## BIOGRAPHICAL NOTES

| Name: | Country: |
|---|---|
| Keisuke Nansai | Japan |
| Candidate for which position? | ISIE member since: |
| Council | 2008 |

PLEASE DESCRIBE WHAT YOU WOULD LIKE TO ACCOMPLISH DURING YOUR TERM, AND THE TIME YOU CAN DEDICATE TO THE POSITION (150 WORD LIMIT):

The mission of ISIE includes not merely identifying problems in society, but providing solutions to them based on scientific knowledge. Currently, as shown in recent papers of JIE, the research scope which ISIE should address has been spreading, with expansion of environmental impact assessment, consideration of social impacts, and case studies of developing countries. This trend demands the further involvement of a wide range of specialists as various social scientists, administrators, and engineers in ISIE. It will be a good chance for ISIE to evolve into a more sophisticated transdisciplinary society for designing global sustainability. My personal ambition is to emphasize the establishment of a coactive network with specialists of different fields who can collaborate in building bridges to identify problems, to solve them, and to implement additional efforts. Especially, as a council member, I would like to contribute to strategic planning related to how and for whom ISIE should expand its own social network in the future.

DESCRIBE YOUR CURRENT PROFESSIONA AND/OR ACADEMIC ACTIVITIES (100 WORD LIMIT)

Since December 2014, I have worked as an appointed Head of the International Material Cycles Section at the Center for Material Cycles and Waste Management Research of National Institute for Environmental Studies (NIES), Japan. Specializing in analysis of environmental systems, I have developed IOA, LCA, and MFA methods and have conducted several case studies of energy, GHG, and critical metals for Japan. My current interest is the criticality assessment of metal resources and the future scenario analysis on the resources. I am working to develop analytical methods using IOA and network theory to characterize the global flows of the resources.

LIST PREVIOUS PROFESSIONAL AND/OR ACADEMIC POSITIONS (100 WORD LIMIT)

Sep. 2014-present: Adjunct Associate Professor, Graduate School of Environmental Studies, Nagoya University, Japan

Mar. 2011-May 2012: Visiting Professor, Integrated Sustainability Analysis, School of Physics, Faculty of Science, The University of Sydney, Australia

Oct. 2008- Nov. 2014: Senior Researcher, Research Center for Material Cycles and Waste Management, NIES, Japan

Oct. 2003- Sep. 2008: Researcher, Research Center for Material Cycles and Waste Management, NIES, Japan

Apr. 2001-Oct. 2003: Postdoctoral Researcher, Endocrine Disruptors and Dioxin Research Project, NIES, Japan

EDUCATION

Ph.D in Energy Science, Kyoto University, Japan, March 2001
M.S. in Energy Science, Kyoto University, Japan, March 1998
B.S. in Chemical Engineering, Doshisha University, Japan, March 1996

AWARDS/MERITS

2015: The Best Research Project Award by Mitsui Corporation, Japan
2012: Encouragement Award by Institute of Life Cycle Assessment, Japan
2011: The Sir Richard Stone Prize (the best paper award) by International Input-Output Association
2007: The Wassily Leontief Memorial Prize (16th International Input-Output Conference by International Input-Output Association)

REPRESENTATIVE PUBLICATIONS

[1] Shinichiro Nakamura and Keisuke Nansai (2016), Chapter 6: Input-Output and Hybrid LCA (in LCA Compendium - The Complete World of Life Cycle Assessment: Ed. Matthias Finkbeiner), 219-291.
[2] Y. Shigetomi, K. Nansai, S. Kagawa, S. Tohno (2016) Influence of income difference on carbon and material footprints for critical metals: the case of Japanese households, *Journal of Economic Structures*, 5:1.
[3] K. Nansai, K. Nakajima, S. Kagawa, Y. Kondo, Y. Shigetomi, S. Suh (2015) Global mining risk footprint of critical metals necessary for low-carbon technologies: the case of neodymium, cobalt, and platinum in Japan, *Environmental Science & Technology*, 49(4), 2022-2031.
[4] Y. Shigetomi, K. Nansai, S. Kagawa, S. Tohno (2015) Trends in Japanese households' critical-metals material footprints, *Ecological Economics*, 119, 118-126
[5] K. Matsubae, E. Webeck, K. Nansai, K. Nakajima, M. Tanaka, T. Nagasaka (2015) Hidden phosphorus flows related with non-agriculture industrial activities: A focus on steelmaking and metal surface treatment, *Resources, Conservation & Recycling*, 105 (B), 360-367.
[6] S. Kagawa, S. Suh, K. Hubacek, T. Wiedmann, K. Nansai, J. Minx (2015) $CO_2$ Emission Clusters within Global Supply Chain Networks: Implications for Climate Change Mitigation, *Global Environmental Change*, 35, 486-496.

PROFESSIONAL ASSOCIATIONS (I.E. BOARD MEMBERSHIPS, PROFESSIONAL SOCIETIES, ETC)

2016-present: Board member of EEIO section of ISIE.

2015-present: Organizing Committee of ISIE conference 2017 in USA

2015-2016: Program Committee member of IIOA conference 2016 in South Korea

2014-2016: Chair of 12th International Conference on EcoBalance (EcoBalance 2016) in Japan

2012-present: Editorial board member of *Economic Systems Research (Routledge)*

2011-present: Editorial board member of *Journal of Economic Structure (Springer)*

2012-2013: Technical Committee member of ISIE conference 2013 in South Korea

2011-2013: ISIE, Nominating Committee member