

YOSEF MANIK

PROFESSIONAL PREPARATION

Ph.D. Ecology and Environmental Sciences, University of Maine, 2013

Field: Industrial Ecology and Sustainability Assessment

Dissertation: “*Life Cycle Sustainability Assessment of Palm Oil Biodiesel: Insights into Opportunities and Challenges for Balancing of the 3Ps (People, Profit, and Planet)*”

M.Sc. Chemical Engineering, Universität Karlsruhe (now Karlsruhe Institute of Technology), 2008

Field: Sustainable Processing of Utilities and Waste

Thesis: “*Flame Stability and Emissions of a SiSiC Porous Burner*”

B.S.(Eng) Industrial Engineering, Institut Teknologi Sepuluh Nopember, 1998

ASSIGNMENTS

Harvard University – John F. Kennedy School of Government (2013 – 2014)

Title: Giorgio-Ruffolo Post-doctoral Research Fellow in Sustainability Science Program

Project: Policy research in palm oil biodiesel sustainability

President University, Indonesia – Faculty of Engineering (2009 – 2010)

Title: Lecturer/Instructor for the Department of Industrial Engineering

Project(s): Teaching (50%); Research (50%) Growing inclusive market model for sustainable development

Universität Karlsruhe, Germany – Engler-Bunte Institute, Division of Combustion Technology (2007 – 2008)

Title: Graduate Research Assistant

Project: Experimental research on the technical performance of a porous inert media burner

Astra Otoparts Co., Indonesia – Automobile component manufacturing (1999– 2006)

Title: Process Engineer

Project: Process development/line balancing for Aluminum die-casting process

GRANTS

Giorgio-Ruffolo (Italy’s Founding Minister of Environment) **Fellowship**, (2013 – 2014) \$ 55,000

Fulbright Presidential PhD Scholarship (2010 – 2013) \$ 52,416

University of Maine International Tuition Scholarship (2010 – 2013) \$ 60,894

Travel Awards from National Science Foundation, Marie Currie, Yale, etc. (2010 – 2013) ~ \$ 10,000

DAAD (German Academic Exchange Service) **Development-Related Scholarship** (2006 – 2008) €18,000

Universität Karlsruhe Tuition Scholarship (2006-2008) € 15,000

PUBLICATIONS

Articles

- Manik, Y**, J Leahy, and A Halog. 2013. Social life cycle assessment of palm oil biodiesel: a case study in Jambi Province of Indonesia. *International Journal of Life Cycle Assessment*, 18(7):1386-1392
- Manik, Y** and A Halog. 2012. A meta-analytic review of life cycle assessment and flow analyses studies of palm oil biodiesel. *Integrated Environmental Assessment and Management*, 9(1):134-141
- Halog, A and **Y Manik**. 2011. Advancing Integrated Systems Modelling Framework for Life Cycle Sustainability Assessment, *Sustainability*, 3(2): 469-499

Book Chapter

- Suhartomo, A, **Y Manik**, TK Gan, DT Siahaan. (2010) Cimory dairy products: Empowering poor dairy farmers to do sustainable business. *Growing Inclusive Market – Indonesia Cases Vol. I-2010: Creating Value for All, Strategies for Doing Business with the Poor*, Jakarta, Indonesia: Indonesia Global Compact Network.

Conference Proceedings

- Manik, Y** and A Halog. 2011. ISO 14040 compliant- and ecologically-based LCA of palm oil biodiesel. *Proceedings of the LCA XI International Conference*, October 4-6, Chicago, IL, United States: American Center for Life Cycle Assessment (ISBN: 978-0-9882145-0-7) pp. 73-78
- Halog, A., N Bichraoui, **Y Manik**, B Neupane. 2011. Advancing integrated methodological framework for developing sustainable and resilient systems. *Proceedings of the 8th International Conference on Complex Systems*, June 26 - July 1, 2011, Quincy, MA, United States: New England Complex Systems Institute (ISBN 978-0-9656328-4-3) pp. 129-143
- Manik, Y**. 2010. Influence of the pore structure of a SiSiC sponge on the flame stability of natural gas/ air mixture in a porous burner. *Proceedings of National Seminar Basic Science VII*, February 20, Malang, Indonesia: Universitas Brawijaya (ISBN: 978-602-96393-0-8)
- Manik, Y**. 2009. Potential of energy recovery from municipal solid waste incineration. *Proceedings of International Conference of Sustainable Biomass Production and Utilization*, August 3-4, Bandar Lampung, Indonesia: Universitas Lampung (ISBN: 978-979-18775-7-8)
- Manik, Y**. 2009. Mass and energy balance of a municipal solid waste incinerator, *Proceedings of the 14th Seminar of Industrial Technology: Renewable Energy and Sustainable Development in Indonesia*, Surabaya, Indonesia: Institut Teknologi Sepuluh Nopember (ISBN: 979-545-043-3)

Selected Presentations

- Manik, Y**. 2014. Toward Sustainability of Palm Oil: Linking knowledge into policy. *Building Future Faculty Program*. North Carolina State University. April 2-5. Raleigh, NC
- Manik, Y**. 2013. Policy evaluation of sustainable development in palm oil biodiesell. *Society of Environmental Toxicology and Chemistry (SETAC) North America Annual Meeting*. November 18-21. Nashville, TN
- Manik, Y**. 2013. Modeling the sustainability of palm oil biodiesel in complex system. *International Conference of Industrial Ecology (ISIE)*. June 24-29. Ulsan, Korea.
- Manik, Y**. 2013. Social Life Cycle Assessment of palm oil biodiesel: A case study in Jambi Province of Indonesia. *Green Chemistry & Engineering Conference*. June 17-20. Washington. DC

Ongoing Project

Sustainability of Palm Oil Biodiesel in Indonesia: A Policy Analysis. Harvard Kennedy School Sustainability Science Program Working Paper

Overview, Design concepts and Details (ODD) Protocol of An Agent Based Model for Sustainability Analysis of Palm Oil Biodiesel

TEACHING & INVITED LECTURES

Opportunities and Challenges towards Indonesia's Energy Sovereignty. *Seminar at Harvard Kennedy School, Ash Center for Democratic Governance and Innovation*. Cambridge, MA, United States. October 2013

Application of Life Cycle Assessment in Forest Economics. *Guest Lecture at School of Forest Resources, University of Maine*, Orono, ME, United States. Spring 2012

Life Cycle Assessment and Industrial Ecology. *Teaching Assistant to Dr. Anthony Halog at School of Forest Resources, University of Maine*, Orono, ME, United States. Fall 2011

Sustainable Energy Management. *Undergraduate Coursework at the Department of Industrial Engineering President University*. Cikarang, Indonesia. Taught 2 semesters 2009-2010

Operation Research. *Undergraduate Coursework at the Department of Industrial Engineering President University*. Cikarang, Indonesia. Taught 2 semesters 2009-2010

SKILLS & TRAININGS

Familiar with NetLogo, R, EViews, SimaPro, OpenLCA

Building Future Faculty Program, North Carolina State University, Raleigh, NC (2014)

"From Lab to Market"—Fulbright Enrichment Seminar, Seattle, WA (2011)

Center for Excellence in Teaching and Assessment (CETA) Training, University of Maine, Orono, ME (2011)

Evaluation of Sustainability: European Training Courses, Universite Libré de Bruxelles, Belgium (2010)

MEMBERSHIPS

Phi Kappa Phi Honor Society

Golden Key International Honour Society

American Center for Life Cycle Assessment

Society of Environmental Toxicology and Chemistry

International Society for Industrial Ecology