chains, Workshop Summary, by Vered D. Blass

On June 6, 2011 the International Interdisciplinary Working Group on Measuring Carbon and Energy Footprints in Supply Chains (lead by Charles Corbett and Vered D. Blass) organized a one day workshop for operations research, management, industrial engineering, and industrial ecology scholars. The workshop was supported by the UCLA CIBER program on Global Environmental Sustainability and hosted by the UCLA Anderson School of Management and the Recanati Graduate School of Business Administration, Tel Aviv University.

The goals of the workshop were to discuss main issues in carbon footprint and supply chains, get the industrial ecology and operations scholars familiar with each other work in that area, and discuss potential interdisciplinary research collaborations opportunities via interactive session in order to come with future research and collaboration agenda.

We had a diverse group of over 30 attendees from different institutes in four continents. The attendees included leading senior professors, junior professors, PhD students, and researchers from research organizations and NGOs. The first half of the day was devoted to presentations by scholars from industrial ecology and the operations discipline as well as from industry. The presentations files are posted on the group's website. In the second part of the workshop the group was divided to small working groups and research questions and methods were discussed among the joint teams of researchers. The workshop ended with a summary session identifying future opportunities including completing literature review paper, mutual workshop in June 2012, and joining the new ISIE production and consumption section.



In order to learn more about the workshop and the intentional group, please visit the following links:

Group web site: <http://sites.google.com/site/lcaworkinggroup/>

Workshop details: <https://sites.google.com/site/lcaworkinggroup/announcements/june6workshop/june-6-workshop>

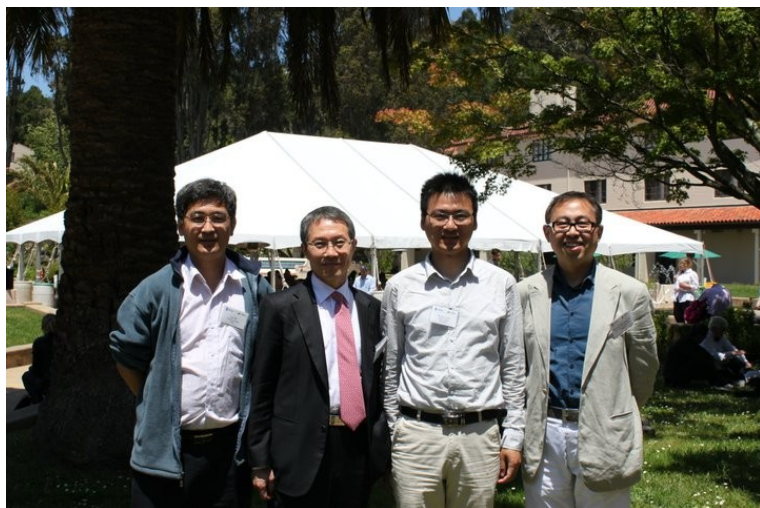
To join our linkedIn group, please visit <http://www.linkedin.com/groups?mostPopular=&gid=3188223>

Literature survey:

As part of our effort to facilitate more research in the area of measuring carbon footprint in supply chain we are working on a literature review paper to establish suggested research agenda for joint teams of operations management, industrial engineering, and industrial ecology scholars. In order to make sure that we include as much as possible relevant literature we would be very grateful if you can take the time to contribute answering this short survey. To respond to this questionnaire, please follow this link:

<https://www.questchain.com/platform/main/response.php?qcrespid=cd8c7552fbc97fc664e92086ab685c3c>

Having Fun and Making Friends in ISIE 2011



Thanks to Anthony SF Chiu, Ankit Aggarwal, Rachel Lombardi, Gemma Cervantes, Jeroen Guinee, and Catherine Izard for sending their photos from the different conference events.

