



Curriculum vitae

Of

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Program Manager
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AMINUL ISLAM

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Current and previous employment

- July 12- Current Program Manager (½ time), Micro Mechanical Development (MMD), Sonion Roskilde A/S, (www.sonion.com).
- Senior Researcher (½ time) at the department of Mechanical Engineering, Technical University of Denmark (www.mek.dtu.dk).
- Jan 09- June 12 Project Leader (½ time), RD&I, Sonion Roskilde A/S, (www.sonion.com).
- Post.doc (½ time) at the department of Mechanical Engineering, Technical University of Denmark (www.mek.dtu.dk).
- Mar 08- Dec 08 Post.doc at Technical University of Denmark (www.mek.dtu.dk).
- Mar 05- Feb 08 Ph.D student at the department of Mechanical Engineering, Technical University of Denmark (www.mek.dtu.dk).
- May 04- Feb 05 Research Engineer Swedish LCD Centre, Borlänge, Dalarna, Sweden, (www.lcdcenter.com).

Skills

- Professional skills Teaching and Supervision, Project management, Product design and development of manufacturing process, Plastic processing for advanced application, Process optimization and process control.
- Computer skills Solid works, SimaPro, FORTRAN 77, MS Office, Photoshop, Paint shop pro, Pro-engineer, Auto-Cad, Pro-mechanica, Moldflow, Sigmasoft.

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Language skills	Bengali (Native), English (Advanced), Danish (Passed: Module 5), Swedish (Intermediate), Hindi (Fluent in speaking).
Personal skills	A passionate, committed and self-motivated person having intellectual curiosity and desire to learn and teach. Understand the power of cooperation and team work, focused, industrious and result oriented.

Professional interest

- Plastic processing- micro moulding, multi-component moulding etc.
- Micro manufacturing and micro-mechanical system development.
- Systematic development of products and modular products.
- Mechanical drawing and design, manufacturing process.
- Inkjet printing and liquid crystal display technology.
- Moulded Interconnect Device (MID) technologies.
- Selective metallization of polymer parts.
- Hearing aids and hearing technologies.
- System development for Hearing aids.
- Teaching, learning and supervising.

Education

2005-2008	Ph.D. (Project title: Two component micro injection moulding for moulded interconnect devices), Department of Mechanical Engineering, Technical University of Denmark (www.dtu.dk).
2003-2004	M.Sc. in Mechanical Engineering Dalarna University, Sweden (www.du.se) CGPA 4.7 out of 5 (<i>corresponding to ECTS grade A</i>) <i>International award given for M.Sc. thesis in Stuttgart, Germany 2004.</i>
1997-2002	B.Sc. in Mechanical Engineering Bangladesh University of Engineering & Technology (www.buet.ac.bd), CGPA 3.5 Out of 4 (<i>ECTS grade A</i>).

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Key projects: worked so far

COTECH (Sonion & DTU)



Time frame: 2008-2012

Project concept: COTECH is a large scale European Project funded by European Commission. There are 25 partners from 10 EU nationalities. From Denmark, DTU and Sonion are involved in the project. The project concept is based on the convergence of functionalities and production process for mass production of advanced micro products. The whole project is broken into 8 different Sub Projects (SPs) and each SP is focused on some specific areas of the project. Project web site: www.fp7-cotech.eu.

Role in the project: SP7 Leader, Work package 5.4 Leader, and Task 4.2.1, Task 1.1.2, Task 1.1.3, Task 1.2.1 Leader in SP4 and SP1. SP7 is one of the most important Sub-projects for COTECH which deals with the development of 8 industrial demonstrators with the knowledge developed in the project. These 8 industrial demonstrators are coming from 8 different European industries those are part of COTECH. SP Leader is responsible for the ultimate success of the SP and the responsibilities include overall SP management, technical supervision of the industrial partners, meeting the SP goals & milestones, prepare & submit deliverables, reporting results to the Executive Committee and Governing Board etc.

