

Name:	Jitti Mungkalasiri
Tel:	0-2564-6500 ext 4063
Fax:	0-2564-6404
Email:	Jitti.mungkalasiri@nstda.or.th
Education	
s:	
2009	Ph.D. (Material science), University of Toulouse (France).
2005	M. Sc. (Chemical and biological) University of Limoges (France).
2004	M. Eng. (Environment) ENSIL (France).
2002	B. Eng. (Environment) Kasetsart University (Thailand).
Experiences:	
03/2019-present	Director, Technology and Informatics Institute for Sustainability, National Science and Technology Development Agency, Thailand
10/2014-02/2019	Head, Life Cycle Assessment Lab. (MTEC), Thailand.
6/2009 – 9/2014	Researcher, Life Cycle Assessment Lab (MTEC).Thailand.
1/2009 –	Research engineer, Institut National

4/2009		Polytechnique de Toulouse, France.
10/2005 12/2008	-	Research engineer, Commissariat de l’Energie Atomique (Grenoble), France.
Research Projects:		
2021 2022	-	Ecosystem service values for mangroves restoration area: Case study the International Mangrove Botanical Garden Rama IX, Chanthaburi Province
2020 2021	-	Food loss Evaluation for palm oil industry (SDG 12.3)
2020 2021	-	Eco efficiency evaluation for Wastewater Management Authority: WMA
2020 2023	-	Life Cycle Data Center for Sustainable Development
2020 2021	-	Study of Sustainable Consumption and Production (SCP) Indicators for Sustainable Development Goals (SDG) in the context of Thailand: Phase 3
2019 2021	-	Tourism Satellite Account-System of Environmental Economic Accounting: TSA-SEEA (Eastern Sea of Thailand)
2019	-	Ecoefficiency management for refinery plant:

2020		Phase II
2019 2020	-	Life Cycle Inventory development for green products and services
2017 2019	-	Ecoefficiency management for refinery plant
2016 2018	-	Study of Sustainable Consumption and Production (SCP) Indicators for Sustainable Development Goals (SDG) in the context of Thailand
2017-2018		Food waste and food packaging monitoring application via life cycle concept
2016 2018	-	Ecosystem service evaluation for cement industry
2016 2018	-	Development of Environmental Life Cycle Inventory Database using Thailand Input-Output Table
2016 2017t	-	Green GDP for cement industry
2015 2017	-	Sustainability Assessment of Food and Agriculture systems (SAFA) for animal feed (maize-based).
2014	-	Product Environmental Footprint (PEF) Policy-

2015	Driven Program
Collaborations:	
<p>UNEP/SETAC Life cycle initiative on Data and database management (Flagship 2a)</p> <ul style="list-style-type: none"> - Review of LCA datasets in three emerging economies: Brazil, Malaysia and Thailand, 2015 - Responsible Management Practices (RMP) self-assessment, 2016-2017 - Developing guidance on conformance with the Global (Shonan) Guidance Principles (SGP) for LCA Databases: Australia, Chile, Thailand, 2016-2017 	
International network:	
<p>Global LCA Access Network (GLAD)</p> <ul style="list-style-type: none"> - Global Network of interoperable LCA - Member of Ad Hoc Group on Life Cycle Data Quality. United Nations Environment Programme (UNEP) 	
Training:	
03/2560	Consequential LCA Workshop
12/2559	Evaluation and Monitoring of Material Footprint (Thailand) for SDGs Indicators technical supported by UNEP, Thailand

11/2559	Measurement and Monitoring of Materials Flows and Resource Productivity Data of Thailand for SDGs Indicators technical supported by UNEP, Thailand
07/2558	MeRAM' Multi-purpose Ecological Risk Assessment and Management Tool Workshop, AIST
02/2557	Water Footprint Training: Applications for National database, Thailand
01/2557	Database improvement and upgrading to international standards, Malaysia
2557	Fundamental management program, Pathumthani Thailand
2556	Water Footprint, Pathumthani Thailand (qualified as a trainer)
2556	Material Flow Cost Accounting, Bangkok Thailand
2555	Carbon footprint of Organization, Nakhompathom Thailand (as a verifier)
2553	Life Cycle Impact Assessment, Tokyo Japan
2552	LCA & Carbon Footprint, Tokyo Japan

Interest:

- Sustainability research
- Environmental labelling (Carbon footprint, Water Footprint, Environmental footprint)
- Life Cycle Database
- Sustainable Consumption and Production
- Eco-efficiency

Selected publications:

- Guido Sonnemann, Dieuwertje Schrijvers, Anne Asselin, Nongnuch Poolsawad, Jitti Mungkalasiri, Tim Grant, Cristobal Loyola and Bruce Vigon. 2020. Updating and Road-testing Life Cycle Inventory Data Review Criteria: Toward Global Consensus and Guidance on Data Quality Assessment. *Integrated Environmental Assessment and Management*.
- So Pyay, Wanwisa Thanungkano, Jitti Mungkalasiri and Charongpun Musikavong. 2019. A life cycle assessment of intermediate rubber products in Thailand from the product environmental footprint perspective. *Journal of Cleaner Production, Volume 237, 10*
- Pattaramart Makmoon, Jitti Mungkalasiri, Tanapon Phenrat, Shabbir H. Gheewala and Trakarn Prapasongsa. Human toxicity assessment of oil palm

cultivation in Thailand: the variability from using different life cycle impact assessment methods. *The 11th International Conference on Life Cycle Assessment of Food (LCA Food 2018) in conjunction with the 6th LCA Agri Food Asia and 7th International Conference on Green and Sustainable Innovation (ICGSI)*, 16-20 October 2018, Bangkok, Thailand.

