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University of Tsukuba**

2010 - Present: Associate Professors, University of Tsukuba),
1999-2009: Associate Professor, Utsunomiya University
(1998-1999) Visiting Scholar, Michigan State University"
1993-1999: Assistant Professor, University of Tsukuba
1993, Award the degree of Ph.D. in Agricultural (Kyushu University)

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Major Scientific Interests

My research concentrated on Biomass energy, Agricultural machinery and power, Oil separation and recycling system. Research and Technology in rural area contributing to “Prosumer (Producer × consumers)” advocated by Alvin Toffler is my lab’s philosophy and mission to extract and solve the technical problem, ethical issues of food and bio-resources. For solving the issues in the 21st century as like environmental problems, food and energy security, and reforming to a new lifestyle, utilization of biomass resources can bring the solution. Meanwhile, in Southeast Asia, increasing production of palm oil brings environmental destruction of tropical rainforests. Utilizing state-of-the-art technologies, we aim to solve technical problems for designing a sustainable rural community by utilizing biomass resources for better living.

Research Projects

Microalgae Oil Production

- LCA for microalgae oil production from upstream to downstream stages for bioenergy
- Process optimization for algae biofuel production using hydro thermal liquefaction (HTL) process
- Palm Oil Mill Effluent (POME) Utilization For Algae Oil Production

Rice Husk Combustion for Material and Energy Utilization

Oil and Water Separation for Wastewater Treatment

Recent Publications

1. Sasongko Nugroho Adi, Noguchi Ryozo, Ito Junko, Demura Mi. Engineering Study of a Pilot Scale Process Plant for Microalgae-Oil Production Utilizing Municipal Wastewater and Flue Gases: Fukushima Pilot Plant, **Energies** /11(7), 2018-07.
2. Du Jing, Noguchi Ryozo, Ahamed Tofael. Feasibility Study of Motor Powered Agricultural Tractors Based on Physical and Mechanical Properties of Energy Sources, **Japanese Journal of Agricultural Informatics**, 27(2): 14-27, 2018.
3. Muhsin Nazia, Ahamed Tofael, Noguchi Ryozo. GIS-based multi-criteria analysis modeling used to locate suitable sites for industries in suburban areas in Bangladesh to ensure the sustainability of agricultural lands, **Asia-Pacific Journal of Regional Science**, 2(1): 35-64, 2017-07.
4. Purnamasari Riska Ayu, Ahamed Tofael, Noguchi Ryozo. Land Suitability Assessment for Cassava Production in Indonesia Using GIS, Remote Sensing and Multi-Criteria Analysis, **Asia-Pacific Journal of Regional Sciences**, 32, 2018-03.
5. Sasongko Nugroho Adi, Noguchi Ryozo, Ahamed Tofael. Environmental load assessment for an integrated design of microalgae system of palm oil mill in Indonesia, **Energy**, 159(1148-1160), 2018-04.
6. Wibawa Dhani S., Nasution Muhammad Ansori, Noguchi Ryozo. Microalgae Oil Production: A Downstream Approach to Energy Requirements for the Minamisoma Pilot Plant, **Energies**, 11(3): 521, 2018-02.
7. Nasution Muhammad Ansori, Wibawa Dhani S., Ahamed Tofael, Noguchi Ryozo. Comparative environmental impact evaluation of palm oil mill effluent treatment using a life cycle assessment approach: A case study based on composting and a combination for biogas technologies in North Sumatera of Indonesia, **Journal of Cleaner Production**, 184: 1028-1040, 2018-05.