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Education
PhD, Mechanical Engineering (ME), University of Nevada Las Vegas (UNLV), Las Vegas, NV, USA, 2004
MS, Mechanical Engineering, Tuskegee University (TU), Tuskegee, AL, USA, 2001
BS, Mechanical Engineering, Bangladesh University of Engineering & Technology, Dhaka, Bangladesh, 1997

Professional Employment	
July 2014-Present	Associate Professor, Mechanical Engineering, Tuskegee University
August 2008-June 2014	Assistant Professor, Mechanical Engineering, Tuskegee University
May 28, 2018-August 3, 2018	Summer Faculty Research Fellow, NASA JPL, Pasadena, CA
June 5, 2017-August 11, 2017	Summer Faculty Research Fellow, NASA JPL, Pasadena, CA
June 02, 2014-August 08, 2014	Department of Homeland Security Summer Team Research Fellow, Coastal Hazard Center, North Carolina State University, Raleigh, NC
May 2013-August 2013	Office of Naval Research Summer Research Fellow, Newport Undersea Warfare Center (NUWC), RI
July 2008-July 2008	Visiting Assistant Professor, Mechanical Engineering, UNLV
June 2007-July 2008	Technical Advisor, Senior Design, Mechanical Engineering, UNLV
February 2005-June 2008	Research Faculty, Mechanical Engineering, UNLV
February 2005-June 2008	Assistant Lab. Coordinator, Mechanics Materials Laboratory, UNLV
August 2005-June 2008	Part Time Instructor, Mechanical Engineering, UNLV
2002-2004	Research Assistant, Mechanical Engineering, UNLV
2002-2004	Teaching Assistant, Mechanical Engineering, UNLV
1999-2001	Research Assistant, Mechanical Engineering, Tuskegee University

Research Interest
Processing and Characterization of Neat and Nanostructured Polymer Composites, and Conventional and Nanophased Synthetic and Natural Fiber Reinforced Composites, Functionally-Graded Conventional and Nanophased Foams, Failure Analysis, Metallurgical Characterization, Environment-Assisted Cracking, Localized Corrosion, Finite Element and Stress Analysis, Modeling, Simulation, Capstone/Senior Design Projects, and Collaborative Engineering Education.

Engineer Intern: Certificate No. 0T5528, Board of Professional Engineers and Land Surveyors, State of Nevada, USA.

Awards
1. "**Outstanding Faculty Performance Award for Research 2014-2015**", College of Engineering (COE), Tuskegee University (TU).
2. "**Outstanding Faculty Performance Award for Service 2013-2014**", College of Engineering, Tuskegee University.
3. "**Outstanding Faculty Performance Award for Teaching 2012-2013**", College of Engineering, Tuskegee University.
4. "**Outstanding Faculty Performance Award for Research 2011-2012**", College of Engineering, Tuskegee University.
5. "**Outstanding Faculty Performance Award for Service 2010-2011**", College of Engineering, Tuskegee University.
6. "**Engineering Professor of the Year 2009-2010**", Tuskegee University Business and Engineering (TUBE) Conference.
7. "**Outstanding Faculty Performance Award for Teaching 2009-2010**", College of Engineering, Tuskegee University.

8. "**Voluntary Safety Advisor Service Award**", First Robotics Competition, University of Nevada, Las Vegas, **2008.**
9. "**Best Senior Design Supervision Faculty Award**", College of Engineering, University of Nevada, Las Vegas, **2007.**
10. **First Prize for Outstanding Oral Presentation**, ANS Student Conference, University of Berkeley, CA, **2003.**
11. **Third Prize for Excellent Poster Presentation**, the 28th Annual Student Research Symposium of Sigma Xi, Tuskegee University, AL, **2001.**