CS 88 RIC (Sonion)



Time frame: 2009-2013

Project concept: CS 88 RIC is a Sonion's development project initiated to develop next generation RIC connector for hearing aids. The project concept also includes the development of a flexible production platform so that Sonion can be able to provide different RIC connector to different hearing aid manufactures irrespective of their requirements on the number of contact Pins in the connector.

Role in the project: Working in the project as a Program Manager who is overall responsible for the project and lead the project team to develop the product (8 Pin RIC connector) and production process for mass production.

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Optical Plasmon Sensor project (DTU)



Time frame: 2008-2009

Project concept: The project concept was to develop novel methods for the production of Optical Plasmon Sensors. The project was a collaboration project among DTU and some other Danish partners.

Role in the project: Was employed as a Post.Doc in this project and was carrying out research develop production process for Optical Plasmon based on physical masking process.

Polymetal project (DTU)



Time frame: 2005-2008

Project concept: "Polymetal" was a Danish National project funded by Danish Ministry of Science and Innovation. The project concept was to integrate micro metallic structures on polymer devices and to develop processes for industrial mass production of μ -MIDs (Moulded Interconnect Devices). The project was a collaboration project among DTU, Sonion and several other Danish partners.

Role in the project: Worked as Ph.D Student in the project and carried out the research part of the project to produce μ -MIDs based on two component micro injection moulding.

Next generation LCD production (Swedish LCD Center)



Time frame: 2004-2005

Project concept: It was a collaborative research project among several Swedish research institutes and companies. The project was initiated to develop novel production process for next generation LCD (Liquid Crystal Display) manufacturing.

Role in the project: Worked as Research Engineer in the project and conducted research on the feasibility of the use of inkjet printing techniques for LCD production.

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Teaching and supervision experience

Teaching responsibilities:

1. 41742 Introduction to Micro Mechanical Systems Design and Manufacture. Lecture titles- "Micro replications", "2k Moulding- Products and Processes", "Micro moulding for hearing aid applications". Polymer workshop- "Basics of micro injection moulding process", "Defects and remedy for micro moulded plastic parts" etc.
2. 28811 Polymers in Processes and Products- Project based course (usually an industrial problems is handled in the course)-Project work in groups includes solving the industrial problem, visit the company, make oral and poster presentation.
3. 41738 Experimental Plastics Technology- Project based course (usually an industrial problems is handled in the course) - taught under Open University, enable the student to plan and conduct experiments to resolve technical problems associated with processing and constructive use of plastic.
4. 41737 Design of Plastic Products. Lecture title "Multi-component injection moulding: process optimization and industrial applications".
5. 41790 Micro Mechanical Systems Design and Manufacture (PhD summer school). Lecture titles: "Industrial applications of micro moulded plastic parts" (Main responsible: Prof. H. N. Hansen).

Supervision (Students' projects):

Master projects:

1. Farzaneh Omidvernia, "Life cycle analysis of micro products and micro manufacturing process", (on-going project expected to be finished by Dec 2011), 45 ECTS, Sonion A/S and Department of mechanical engineering, Technical University of Denmark.
 2. Kasper Lynge Sørensen, "Three dimensional process simulation for two components micro injection moulded parts", -ongoing project, 30 ECTS, Department of mechanical engineering, Technical University of Denmark.
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3. Jasna Nilsson, Aida Ploskic, "Bonding strength between two injection moulded polymer", 45 ECTS, Master thesis, Sonion A/S and Department of mechanical engineering, Technical University of Denmark, June 2007
4. Jie Sun, "Molded Interconnect Device by two shot injection molding and laser induced selective activation", 30 ECTS, Master thesis, Dec 2007
5. Jais Andreas Breusch Angel, "2k RIC system development for hearing aid applications", 30ECTS, Sonion A/S and Department of mechanical engineering, Technical University of Denmark, Jan 2010

Pre-master projects:

1. Marko Lukic; "Optimization of micro injection moulding with Thermoplastic Elastomer (TPE)", Sonion A/S and Department of mechanical engineering, Technical University of Denmark, ongoing project
2. Kasper Lyng Sørensén, "State of the art: 2k – Micro Moulding", Department of mechanical engineering, Technical University of Denmark, Sep 2010
3. Jais Andreas Breusch Angel, "System design for forming of microstructures", Pulse ApS and Department of mechanical engineering, Technical University of Denmark, May 2009
4. Kaveh Aminvaziri, "Investigating on How to Make SPR Sensor with Lower Cost Method" Micro/Nano and Precision Manufacturing, IPL – Department of Manufacturing Engineering and Management, DTU – Technical University of Denmark, Nov 2007
5. Marco Mulser, "Design of a flexible mould for micro applications", Micro/Nano and Precision Manufacturing, IPL – Department of Manufacturing Engineering and Management, DTU – Technical University of Denmark, Nov 2007
6. Maximilian Marhofer, "2K Injection Molding for Hearing Aid Application", Internship in cooperation with Sonion A/S as special course at the Technical University of Denmark (DTU). Oct 2010

3 week projects:

1. Claus Øllgaard; Oliver Sundberg; Kirstine Vesth, "Effects of glass fibres on the filling of polymeric thin ribs", 42234 Experimental Plastics Technology, Department of mechanical engineering, Technical University of Denmark, June 2007
 2. Troels Skieller Antvorskov ; Iago Freixeiro Díaz ; Jorge Suárez Misioné; "Effects of Process Temperatures on the Filling of Polymeric Micro Channels" Department of mechanical engineering, Technical University of Denmark, June 2008
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3. Aarøe Esben Raahede; Blaimschein Karl Stephan; Decker Lasse; Stentoft-Christensen, "Examining the influence of injection speed and mould temperature on the tensile strength of polypropylene and ABS", Sonion A/S and Department of mechanical engineering, Technical University of Denmark, June 2009
4. Tobias A.; Rikke M.; "Effects of moulding and environmental conditions on the mechanical and surface properties of injection moulded Santoprene rubber", Sonion A/S and Department of mechanical engineering, Technical University of Denmark, Jan 2010
5. Jacob Tobias Jensen; Erkan Akbas; Mads Madsen; "Tactile and Visual Perception of injection moulded plastic parts" Department of mechanical engineering, Technical University of Denmark, June 2010
6. Dennis Brian Hansen, Marco Lukic & Marianne Madsen; "Investigations of Mechanical Properties of Moulded Thermoplastic Elastomer for Precision Application" Department of mechanical engineering, Technical University of Denmark, June 2011

Teaching Philosophy

I believe the fundamental goal of teaching is to secure a caring and stimulating learning atmosphere. It is my desire as an educator to help students meet their fullest potential by providing an environment that is customized according to the individual need, supports risk-taking, and invites the sharing of ideas. I believe that learning is a lifelong process that never ends. I am keen to deliver this message to the students. To me, besides students' learning, teaching process includes improving my divine horizon of knowledge. I believe a good teacher never stop growing. Sharing the idea of teaching with fellow colleagues, constant focus on the new knowledge and great sense of responsibility to the students and to the overall mankind can make valuable input for good teaching. Making a good plan, define clear learning objectives and focusing on the core elements of the subjects are vital for good teaching, at the same time I believe patience, understanding and hard work of a teacher are essential for good teaching too.

Services

- Abstract and Paper reviewer for EUSPEN Conference (www.euspen.eu)
 - Member of the American Society of Plastic Engineers (www.sp4.org)
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- Member of Danish Red Cross (www.rodekors.dk)

Awards

- **PPS24 Award:** International Polymer Processing Society, Napoli- Italy, June 08
- **MID Award:** International Society of Information Display, Stuttgart-Germany, Oct 04

Personal information

Contact address	Saven C1, 3-3 2630 Taastrup Denmark
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E-mail	mais@mek.dtu.dk.com
Date of birth	December 23, 1976
Personal no	231276-3411 (Danish)
Nationality	Bangladeshi
