CURRICULUM VITAE – Dr. Md Raisul Islam

1) Personal Information

Name	:	Md Raisul Islam
Position	:	Senior Manager, LJ Energy Pte Ltd
Postgraduate Degrees	:	• Ph.D. National University of Singapore • M.Eng. in Energy Technology Asian Institute of Technology, Bangkok, Thailand
First Degree	:	BSc. First Class Bangladesh University of Engineering and Technology
Professional Membership	:	The Institution of Engineers Bangladesh Asian Institute of Technology Alumni Association, Thailand National University of Singapore Alumni Association

2) Employment History

Period	*Position*	*Name of Company*
2008 - Present	Senior Manager	LJ Energy Pte Ltd
2006 – 2008	Lecturer	Curtin University of Technology Sarawak Campus, Malaysia
2003 – 2006	Post Doctoral Teaching Fellow	National University of Singapore
2001 – 2002	Post Doctoral Research Fellow	National University of Singapore
1998 – 2001	Research Scholar & Graduate Tutor	National University of Singapore
1996 – 1998	Senior Engineer	Federal Electric Corp. Ltd., (SHARP), Thailand
1995 – 1996	Research Associate	Asian Institute of Technology, Thailand
1994 – 1995	Research Scholar	Asian Institute of Technology, Thailand
1990 – 1993	Lecturer	Bangladesh Institute of Technology, Rajshahi

3) Professional Experience

- Energy optimization projects: (a) Becton Dickinson Critical Care Systems, (b) Golden Wall Centre, (c) Holiday Inn Park View, (d) Science Centre.
- Designing and implementation of industrial energy conservation projects.
- Evaluation of building energy performance using commercial software.
- Design, fabrication and performance evaluation of absorbers for vapor absorption cooling systems.
- Design and fabrication of climatic chamber to test the performance of solar refrigerator.
- Designing, implementation and experimentally investigation of different renewable/clean energy projects.
- Design, fabrication, experimental and numerical investigation of multi-mode heat pump drying system.

4) Teaching and Research Experience

- *Teaching Activities at Curtin University of Technology*: Prepared teaching materials, delivered lectures, prepared questions and evaluated answer papers for tutorial, class test and final examination for the following modules:

    - Air-Conditioning-431 (Final year undergraduate)
    - Heat transfer-431 (Final year undergraduate)
    - Fluid Mechanics-433 (Final year undergraduate)
    - Engineering Mechanics-100 (First year undergraduate)

- *Teaching Activities at National University of Singapore:* Prepared teaching materials, delivered lectures, prepared questions and evaluated answer papers for tutorial, class test and final examination for the following modules:

    - Industrial Transfer Processes-ME5202 (Postgraduate)
    - Industrial Heat Transfer-ME4225 (Final year undergraduate)
    - Energy Conversion Processes-ME3221 (Third year undergraduate)

- Energy Related Projects Supervised
    - Calculation and analysis of building cooling load.
    - Designing of central air-conditioning systems.
    - Development of design improvements for the absorber of vapor absorption cooling systems.
    - Designing of encapsulated and slurry ice production, storage and circulation systems to meet part of the building cooling load.
    - Performance Improvement analysis of horizontal tube evaporative condensers.

- ***Teaching Excellence Award***
    - "Teaching Commendation" from NUS in recognition for my dedication and commitment to the education of engineering students.
    - "Students' Choice Award – Best as voted by the students" for the year 2007 and 2008, arranged by Student Council, Curtin University of Technology.

5) Other Energy Related Experience

Attended as speaker in the following energy optimization workshops:

- Second Workshop: "Technology Transfer of Heat Pump Drying Expertise for Cambodia, Lao PDR, Myanmar and Viet Nam" at National University of Singapore, Financed by A*STAR, July 2008.

- First Workshop: "Technology Transfer of Heat Pump Drying Expertise for Cambodia, Lao PDR, Myanmar and Viet Nam" at National University of Singapore, Financed by A*STAR, December 2007.

- "Heat Pump Drying for Agricultural and Marine Products" at Bangkok and Chiang Mai, Thailand, November 2004.

- Forth Workshop: "Manpower Training & Technology Transfer on the Drying of Agricultural Products for Cambodia, Lao PDR and Myanmar (CLM Project)" at Lao PDR, July 2004.

- Third Workshop: "Manpower Training & Technology Transfer on the Drying of Agricultural Products for Cambodia, Lao PDR and Myanmar (CLM Project)" at Ho Chi Minh City, Vietnam, November 2003.

- Second Workshop: "Manpower Training & Technology Transfer on the Drying of Agricultural Products for Cambodia, Lao PDR and Myanmar (CLM Project)" at Chiangmai, Thailand, December 2002.

Book chapters on application of heat pump to improve the energy performance of drying systems:

- Heat Pump-Assisted Drying. Drying Technologies in Food Processing, Chapter-6, pp. 190-224, Editor: Professor Xiao Dong Chen and Professor A.S. Mujumdar, Publisher: Blackwell Publishing Ltd, 9600 Garsington Road, Oxford OX4 2DQ, UK, 2008.

- 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, 2004.

- 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, 2003.

Publications in international journals and conferences:

- Published sixteen international journal papers, sixteen international and national conference papers arising from my research work.

Selected energy related papers presented in international conferences:

- "A Simple Linearized Model for Counter-flow Falling-film Absorbers" at International conference on Heat Transfer in Components and Systems for Sustainable Energy Technologies (Heat SET 2007), 18-20 April 2007, Chambery, France.

- "A Numerical Study of Heat and Mass Transfer in Falling Film of Film-inverting Absorber" at 13th International Heat Transfer Conference, Sydney Convention & Exhibition Centre, 13-18 August 2006, Sydney, Australia.

- "A Detailed Model for the Prediction of Heat and Mass Transfer Coefficients of a Lithium Bromide-Water Absorber" at the 4th European Thermal Sciences Conference, 29-31 March 2004, National Exhibition Centre, Birmingham, UK.

- "Experimental and Numerical Study of a Falling-Film on a Tubular Absorber. In the proceedings of the 1st International Forum on Heat Transfer, K. Takeishi (ed.), 24-26 August 2004, Kyoto, Japan.

- "Estimation of Heat and Mass Transfer Coefficients of a tubular Film-Inverting Absorber" at The 2nd ASEAN Science Congress and Sub Committee Conferences, S. Matosudirdjo (ed.), 5-7 August 2005, Jakarta, Indonesia.

- Attended as session chairperson and presented paper on "A numerical study of the effect of air-impingement and dehumidified air on drum drying" The 5th Asia-Pacific Drying Conference (ADC07), 13-15 August 2007, Hong Kong, China.

Delivered lecture in R&D seminars:

- "Simulation of energy processes using MATLAB" at The National University of Singapore, May, 2004.

- "A Simple Linearized Model for Counter-flow Falling-film Absorbers" at Curtin University of Technology, Sarawak Campus, Malaysia, March 2007.

- "Drying of heat sensitive materials using multi-mode heat pump dryers" at Curtin University of Technology, Sarawak Campus, Malaysia, April 2008.