- Arangsri M., Pattarajinda V.*, Duangjinda M., Mungkalasiri J.1, Anghong W.2, Bernard J.K. Effect of Fermented Total Mixed Rations Differing in Methane Production Potential on Milk Production, Methane Emission, Ruminal Fermentation, Digestibility and Performance of Lactating Dairy Cows in Thailand. *Animal Nutrition and Feed Technology*. Year : 2018, Volume : 18, Issue : 3
- Jantima Samneangngam, Jitti Mungkalasiri, Seksan Papong, Athiwatr Jirajariyavech and Pornpimon Boonkum. Domestic Material Consumption (DMC) of Biomass in Thailand. *The 11th International Conference on Life Cycle Assessment of Food (LCA Food 2018) in conjunction with the 6th LCA Agri Food Asia and 7th International Conference on Green and Sustainable Innovation (ICGSI)*, 16-20 October 2018, Bangkok, Thailand.

- Nongnuch Poolsawad, Wanwisa Thanungkano, Ruthairat Wisansuwannakorn, Prakaytham Suksatit and Jitti Mungkalasiri. Waste Management through Life Cycle Assessment to Shift to a Circular Economic Development. *The 22nd International Conference on Environmental Indicators, 2017.*
- Naruetep Lecksiwilai, Shabbir H. Gheewala, Thapat Silalertruksa, Jitti Mungkalasiri. 2016. LCA of biofuels in Thailand using Thai Ecological Scarcity method. *Journal of Cleaner Production, 1 -9.*
- Mongkolchai Assawadithalerd, Nuwong Chollacoop, Jitti Mungkalasiri, Chantra Tongcumpou.. 2016. Optimizing Jatropha biodiesohol composition for a suitable kinematic viscosity by a phase diagram and mixture design. *Fuel 164, 134-140.*
- Phetrada Suttayakul, Aran H-Kittikun, Chaisri Suksaroj, Jitti Mungkalasiri, Ruthairat Wisansuwannakorn, Charongpun Musikavong. 2016. Water footprints of products of oil palm plantations and palm oil mills in Thailand. *Science of the Total Environment. 542, 521-529.*
- Bruce Vigon, Guido Sonnemann, Anne Asselin, Dieuwertje Schrijvers, Andreas Ciroth, Sau Soon Chen,

Tiago Braga, Nongnuch Poolsawad, Jitti Mungkalasiri, Fayçal Boureima, and Llorenç Milà i Canals. 2016. Review of LCA datasets in three emerging economies: a summary of learnings. *The International Journal of Life Cycle Assessment*, pp. 1-8.

- Prakaytham Suksatit, Nongnuch Poolsawad, Wanwisa Thanungkano and Jitti Mungkalasiri. Product Environmental Footprint for Feed Production in Thailand. *The World Congress on Civil, Structural, and Environmental Engineering, March, 2016, Prague, Czech Republic*.
- N. Poolsawad, W. Thanungkano, J. Mungkalasiri, P. Suksatit, R. Wisansuwannakorn, A.Jirajariyavech, and K. Datchaneekul. 2015. Thai National Life Cycle Inventory Readiness for Product Environmental Footprint. *The International Journal of Life Cycle Assessment*.
- Nongnuch Poolsawad, Wanwisa Thanungkano, Jitti Mungkalasiri and Ruthairat Wisansuwannakorn. 2015. Approach for Environmental Data: Thai National Life Cycle Inventory Development Framework. *International Journal of Advanced Research*, 2015. 3(10): p. 427 - 433.
- J. Mungkalasiri, R. Wisansuwannakorn, W. Paengjuntuak. Water Footprint Evaluation of Oil Palm Fresh Fruit

Bunches in Pathumthani and Chonburi (Thailand).
International Journal of Environmental Science and
Development ISSN: 2010-0264.

- W. Paengjuntuek, J. Boonmak and J. Mungkalasiri.
Environmental Assessment of Integrated Biomass
Gasification Fuel Cell Power Generation System
International Journal of Environmental Science and
Development ISSN: 2010-0264.
- R. Tongpool, J Mungkalasir. Greenhouse Gas Emission
Assessment and Reduction Aspects of Betagro Broiler
Farms. Greenhouse gases and sustainable animal
agriculture for developing countries. ISSN 1341-710X.
- J. Mungkalasiri, L. Bedel, F. Emieux, J. Doré, F.N.R.
Renaud, C. Sarantopoulos F. Maury. CVD Elaboration of
Nanostructured TiO₂-Ag Thin Films With Efficient
Antibacterial Properties. Chem. Vap. Deposition , Vol.
16(2010) p.35–41
- J. Mungkalasiri, L. Bedel, F. Emieux, J. Doré, F.N.R.
Renaud, F. Maury. DLI-CVD of TiO₂-Cu antibacterial thin
films: Growth and characterization. Surface & Coatings
Technology 204 (2009) p.887–892.
- F. Maury and J. Mungkalasiri. Chemical Vapor Deposition
of TiO₂ for Photocatalytics Application and Biocidal

surfaces. Key Engineering Materials, Vol 415 (2009) p.1-4.