

Sourav Chowdhury

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OBJECTIVE	Seeking a full time position that is challenging and provides creative opportunities
EDUCATION	<ul style="list-style-type: none">▪ UNIVERSITY OF MARYLAND (UMD), College Park, MD, Aug 2002- May 2006 (expected) Ph.D. in Mechanical Engineering (Major: Thermal and Fluid Sciences), GPA: 3.5/4.0 <i>Dissertation Focus: Experimental Study of Condensation in a high-aspect ratio micro-channel involving traditional and MEMS-based fabrication techniques</i> Advisor: Prof. M. Ohadi, Smart and Small Thermal Systems Lab (S²TS/CALCE), Univ. of MD Co-advisor: Prof. Reza Ghodssi, MEMS Sensors and Actuators Lab (MSAL), Univ. of MD▪ UNIVERSITY OF MARYLAND (UMD), College Park, MD, August 2000 – August 2002 M.S. in Mechanical Engineering (Major: Thermal and Fluid Sciences) <i>Specialization: Thermal and Fluid Sciences</i> Advisor: Prof. M. Ohadi, Smart and Small Thermal Systems Lab (S²TS/CALCE), Univ. of MD▪ INDIAN INSTITUTE OF TECHNOLOGY (IIT), KHARAGPUR, INDIA, Aug 1996 – Aug 2000 B. Tech. in Mechanical Engineering (equivalent to B. S.), GPA: 7.8/10 Advisor: Prof. P. K. Nag, (Head of Mechanical Engineering Dept.), IIT-KGP, INDIA
RESEARCH	<ul style="list-style-type: none">▪ Experimental investigation of two-phase condensation heat transfer and pressure drop in a high aspect ratio micro-channel (Project supported by ASHRAE)▪ Design and Fabrication of a Wafer-bonded Silicon Micro-channel for a compact two-phase chip cooling loop (Project supported by BMDO)▪ Experimental investigation of the behavior of a unique Electro-hydro-dynamic (EHD) Polarization Micropump-cum-evaporator for highly compact electronics cooling system (Project supported by BMDO)▪ Experimental investigation of the behavior of a EHD Ion-drag Micropump for pumping dielectric coolants like HFE-7100
TECHNICAL PROFICIENCY/ SKILLS	<ul style="list-style-type: none">▪ Project Management: Successfully managed several projects during course of study, written a proposal which was awarded grant.▪ Basic MEMS Fabrication: Photolithography, Contact Mask Alignment, Front-to-back Alignment, Bulk Silicon Micro-machining, Reactive Ion Etching (RIE), RCA Wafer Cleaning and Fusion & Anodic Wafer Bonding▪ Equipment Handling and Machining: Extensive hands-on experience in general purpose machining equipment such as mills, lathes etc., soldering and brazing equipment, transducers, controllers, high-voltage equipment, data acquisition, wafer bonder; limited experience in electrochemistry; experience in construction of a class 1000 clean room inside the laboratory▪ FEM & CAD Tools: <i>Fluent</i>®, <i>Femlab</i>, <i>ANSYS</i>, <i>AutoCAD</i>, <i>ProE</i>
EXPERIENCE	
07/00 – present	<p><i>Graduate Research Assistant, University of Maryland</i>, College Park, MD. At Smart and Small Thermal Systems Laboratory (S²TS)/CALCE (Computer Aided Life Cycle Engineering Electronic Products and Systems Center)</p> <p><i>Graduate Teaching Assistant, University of Maryland</i>, College Park, MD.</p>
07/00 – 07/05	<ul style="list-style-type: none">▪ Instruction, grading of reports/exams and laboratory guidance in Vibrations, Mechanics of Materials, Thermodynamics, Fundamentals of Fluid Mechanics – Laboratory, Data Analysis of Thermo-fluidic Systems▪ Was recommended for excellent Teaching Assistant (TA) in Thermodynamics course by professor
05/99 – 07/99	<p><i>Summer Intern: Titagarh Thermal Power Plant, West Bengal, India</i></p>
PUBLICATIONS	3 Papers in International Conferences, 1 paper to be published in journal. Details are available on request.
ADDITIONAL	
HONORS & AWARDS	<ul style="list-style-type: none">▪ Prestigious ASHRAE Grant-in-Aid Research Fellowship Award, 2004-2005▪ Research Sponsorship (Ph.D. Dissertation) by ASHRAE, 2005-2007▪ Elected as President, ASHRAE Maryland Student Chapter, 2003▪ Stood top 600 amongst 150,000 participants, in IIT-JEE Entrance Exam; Stood top 50 amongst 10,000 participants in prestigious Indian Statistical Institute (ISI) Entrance Exam▪ Received National Merit Scholarship, Higher Secondary Exam (High School), 1996
INTERESTS	<ul style="list-style-type: none">▪ Avid reader with special interest in Vedanta and other Indian Philosophies and world history.▪ Badminton and Table Tennis Player▪ Fluent in English, Hindi and Bengali languages▪ Volunteer for Social work.