Honors/Leaderships

1. **Spotlight:** Tuskegee University and Dr. Mohammad Kamal Hossain, Small Business Programs Office, Jet Propulsion Laboratory, eNewsletter, January 2018-Vol. 18.
2. **TU Coordinator:** NASA JPL HBCU Collaborative Initiative, Spring 2017-Present.
3. **External Faculty Advisor:** NASA JPL HBCU Collaborative Initiative Interns, **Summer 2018 & 2017**.
4. **Panelist: 2018** National Defense Science and Engineering Graduate (NDSEG) Fellowship Program; **2018, 2017, 2016, 2015,** NSF Graduate Research Fellowship Program (GRFP); **2018, 2017, 2014, 2012,** Science, Mathematics & Research for Transformation (SMART); **2017, 2016** NASA Education Aeronautics Scholarship and Advanced STEM Training and Research (AS&ASTAR) Fellowship; **2015** ORISE EPA STAR Fellowship Program.
5. **Judge: 2018, 2017, 2016, 2015, 2014, 2011,** Joint Annual Research Symposium, Facilitated by Tuskegee University Office of Undergraduate Research; ASME **2016** International Mechanical Engineering Congress & Exposition Graduate Students' Poster Competition; **2015** Partners for the Advancement of Collaborative Engineering Education (PACE) Annual Global Forum Poster Competition; **2014, 2013** 1st Annual Alabama VEX Robotics Competition, Brewbaker Technology Magnet High School, Montgomery, AL; **2012, 2011** Alabama Louis Stokes Alliance for Minority Participation (ALSAMP) Graduate and Undergraduate Conference; **2012** Alabama NSF EPSCoR RII Science & Technology Open House; Mentoring InTo Engineering, 2009-2010 Summer Programs Bridge Competition, College of Engineering, TU.
6. **Reviewer: 2017** NASA EPSCoR International Space Station (ISS) Flight Opportunity; **2016** DHS Scientific Leadership Awards (SLA) for Minority Serving Institutions (MSI) Proposals; Technical Proposals (**9**); Journal Articles for **27** Journals; **2017, 2016, 2014, 2013, & 2012** ASEE Annual Conference & Exposition; **2014, 2013, 2012, 2011, 2010, 2007** ASME International Mechanical Engineering Congress and Exposition (IMECE); **2017, 2016, 2015, 2014, 2013, 2012** PACE Global Annual Forum; 2010 MRS Fall Meeting.
7. **External Dissertation Evaluator:** Title "Optimal Selection of Machining Parameters in Milling Operation Using Heuristic Technique" by Mrs. M. Arunadevi, Visvesvaraya Technological University, "Jnana Sangama", BELAGAVI - 590 018, KARNATAKA, INDIA.
8. **Co-Advisor:** Tau Beta Zeta Engineering Honor Society, College of Engineering, TU, 2017-Present.
9. **Distinguished Inductee:** Order of the Engineer Ceremony, Tuskegee University Link, May 7, 2011
10. **Presenter Acceptance of the Obligation by Inductees: 2018, 2017, 2016, 2015, 2014, 2013** Order of the Engineer Ceremony, Tuskegee University Link.
11. **Professional Referee:** Reviewing a Tenure Application of a Faculty, Department of Mechanical Engineering, University of Nevada, Las Vegas, USA, September 2015.
12. **Invited Lecturer:** "Introduction to Mechanical Engineering" to High School Students, **2015** Summer Program Mentoring InTo Engineering (MITE), College of Engineering, Tuskegee University; "Effects of Carbon Nanofiber (CNF) on Mechanical and Thermal Behavior of Polyester and E-glass/Polyester Composites", **2013** Summer Lecture Series, Newport Undersea Warfare Center (NUWC), Newport, RI; "Increasing Interpersonal Skills," organized by the TU Engineering Student Council, Spring **2012**; "How To Be A Good Student in Engineering," TU ASME's Spring Mixer, Spring **2011;** Lecture for UNLV New International Students' Fall **2005** Orientation Program.
13. **Evaluator:** ETS Personal Potential Index Evaluation for Graduate School, January **2015**.
14. **TU Business and Engineering (TUBE) Conference Faculty Advisor: 2014-2015 Event**; **2013-2014, 2012-2013, and 2011-2012 Finance; 2010-2011 Seminar.**
15. **Faculty Mentor: 2014-2015, 2013-2014** ALSAMP Scholarship Awarded TU ME Students (5); **2014, 2013** NASA Space Grant TU ME Scholars (5).
16. **Moderator:** T-CAM Summer MS Students Seminar, July 21, 2011; T-CAM Summer REH Students Seminar, July 23, 2009.
17. **PACE Lead Faculty Contact and Coordinator:** College of Engineering, TU, **Spring 2009-Present**.
18. **Faculty Advisor:** TU ASME Students Chapter, Fall 2013-Present; Bangladesh International Students Association, TU, **Fall 2012-Present**; Tuskegee University Muslim Students Association, **Fall 2011-Present**; Bangladesh Cultural Society, UNLV, **Spring 2008-Summer 2008.**
19. **Member:** TU Chapel Advisory Council, July 2016-Present
20. **Vice President:** East Central Alabama Soccer Official Association, June 2018-Present.
21. **USSF Soccer Referee:** Registered for 2017-Present, ID: 2018-0000-0395-3691.

