

Toshinori MAKUTA

Department of Mechanical Systems Engineering,
Graduate School of Science and Engineering, Yamagata University

Education

- 1995-1999 Faculty of Engineering, University of Tokyo
Awarded the degree of BSc in Mechanical Engineering
- 1999-2001 Graduate School of Frontier Sciences, University of Tokyo
Awarded the degree of MSc in environmental study for a thesis entitled
"The development of micro-bubble generation system".
Work supervised by Associate Professor Fumio TAKEMURA
- 2002-2005 Graduate School of Frontier Sciences, University of Tokyo
Awarded the degree of PhD in environmental study for a thesis entitled
"Micro-bubble generation mechanism in an ultrasonic acoustic field".
Work supervised by Professor Eiji HIHARA and Dr. Fumio TAKEMURA

Employment

- 2001-2002 Researcher at Robot Laboratory, FANUC Co., Ltd.
- 2005-2007 Postdoctoral Researcher at Energy Technology Institute,
National Institute of Advanced Industrial Science and Technology
- 2007-2014 Assistant Professor, Department of Mechanical Systems Engineering,
Faculty of Engineering, Yamagata University
- 2014-Present Associate Professor, Department of Mechanical Systems Engineering,
Faculty of Engineering, Yamagata University

Research Interests

1. Experimental Fluid Mechanics
 - Especially bubble dynamics, oscillatory flow,
capillary wave, medical and engineering application with micro-bubbles.
2. Micro/Nano Particle Fabrication and Application
 - Especially hollow microcapsules directly fabricated from microbubbles.
3. Sonochemistry with Ultrasonically Generated Microbubbles

Membership of Academic Societies

1. Japan Society of Mechanical Engineers (JSME)
2. Society of Chemical Engineers, Japan (SCEJ)
3. Japanese Society for Multiphase flow (JSMF)
4. Japanese Society for Experimental Mechanics (JSEM)

Award

1. JSME Young Engineers Award (2007)
2. Incentive Award of Intelligent-Cosmos Foundation (2009)
3. JSEM Technology Award (2012, 2013)
4. Prize for Outstanding Educators - Yamagata Univ. (2013)
5. SCEJ - Fluid Particle Processing Division Frontier Award (2014)