

Md Raisul Islam



Senior Lecturer
Engineering Science Programme

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Professional Experience

- 2014 - Present: Senior Lecturer, Engineering Science Programme, NUS
- 2008 - 2014: Technical Director, LJ Energy Pte Ltd
- 2006 - 2008: Lecturer, Mechanical Engineering Department, Curtin University of Technology
- 2001 – 2006: Teaching and Research Fellow, Energy and Bio-thermal Systems, Mechanical Engineering Department, NUS
- 1997 – 1998: Senior Engineer, Federal Electric Corp., Ltd., (SHARP), Thailand
- 1995 – 1997: Research Associate, Asian Institute of Technology, Thailand
- 1990 – 1993: Lecturer, Mechanical Engineering Department, Bangladesh Institute of Technology

Qualifications

- Ph.D., National University of Singapore, 2001
- M. Eng., Asian Institute of Technology, Thailand, 1995
- BSc. Eng., Bangladesh University of Engineering and Technology, 1989
- Leadership in Energy and Environmental Design – Accredited Professional (LEED AP, USA)
- Qualified Energy Services Specialist (QuESS)
- Singapore Certified Energy Manager (SCEM)
- Green Mark Professional (GMP)
- Green Mark Facility Manager (GMFM)
- Green Mark Manager (GMM)
- Green Building Index Facilitator (GBIF)

Teaching Areas

- Industrial Transfer Processes
- Optimization of Energy Systems
- Air Conditioning Systems
- Heat and Mass Transfer
- Engineering Mechanics
- Fluid Mechanics
- Design Projects

Teaching Awards

- Teaching Commendation Award 2003/4, NUS
- Teaching Excellence Award 2007, Curtin University of Technology
- Teaching Excellence Award 2008, Curtin University of Technology

Research Interests

- Vapor Absorption Cooling Systems
- Energy Efficient Air Conditioning System

- Bio-thermal Systems
- Multi-Mode Drying System
- Heat and Mass Transfer

Professional Lectures

- Singapore Certified Energy Manager (Professional level)
- Green Mark Facilities Manager
- Energy Management Programme for Public Sector's Facilities Managers and EENP Partners

Selected Publications

1. Jahangeer, K.A.; Tay, A.O.; Islam, M.R. (2011) Numerical investigation of transfer coefficients of an evaporatively-cooled condenser, *Applied Thermal Engineering*, vol.: 31, pp 1655-1663.
2. Islam, M.R. (2008) Absorption process of a falling film on a tubular absorber: An experimental and numerical study, *Applied Thermal Engineering*, vol.: 28, pp 1386–1394.
3. Rahman, S.M.A.; Islam, M.R.; Mujumdar, A. S. (2007). A Study of Coupled Heat and Mass Transfer through Composite Food Products during Convective Drying, *Drying Technology – An International Journal*, vol.: 25 (7), pp 1359-1368.
4. Islam, M.R.; Wijeysondera, N.E.; Ho, J.C. (2006). Heat and Mass Transfer Effectiveness and Correlations for Counter-Flow Absorbers, *International Journal of Heat and Mass Transfer*, 49, pp. 4171–4182
5. Chua, K.J.; Ho, J.C.; Chou, S.K.; Islam, M.R. (2005). On the Study of the Temperature Distribution Within a Human Eye Subjected to a Laser Source. *International Communications in Heat and Mass Transfer*, 32(8), pp. 1057–1065.
6. Lan, S.; Islam, M.R.; Mujumdar, A.S. (2005). A Diffusion Model for Drying of a Heat Sensitive Solid under Multiple Heat Input Modes. *Bioresource Technology*, 96, pp. 1551–1560.
7. Islam, M.R.; Wijeysondera, N.E.; Ho, J.C. (2004). Simplified Models for Coupled Heat and Mass Transfer in Falling-Film Absorbers, *International Journal of Heat and Mass Transfer*, 47(2), pp. 395-406.
8. Islam, M.R.; Wijeysondera, N.E.; Ho, J.C. (2003). Evaluation of Heat and Mass Transfer Coefficients for Falling-Films on Tubular Absorbers, *International Journal of Refrigeration*, 26(2), pp. 197-204.
9. Islam, M.R.; Wijeysondera, N.E.; Ho, J.C. (2003). Performance Study of a Falling-Film Absorber with a Film-Inverting Configuration, *International Journal of Refrigeration*, 26(8), pp. 909-917.
10. Islam, M.R.; Sablani, S.S.; Mujumdar, A.S. (2003). An Artificial Neural Network Model for Prediction of Drying Rates. *Drying Technology – An International Journal*, 21 (9), pp. 1871-1888.

Book Chapters

1. Islam, M.R.; Mujumdar, A.S. (2007). Heat Pump-Assisted Drying. *Drying Technologies in Food Processing*. Editor: Professor Xiao Dong Chen and Professor A.S. Mujumdar, Publisher: Blackwell Publishing Ltd, 9600 Garsington Road, Oxford OX4 2DQ, UK.
2. Islam, M.R.; Mujumdar, A.S. (2004). Heat Pump-Assisted Drying. *Guide to Industrial Drying: Principles, Practice and New Developments*. Chapter-8, pp. 187-209, Editor: Arun S. Mujumdar, Colour Publications Pvt. Ltd., Mumbai, India.
3. Islam, M.R.; Mujumdar, A.S. (2003). Periodic Multi-mode Batch Drying of Heat-Sensitive Materials-Engineering Applications of the Diffusion Equation, *Drying of Products of Biological Origin*, Chapter-4, pp. 93-133, Editor: Arun S. Mujumdar, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, India, Co-published by Science Publishers, Inc., USA.