22. **Soccer Official:** East Central Alabama Soccer Official Association, ID: 160616, January 2017-Present.
23. **Coach/Manager:** Auburn City, AL Recreational Youth and Adult Soccer League, Fall 2016-Present.
24. **Board Member:** Auburn Islamic Society, Auburn, AL, 2014-Present.
25. **Vice Principal & Teacher:** Auburn Islamic Society Sunday School, Auburn, AL, 2013-Present.
26. **Who's Who:** Engineering Higher Education (WWEHE), 2010; Cambridge in America, 2010-2011; Madison 2008-2009.
27. **President:** Bangladesh Cultural Society, UNLV, NV, USA, Spring 2004-Fall 2007.
28. **Biography included in The Chancellor's List** for fine academic achievements, 2004-2005.
29. **Interviewed by Mr. Blake Douglas (Special Assistant to the Vice President for Student Life at UNLV)** for an article about student life at UNLV Campus, Spring 2005.
30. Worked as an **Interviewer** for the International Students Service (ISS) office of UNLV.
31. **Official General Secretary:** Central Students' Union of Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh, 1997-1998.
32. **Sports Secretary:** Fazlul Haq House, Mirzapur Cadet College, Bangladesh, 1988-1989.

Service

Chair: 2018 College of Engineering (COE) Award Committee, Tuskegee University (TU); **Faculty Senator:** TU Faculty Senate Committee, August 2017-July 2018 & April 2015-May 2016; **Chaperone:** 7th Graders' Ferbank Museum of Natural History Field Trip at Atlanta, Georgia, February 9, **2017**. Reference: Ms. Brandy McKinnell, 7th Grade Science Teacher, E-Mail: bamckinnell@auburnschools.org, JF Drake Middle School, Auburn, AL; **Faculty Senate Vice Chair:** Faculty Senate Committee, Tuskegee University, June 2016-July 2017; **Member:** Research & Graduate Studies Committee, Faculty Senate, TU, September 2016-Present; **Chaperone:** 5th Graders' American Village Trip at Montevallo, AL, February 10, **2015**. Reference: Ms. Cathy Taylor, 5th Grade Reading and Social Studies Teacher, E-Mail: cataylor@auburnschools.org, Yarbrough Elementary School, Auburn, AL; **Member:** Accreditation Coordinating Committee, College of Engineering, TU, Fall **2013-Present; Chaperone:** 4th Graders' 4H Camp Field Trip **2013** to the Alabama 4-H Center at Columbiana, AL. Reference: Ms. Katie Lindsey, E-Mail: kwlindsey@auburnschools.org, Fourth Grade Teacher, Yarbrough Elementary School, Auburn, AL; **Director:** Engineering Graphics, Computer-Aided Design, and Capstone Design Lab, Department of Mechanical Engineering, TU, Fall **2009-Present**; **Participated in the Engineering Week at TU with the** PI TAU SIGMA, National Mechanical Engineering Honor Society; **Involved in the TU College of Engineering Day of Service**. Visited local schools to motivate students in the STEM Education; **Assistant to the ME Head:** 2012 ABET Visit Activities, ME Department, TU; **Academic Faculty Advisor:** College of Engineering, TU, Summer 2010-Fall 2011; **Instructor:** Freshman Accelerated Start-up and Training for Retention in Engineering Curricula (FASTREC), College of Engineering, TU, Summer 2011 & 2010; **Web Administrator:** ME Department, TU, Summer 2010-Spring 2018; **Freshman Advisor:** ME, TU, Spring 2009-Present; **Member:** Recruiting & Retention Committee, College of Engineering, TU, Spring 2009-Present.

