



Munshi Mahbubul Basit

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EDUCATION

- Ph.D., Mechanical Engineering; **Auburn University**, USA, Summer, 2015
- M.Sc., Mechanical Engineering; **University of Nevada**, Reno, USA, Spring, 2010
- M.Sc., Automotive Engineering; **Kongju National University**, S. Korea, Spring, 2007
- B.Sc., Mechanical Engineering; **Bangladesh University of Engineering and Technology**, Bangladesh, 2004

ACADEMIC EXPERIENCES

- Associate Professor, Department of Mechanical Engineering, **Tuskegee University**, August 2025 to present
- Assistant Professor, Department of Mechanical Engineering, **Tuskegee University**, August 2019 to July 2025
- Assistant Professor, Department of Mechanical Engineering, **Georgia Southern University**, August 2017 to 2019
- Lecturer, Primeasia University, Dhaka, Bangladesh, 2007 to 2008

INDUSTRIAL EXPERIENCE

- R&D Package Simulation Engineer, **Micron Technology Inc.**, USA, 2015–2016

FUNDED PROJECTS

- Principal Investigator, Collaborations with High-Tech Industry Partners (CHIP), National Science Foundation (NSF), Funding amount \$394,791 for a three-year project (2024 to 2027)
- Co-Principal Investigator, Evaluation of Mode-I Fracture Toughness of Polymer Matrix Composites using Compliance Calibration, Modified Beam Theory, and Modified Compliance Calibration, DEVCOM Aviation and Missile Center, Funding amount \$100,000, 2020 to 2021
- Co-Principal Investigator, Influence of Process-Induced Defects on Mode I Fracture Resistance of Ceramic Matrix Composites (CMCs), DEVCOM Aviation and Missile Center, Funding amount \$200,000, 2022 to 2025
- Senior Personnel, Aerospace Education, Research and Innovation Center, Tuskegee University, Department of Defense, Funding amount \$5.1M, 2019 to 2025

RESEARCH INTERESTS

- Electronic Packaging, and Solder Joint
- Experimental and Computational Mechanics
- Fatigue and Fracture Mechanics
- Smart materials and Composite Materials
- Finite Element Modeling, and Analysis of Mechanical Design
- Additive Manufacturing

RECENT JOURNAL PUBLICATIONS

- Full list of Publication in Google Scholar [Link](#)
- **Munshi M. Basit** and Seong Sik Cheon, “Time dependent crashworthiness of polyurethane foam”, *Mechanics of Time-Dependent Materials*, Springer Publications, Volume-23, Issue-2, pp 207-221, 2019
- **Munshi M. Basit**, Kenneth Dickerson, Mohammad Hossain, and Heshmat Aglan, “Thermal and mechanical performance of cork insulated aluminum honeycomb panels exposed to corrosive environment” *Multiscale and Multidisciplinary Model, Experiment and Design*, 2023
- **Munshi M. Basit**, David Burdick, and Heshmat Aglan, “Analysis of the Viscoplastic Behavior of Pb-Free Solder Using Lap Shear Joints,” *Microelectronics Reliability*, Volume-119, pp 114091, 2021
- **Munshi M. Basit** and Shen-Yi Luo, “A simplified model of plain weave fabric reinforcements for the pure shear loading”, *International Journal of Material Forming*, Volume-11, Issue-4, pp 445-453, 2018
- **Munshi M. Basit**, Shen-Yi Luo, Aniruddha Mitra, “A simplified constitutive and finite element model of plain weave fabric reinforcements for the biaxial loading”, *Multiscale and Multidisciplinary Modeling, Experiments and Design*, Volume-2, Issue-4, pp 249-258, 2019