



## Biography

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### Dr. Md. Ashraful Islam

Professor

**Research Area** i, § Aerospace Structure and Materials: Bio and nature inspire materials, Polymer composite, Metamaterials i, § UAV Design: VTOL UAV, micro flying robot, Drone application in sustainability resource management and industry 4.0) i, § Computational Mechan

## Education

### PhD in Aerospace Engineering

University of New South Wales (UNSW) Sydney, Australia, Australia (2014-2018)

**Thesis Title:** [Mechanics of Closed-cell Cellular Materials](#)

### Masters in Aerospace Engineering

Institute of Aeronautics and Astronautics, National Cheng Kung University, Tainan, Taiwan (2010-2012)

**Thesis Title:** [Design and Development of Electromagnetic Shock Wave Generator](#)

### Bachelor of Science in Mechanical Engineering

Rajshahi University of Engineering and Technology (RUET), Bangladesh (2000-2005)

Thesis: Development of particulate pollutant measurement devices

## Service Records

- **Assistant Professor**

**Department/Section:** Mechanical Engineering

**Khulna University of Engineering and Technology** From to

Working Area: University Teaching

Responsibility: i, § Supervising and examining projects and theses of undergraduate and graduate students i, § Performing different administrative works such as preparing undergraduate results. i, § Designing and preparing the Lab Sheets of different undergraduate courses i, § Preparing the testing reports and consultancy documents i, § Trained and supervised students and conducted Engineering projects and theses Configured and installed different tools/software in Mechanical Engineering laboratories

- **Research Assistant (Part-time)**

**Department/Section:** Institute of Aeronautics and Astronautics

**National Cheng Kung University, Taiwan** From to

Responsibility: i, § Installation, Maintenance and Repair of materials testing. i, § Troubleshooting using service manuals, computerized diagnostics & general technical experience i, § Data requisition from complex experimentation for materials testing. i, § Test set up for various undergraduate students' projects. i, § Supervised and trained students on lab test setup. i, § Led discussion sessions on experimental results and graded lab reports i, § Develop & maintain key relationships with significant other laboratory personnel

- **Academic Casual (Part-time)**

**University of New South Wales (UNSW) , Canberra** From to

Responsibility: i, § preparing the tutorial materials, preparing the PPT slides, re-designing the lectures. i, § Delivering high-quality teaching as measured by students' feedback evaluations. i, § Instructed students in weekly labs, Materials Engineering Labs for 6 semesters. i, § Taught principles and concepts of Materials Engineering to 100+ students through experiments including mechanical testing methods, metallography, microstructure analysis, and heat treatment. i, § Supervised and trained students in material testing: hardness, impact, tensile, compression, fatigue, creep tests, hardenability, cold rolling, microhardness, and metallography. i, § Providing consultation and assistance to the students. i, § Demonstrating the lab classes by performing physically and teaching students.

- **Associate Professor**

**Department/Section:** Mechanical Engineering

**Khulna University of Engineering and Technology** From to

Responsibility: i, § Lecturing and coordinating different undergraduate and graduate course i, § Supervising projects and theses of undergraduate and graduate students i, § Performing different administrative works such as preparing undergraduate results.

i, § Conducting research and publication i, § Laboratory in charge in Applied Mechanics in the Department of Mechanical Engineering.

i, § Worked with faculty to maintain ABET assessment. i, § Configure and installing of different tools/software in Mechanical Engineering laboratories

- **Assistant Professor**

**Department/Section:** Mechanical Engineering

**Khulna University of Engineering and Technology** From to

Working Area: University Teaching

Responsibility: i, § Lecturing and coordinating different undergraduate and graduate course i, § Supervising projects and theses of undergraduate and graduate students i, § Performing different administrative works such as preparing undergraduate results.

i, § Conducting research and publication i, § Laboratory in charge in Applied Mechanics in the Department of Mechanical Engineering.

i, § Worked with faculty to maintain ABET assessment. i, § Configure and installing of different tools/software in Mechanical Engineering laboratories

- **Lecturer**

**Department/Section:** Mechanical Engineering

**Khulna University of Engineering and Technology** From to

Working Area: University Teaching

Responsibility: -Supervising and examining projects and theses of undergraduate and graduate students; Performing different

administrative works such as preparing undergraduate results; Designing and preparing the Lab Sheets of different undergraduate courses; Preparing the testing reports and consultancy documents -Trained and supervised students and conducted Engineering projects and theses; Configured and installed different tools/software in Mechanical Engineering laboratories.

## Research Interest

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•,§ Aerospace Structure and Materials: Bio and nature inspire materials, Polymer composite, Metamaterials •,§ UAV Design: VTOL UAV, micro flying robot, Drone application in sustainability resource management and industry 4.0) •,§ Computational Mechan

I have research collaboration with following universities as evidenced in joint publications •,§ Australian National University (ANU), Canberra, Australia •,§ Sydney University (SU), Sydney, Australia •,§ Swinburne University of Technology, Melbourne, Australia •,§ Cranfield University of Technology, UK •,§ National Cheng Kung University, Tainan, Taiwan

## Publication

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### Books

1Brown,A. , Hutchison,W. , Islam,M. , Kader,M. , Escobedo,J. and Hazell,P. , **Effects of Thermal Processing on Closed-Cell Aluminium Foams** ,Characterisation of Minerals, Metals, and Materials TMS-2017

## Publication

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### Books

2Islam,M. , Kader,M. , Brown,A. , Hazell,P. , Escobedo,J. and Saadatfar,M. (2017) , **Experimental Investigation of Mechanical Behaviour of Closed-Cell Aluminium Foams Under Drop Weight Impact** ,Characterisation of Minerals, Metals, and Materials, TMS 2017

## Publication

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### Books

3Kader,M. A. , Hazell,P. J. , Saadatfar,M. , Islam,M. A. , Brown,A. D. and Escobedo,J. P. (2018) , **The Influence of Microstructure on the Collapse Mechanisms and Specific Energy Absorption Capacity of Aluminium Alloy Foams** ,Presented in Characterisation of Minerals, Metals, and Materials, TMS 147th Annual Meeting and Exhibitio

## Publication

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### Books

4Islam,M. , Kader,M. , Hazell,P. , J.P.Escobedo,J. , Saadatfar,A. B. a. M. and ,(2018) , **Characterization of Minerals, Metals, and Ma** ,TMS