Personal Reflection, Gemma Cervantes

For me this was one of the best ISIE conferences in terms of the contents. I see that every year IE is spreading around the world and widening its scope. I realized that political and social themes had a bigger space in this ISIE conference than in previous ones and I think it's related to the spreading of national politics in IE, specially in Asia. It was great to meet so many people of different countries, this is one of the most inter-

esting things in the ISIE conferences, because you can learn from other ways of putting IE into practice. I would like to have more time for discussion. Perhaps devoting one morning or afternoon only to a panel session and debate session, without any presentations, just discussing about some emerging aspects of IE.



The Journey of ISIE Conferences

Location of past conferences:

- 2001 – Leiden
- 2003 – Ann Arbor
- 2005 – Stockholm
- 2007 – Toronto
- 2009 – Lisbon
- 2011 – Berkeley



Next ISIE Biennial International Conference in 2013 will be in Ulsan, Korea!
We look forward to seeing you all in Ulsan.

JIE News, Reid Lifset

Change in page Size

New Impact Factor

Special Issue

Change in Page Size

Beginning with the first issue of 2012, the *JIE* will be published in a larger format. The size will increase from 7 x 10 inches (~ 17.8 x 25.4 cm) to 8.5 x 11 inches (~ 21.6 x 27.9 cm). This will provide enough additional space to permit publication of approximately 2 more papers per issue or the equivalent of about 1 more issue per volume. The change in page size allows the *JIE* to publish more articles with only minor change in cost.

New Impact Factor

The 2-year impact factors for 2010 were released at the end of June. The *JIE*'s 2-year impact factor increased from 2.393 to 2.426. Because the *JIE* has now been indexed by ISI for five years, the 5-year value has been calculated for the first time—3.097. The impact factor is the ratio of recent citations to journal articles divided by the number of articles published in the journal.

Special Issue: Sustainable Urban Systems

Don't forget the upcoming deadline for the special issue on sustainable urban systems: **August 31, 2011**. Information on the special issue can be found at < <http://www.yale.edu/jie/CFPs/CfP-SUS.html> >.

Do you receive the JIE table of contents alerts? If not, be sure to sign up to receive these emails or RSS feeds so that you always have the latest in industrial ecology research. Just go to <http://onlinelibrary.wiley.com/user-registration>) and follow the instructions for registration. If you need assistance, contact the editorial office at indecol@yale.edu.

Special Publications

"Humanity Can and Must Do More with Less: UNEP experts warn: 'Decouple' resource consumption and economic growth rates"

By 2050, humanity could devour an estimated 140 billion tons of minerals, ores, fossil fuels and biomass per year – three times its current appetite – unless the economic growth rate is “decoupled” from the rate of natural resource consumption, warns a new report from the United Nations Environment Programme. With this report the industrial ecology method of material flow accounting is prominently recognized and global and national centennial series of materials are presented. UNEP Executive Director Achim Steiner and International Resource Panel Co-Chair Ashok Khosla, together with lead authors Marina Fischer-Kowalski and Mark Swilling, launched the report 12 May 2011 at the 19th annual meetings of the Commission for Sustainable Development, UN Secretariat, New York. The full report, “Decoupling natural resource use and environmental impacts from economic growth,” is available at www.unep.org/resourcepanel/decoupling/

New Projects

New project to create LCA and IE network between Spain, Portugal and southern France: The Universitat Autònoma de Barcelona, along with 7 other members from Spain (Universitat de Girona), Portugal (Universidade de Aveiro) and France (Montpellier SupAgro, Ecole des Mines d'Alès, CATAR-CRITT Agroressources, Institute National de la recherche agronomique, and the Centre National du Machinisme Agricole, du Génie Rural, des Eaux et des Forêts) have started a project entitled ECOTECH-SUDOE "International Network in Life Cycle Assessment and Ecodesign for Environmental Innovation of Technologies", co-financed with FEDER European funds through the Interreg Sudoe IV program. With a lifespan of 33 months this project aims to improve competitiveness of the Portuguese, Spain and southern France region through the development of environmental technologies through the application of LCA and Industrial Ecology. Through applying these techniques and their results, technologies can become not only sustainable and environmentally friendly, but they can also be considered on par in performance with other technologies. By informing and engaging companies about this concept it is possible to increase the market in the region. For more information please see www.ecotechsudoe.eu