Publications

Book

1. Stress Corrosion Cracking and Hydrogen Embrittlement of Alloy EP-823 (Book). Lambert Academic Publishing, Germany, ISBN: 978-3-8383-6016-4.

Book Chapter

1. Scanning Electron Microscopy Study of Fiber Reinforced Polymeric Nanocomposites. **Book: Scanning Electron Microscopy edited by Viacheslav Kazmiruk**, InTech Publisher, ISBN: 979-953-307-309-4.
2. Nanophased Cellulose-Based Structural Composite, **Book:** Cellulose and Cellulose Derivatives: Synthesis, Modification, Nanostructure and Applications edited by Dr. Ibrahim Mondal. Nova Science Publishers, Inc., Hauppauge, NY, ISBN: 978-1-63483-885-6.
3. Sugarcane Fiber for Engineering Applications, **Book:** Sugarcane: Production Systems, Uses and Economic Importance, Nova Science Publishers, Inc., Hauppauge, NY, **ISBN:** 978-1-53610-938-2.
4. Carbon Fiber/Epoxy Structural Composites Infused with Graphene Nanoplatelet, **Book:** Fiber Reinforced Polymer Composites: Advancements, Applications and Insights, Volume 31, Nova Science Publishers, Inc., Hauppauge, NY, **ISBN:** 978-1-53612-769-0.
5. Engineered Nanostructured Polyester, Book-Polyester: Synthesis, Types and Applications, Nova Science Publishers, Inc., Hauppauge, NY, **In Press.**

Recent Journal Article

1. Hossain M. K., Chowdhury M. M. R., and Bolden N. W., "Processing and Performance Evaluation of Amine Functionalized Graphene Nanoplatelet Reinforced Epoxy Composites," *Journal of Materials Science and Engineering A* 6 (5-6) (2016) 117-130, DOI: 10.17265/2161-6213/2016.5-6.001, **2017**.

