Input-Output-Analysis in Industrial Ecology Merging Economics with Environmental Systems Science

Call for abstracts and participation to a workshop,

# **Applications of Input-Output Analysis in Industrial Ecology**

A workshop on Applications of Input-Output Analysis in Industrial Ecology will be held in connection to the second international conference of International Society of Industrial Ecology (ISIE) at University of Michigan, Ann Arbor, U.S. (see http://css.snre.umich.edu/isie2003/ for details of the conference).

#### BACKGROUND

Input-Output Analysis (IOA) plays an increasingly important role in the field of Life Cycle Assessment (LCA), Material Flow Accounting (MFA) and, more broadly, environmental systems analysis and Industrial Ecology. As the areas of application of IOA in Industrial Ecology become ever wider and deeper, an overview that embraces the state-of-theart has been called for on the one hand, and a fundamental question on the role of IOA in Industrial Ecology emerged on the other hand. Answering that call, the first joint working group shared by both the Society of Environmental Toxicology and Chemistry (SETAC) and the International Society of Industrial Ecology (ISIE) has been launched last year on the topic of Input-Output Analysis in Industrial Ecology.

The main task of the working group is to make a formal platform where scientists can bring and discuss state-of-the-art contributions on the subject and develop views on its further developments. Ultimately we will prepare a quality publication that provides an overall view on the subject and that will answer the question on the role of IOA in industrial ecology.

The first kick-off meeting was held in Hamburg in this year and the second meeting will be co-organized as a workshop by Sangwon Suh, the convenor of the SETAC-ISIE working group on input-output analysis in industrial ecology and Faye Duchin, the vice-president of the International Input-Output Association (IIOA). We warmly invite your contribution and participation to this workshop.

### DETAILS

#### 1. Abstract:

- Scope: Both theory and applications of input-output analysis that is used in the broad field of industrial ecology including Life Cycle Assessment, Material Flow Accounting, Substance Flow Analysis, Environmental Policy, Energy Systems Analysis, Sustainable Consumption, Waste Management, Sustainability Indicators, etc.
- Size: around 500 words
- Deadline: 30 May, 2003
- To be sent to Sangwon Suh (<u>suh@cml.leidenuniv.nl</u>) with cc. to Faye Duchin (<u>duchin@rpi.edu</u>).
- \* Based on the presented work some authors will be invited to contribute a chapter for the book.

### Input-Output-Analysis in Industrial Ecology

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# ISIE

# 2. Presentation

10 minutes of presentation + 5 minutes of discussion (See following page)

### 3. Workshop

- Registration: Free (please send a line of an e-mail to Sangwon Suh regarding to your intention of attendance).
- Location: University of Michigan, Ann Arbor See map at http://css.snre.umich.edu/isie2003/UMBS\_Level\_One.jpg Paton Accounting Center P1018
- Date and time: 2 July 2003, Wednesday 2:00PM 5:00PM
- Program: Keynote speak, Presentations, Panel discussion: The role of input-output analysis in industrial ecology.

We again welcome your participation and will be looking forward to seeing you at Ann Arbor soon!

Sincerely,

Workshop co-organizers

Sangwon Suh CML, Leiden University PO.Box 9518 2300RA, Leiden the Netherlands <u>suh@cml.leidenuniv.nl</u> (Convenor of the WG) Faye Duchin Department of Economics School of Humanities and Social Sciences Sage Labs Room 3408, 110 8th Street Troy, NY 12180, USA <u>duchin@rpi.edu</u> (Vice-president of the International Input-Output Association (IIOA))

# Wednesday, 2 July 2003 2:00 PM – 5:00 PM

#### Workshop

#### APPLICATIONS OF INPUT-OUTPUT ANALYSIS IN INDUSTRIAL ECOLOGY

#### TIME: IMPORTANT NOTICE

We decided to start the program at 2:00PM instead of 1:00PM due to an urgent event then (lunch).

#### LOCATION:

The workshop will be held in Paton Accounting Center P1018.

There is a map of the UM Business School, including Paton Accounting Center at http://css.snre.umich.edu/isie2003/UMBS\_floorplan.jpg.

#### **PROGRAM:**

- 14:00 Welcome address
- 14.05 Introduction to the WG activities and an overview of the program (Sangwon Suh)
- 14:15 Keynote speak (Faye Duchin)
- 14:25 Panel discussion on the role of IOA in IE (Moderator: Sangwon Suh)

Panelists:

Arpad Horvath (UC Berkeley, USA) Yuichi Moriguchi (NIES, Japan) Gjalt Huppes (Leiden University, the Netherlands) Faye Duchin (Rensselaer Polytechnic Institute, USA) Reid Liefset (Yale University, USA)

<15:25 Coffee break >

15:45 Presentations (4X15min) (Chair: Faye Duchin)

Presentations:

- A Survey of Various Accounting Systems of Material Flows and Waste Stream Yasushi Kondo and Shinchiro Nakamura (Waseda University, Japan)
- Leontief's price model as the basis for combining MFA and IOA? Susanne Kytzia (Swiss Federal Institute of Technology, Swiss)
- Hybrid analysis of a desktop computer Eric Williams (United Nations University, Japan)
- Modeling the economic effects of a material efficiency strategy in the paper cycle: Application of a linked model system. Carsten Nathani (Fraunhofer ISI, Germany)

16:45 Closing the program (Faye Duchin)