Marina Fischer-Kowalski, Laz Xenidis and Simron Singh (SEC Vienna) gladly announce that the municipality of the Island of Samothraki has submitted an application to UNESCO for becoming a Biosphere Reserve. This is an important milestone in a transdisciplinary project supported by the Austrian Academy of Sciences to create the first Biosphere Reserve in Greece. The Island of Samothraki is among the rare remaining examples of island natural beauty and rich biodiversity in the Aegean archipelago; most of its territory is mountainous, and there are numerous streams and waterfalls that flow all year round. Samothraki is also known for its rich archaeological heritage - the famous "Nike of Samothraki" is now exhibited in the Louvre, but the impressive remains of the "City of the Great Gods" where it came from attract many visitors. This project resulted from a collaborative effort of local NGOs, scientists and local administration directed at preserving the island from destruction by animal grazing and mass tourism, and seeking for a sustainable way of living for its inhabitants, which will be subject to a number of follow-up projects. For pictures by a local photographer see <http://samothrakisphotoblog.com/index.php?showimage=2661>.

Industry Updates, Peter Laybourn

International Synergies has been awarded a three year contract with an option for a fourth year to continue developing industrial symbiosis in Northern Ireland.

The significance of the award is that it comes from Invest Northern Ireland whose principal task is to promote economic growth in the region. Clear evidence that industrial symbiosis is seen as an attractive tool for the green growth agenda.

News today from Europe is that two articles have been published on the same day (June 30th) regarding industrial symbiosis. The first is from DG Environment via the ETAP Newsletter and perhaps more importantly in European Voice which is the most read publication of policy makers in Europe (Copy attached).

In his closing remarks at Green Week in Brussels last month (27th May) Environment Commissioner Janez Potocnik

said that "industrial symbiosis needs to become widespread across Europe"



Upcoming Conferences

- Ecocity World Summit - Montreal 2011, August 22-26, 2011 http://ecocite2011.com/accueil/default_e.asp
- Life Cycle Management 2011, August 28-31, Berlin, Germany, <http://www.lcm2011.org/>
- Environmental & Integrated assessment of Complex Systems Conference. Nov 30– Dec 2, 2011. France, Montpellier <http://www.ecotech-tools.org/>
- Gordon Conference - Les Diablerets, Switzerland, June 17-22, 2012
- OSCP section first workshop in Rotterdam, Netherlands, June, 2012
- ISIE Asia Pacific conference in Beijing, Sept 9-10, 2012
- The 9th Industrial Symbiosis Research Symposium in Tianjin, Sept 8, 2012
- MFA Section Workshop in Darmstadt, Germany, Sept 2012

The Ecotech&Tools Conference - call for papers:

The program is built based on invited speakers chosen by the scientific committee. The Ecotech&Tools Conference invites submission of academic and professional research abstracts in the full range of the conference topics in relation to the Lifecycle Thinking framework in Environmental and Social Science disciplines. The Ecotech&Tools Conference encourages discussion on the latest research-in-progress. Submission deadline is August 29, 2011

<http://www.ecotech-tools.org/call-for-papers/>

ISIE Membership Subscriptions, Chris Kennedy and Roland Clift

You will soon be receiving reminders from Wiley-Blackwell to renew your membership for 2012. Following a successful conference and with our growing membership, the ISIE is in good financial shape so, apart from fluctuations in currency exchange rates, the subscriptions are unchanged from recent years. However, because the Society's financial dealings are almost all in dollars, we have to ask members in the Euro and Sterling zones to pay slightly higher subscriptions, to cover part of the change in exchange rates since the subscriptions were last set, three years ago. We also have to ask members in the Rest of the World to pay their subscriptions in dollars not pounds.