2. **Mohammad K. Hossain**, Muhammad E. Hossain, Mahesh V. Hosur, and Shaik Jeelani, "Comparison of Quasi-Static and Dynamic Compressive Response of E-Glass/Polyester-CNF Nanocomposites," *Journal of Materials Science and Engineering B*, 6 (1-2): 14-29, DOI: 10.17265/2161-6221/2016.1-2.002, **2016**.
3. M. E. Hossain, **M. K. Hossain**, M. V. Hosur, and S. Jeelani, Effect of dispersion conditions on the thermal and mechanical properties of carbon nanofiber-polyester nanocomposites", *Journal of Engineering Materials and Technology*, 137: 031005-9, **2015**.
4. **Hossain M**., Chowdhury M. M. R., Salam M. B. A., Jahan N., Malone J., Hosur M. V., Jeelani S. and Bolden N. W., "Enhanced Mechanical Properties of Carbon Fiber/Epoxy Composites by incorporating XD-grade Carbon Nanotube", *Journal of Composite Materials*, 49 (18): 2251-2263, **2014**.
5. **Mohammad K Hossain**, Mohammad R. Karim, Md. Mahmudur R Chowdhury, Mohammad A Imam, Mahesh Hosur, ShaikJeelani, and Ramsis Farag, "Comparative Mechanical and Thermal Study of Chemically Treated and Untreated Single Sugarcane Fiber Bundle", *Journal of Industrial Products and Crops*, 58: 78-90, **2014**.
6. **Mohammad K Hossain**, Md. Mahmudur R Chowdhury, Mahmud B Salam, Johnathan Malone, Mahesh Hosur, Shaik Jeelani, and Nydeia W Bolden. "Improved Thermo-Mechanical Properties of Carbon Fiber Reinforced Epoxy Composite using Amino Functionalized XDCNT", *Journal of Applied Polymer Science*, 131 (17): 8737-8748, **2014**.
7. **Mohammad K Hossain**, Md. Mahmudur R Chowdhury, Kazi A Imran, Mahmud B Salam, Mahesh Hosur, and Shaik Jeelani, "Effect of Low Velocity Impact Responses on Durability of Conventional and Nanophased CFRP Composites Exposed to Seawater", *Journal of Polymer Degradation and Stability*, 99:180-189, **2014**.
8. Mohammad W Dewan, **Mohammad K Hossain**, Mahesh Hosur, and Shaik Jeelani, "Thermo-Mechanical Properties of Alkali Treated Jute-Polyester/Nanoclay Biocomposites Fabricated by VARTM Process", *Journal of Applied Polymer Science*, 128 (6): 4110-4123, **2013**.
9. Muhammad E. Hossain, **Mohammad K. Hossain**, Mahesh Hosur, and Shaik Jeelani, "Low-Velocity Impact Behavior of CNF-Filled Glass Reinforced Polyester Composites", *Journal of Composite Materials*, 48 (7): 879-896, **2013**.
10. **Mohammad K Hossain**, Muhammad E Hossain, Mohammad W. Dewan, Mahesh Hosur, and Shaik Jeelani, "Effects of Carbon Nanofiber (CNF) on Thermal and Interlaminar Shear Responses of E-Glass/Polyester Composites", *Journal of Composites Part B*, 44: 313–320, **2012**.
11. Mohammad K. Hossain, Mohammad W. Dewan, Mahesh V. Hosur, and Shaik Jeelani, "Effect of Surface Treatment and Nanoclay on Thermal and Mechanical Properties of Jute/Biopol Green Composites", Journal of Reinforced Plastics and Composites, 30 (22): 1841-1856, **2011**.
12. Mohammad K. Hossain, Mohammad W. Dewan, Mahesh V. Hosur, and Shaik Jeelani, "Mechanical Performances of Surface Modified Jute Fiber Reinforced Biopol Nanophased Green Composites", Journal of Composites Part B: Engineering, 42 (6): 1701-1707, **2011**.
13. Mohammad K Hossain, Kazi Al Imran, Mahesh Hosur, and Shaik Jeelani, "Effect of Seawater on Thermal Behavior of Conventional and Nanophased Carbon/Epoxy Composites", Cambridge Journals Online, DOI:10.1557/opl.2011.498, **201**1.
14. Mohammad K. Hossain, Muhammad E. Hossain, Mahesh V. Hosur, and Shaik Jeelani, "Flexural and Compression Response of Woven E-Glass/Polyester-CNF Nanophased Composites", Journal of Composites Part A, 42: 1774-1782, 2011.
15. Mohammad K. Hossain, Mohammad W. Dewan, Mahesh V. Hosur, and Shaik Jeelani, "Physical, Mechanical, and Degradability Properties of Chemically Treated Jute Fiber Reinforced Biodegradable Nanocomposites", Journal of Engineering Materials and Technology, 133 (4): 041003-1-041003-7, 2011.

Featured Article

"Thermo-Mechanical Properties of Alkali Treated Jute-Polyester/Nanoclay Biocomposites Fabricated by VARTM Process", *Advances in Engineering*, Ltd, Canada.
Source: http://advanceseng.com/mechanical-engineering/thermomechanical-properties-of-alkali-treated-jute-polyesternanoclay-biocomposites-fabricated-by-vartm-process/

Teaching Interests

Engineering Mechanics: Engineering Statics and Dynamics, Mechanics of Materials, Experimental Mechanics, Experimental Mechanics Lab, Freshman Design, Freshman Engineering, Machine Design, CAD, Composite Materials, Mechanics of Composite Materials, Nanostructured Materials, Senior Design, Fracture Mechanics, Metallurgy, Corrosion Engineering, Theory of Elasticity/Plasticity, and Finite Element and Stress Analysis.

Membership in Professional Organizations

Member: ASME, ASEE, PI TAU SIGMA National Mechanical Engineering Honor Society.