| | Americas USD | Rest of world USD | Developing USD | Euro € | Sterling £ |
|------------------|-----------------|----------------------|-------------------|--------|------------|
| Regular: | | | | | |
| One year: | | | | | |
| Print & on-line | \$150 | \$160 | \$80 | €109 | £92 |
| On-line only | \$140 | \$140 | \$50 | €95 | £80 |
| Two year: | | | | | |
| Print & on-line | \$270 | \$300 ¹ | \$144 | €200 | £170 |
| On-line only | \$252 | \$252 | \$90 | €172 | £145 |
| Student: | | | | | |
| Print & on-line | \$75 | \$85 | \$75 | €59 | £51 |
| On-line only | \$35 | \$35 | \$35 | €24 | £20 |

ISIE Member News

ISIE member Göran Finnveden was appointed as vice-president of Sustainable development in KTH, the Royal Institute of Technology in Stockholm, Sweden. This is a new position and a recognition of the importance of this field for KTH. Göran Finnveden is a professor in Environmental Strategic Analysis at KTH.

Dr Thomas (Tommy) Wiedmann joined CSIRO Ecosystem Sciences in April 2011 as a Senior Research Scientist. Tommy has a long-standing expertise in the development and application of environmental input-output analysis in the fields of footprint analysis (carbon/energy/water), industrial ecology and sustainable consumption and production. He will be leading the Sustainable Consumption and Production team under CSIRO's Social and Economic Sciences Program and will develop CSIRO's capacity to apply environmental input-output analysis as part of a holistic concept to integrated sustainability assessment and scenario analysis.

Marina Fischer-Kowalski has been co-opted as a member of the ERC Starting Independent Researcher Grant peer review panel for a third period. She was also elected vice-president of the board of the European Society of Ecological Economics (ESEE).

Anke Schaffartzik was awarded a DocTeam fellowship for interdisciplinary teams by the Austrian Academy of Sciences for her PhD project on the potential of biofuels.

Professor Xuemei Bai left Commonwealth Scientific and Industrial Research Organization in Australia where he worked for the last 4.5 years as a Senior Science Leader and Senior Principal Research Scientist, and joined Fenner School of Environment and Society at Australian National University. Professor Xuemei Bai will teach human ecology, and continue with the research agenda on several fronts of urban sustainability science, including urban-industrial ecology; drivers and consequences of rapid urbanization; the structure, function and process of urban socio-ecological systems; climate mitigation and adaptation in cities; urban evolution and urban sustainability transition in Asia

We would like to hear from YOU!

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

We can only do it with your help!

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

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

International Society for Industrial Ecology
c/o Yale School of Forestry and Environmental
Studies
195 Prospect Street
New Haven, CT 06511 USA
Tel +1-203-432-6953 Fax +1-203-432-5556
is4ie@yale.edu
<http://www.is4ie.org>

WWW.IS4IE.ORG

President: Greg Keoleian

President-elect: Marian Chertow

Secretary: Clint Andrews and Anthony Chiu

Treasurer: Chris Kennedy

Editor, Journal of Industrial Ecology:
Reid Lifset

ISIE News Editor :

Vered D. Blass

vered@industrialecology.org.il

International Society for Industrial Ecology

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

Next ISIE Newsletter Schedule

| <u>Publication Date</u> | <u>Submission Date</u> |
|-------------------------|------------------------|
| October 30, 2011 | October 15, 2011 |

ISIE Membership Information

Check us out on [LinkedIn](#) and [Facebook](#)!

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

To access the Members Only pages, visit www.is4ie.org/membersonly

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

- Material Flow Analysis - ConAccount
- Life Cycle Sustainability Assessment
- Eco-Industrial Development
- Environmentally Extended Input Output
- Sustainable Urban Systems
- Organizing Sustainable Consumption and Production

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

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