Mohammed Ali

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OBJECTIVES

- Serving the University of Texas at Tyler through teaching, scholarship, service, and professional collegiality;
- Applying my strong teaching, research, and industrial experience to experiential learning;
- Teaching both undergraduate and graduate levels face-to-face and online, Industrial Technology and Industrial Management courses;
- Engaging students in applied research in the areas of pulmonary drug delivery, biomedical devices, and additive manufacturing;
- Providing academic and co-curricular advising to the students and contributing to student development, registration, retention, and timely graduation;
- Undertaking scholarship and professional services to ATMAE and EPT;
- Enhancing student recruitment through advisement, 2+2 MOU articulation, community outreach, college fair, and Undergraduate/Graduate science and engineering research fair.
- Serving various committees of the department, college, and university.

EDUCATION

Ph. D., University of Arkansas at Little Rock, Little Rock, Arkansas, USA, May 2008.
Area of Emphasis: **Applied Science – Manufacturing of Drug Delivery Devices**

M.S., Oklahoma City University, Oklahoma City, Oklahoma, USA, Aug. 2001.
Major: Computer Science
Supporting Areas of Emphasis: **Database and Artificial Intelligence**

M.B.A., Asian Institute of Technology, Bangkok, Thailand, April 1995.
Major: **Management of Technology**

M.E. Coursework, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh, August 1993.
Major: **Industrial and Production Engineering**

B.S., Chittagong University of Engineering and Technology (*Formerly* Bangladesh Institute of Technology), Bangladesh, Sept. 1992. Summa Cum Laude, Class Rank: 2nd out of 60.
Major: **Mechanical Engineering**

TEACHING & PROFESSIONAL POSITIONS

1. **Associate Professor** of Industrial Technology and Industrial Management and Program Coordinator, Longview University Center, The University of Texas at Tyler, Texas, USA. (Sept 2016 -) w/tenure.

2. **Associate Professor** of Industrial Systems and Technology and Program Coordinator of Manufacturing and Design, Jackson State University, Jackson, Mississippi, USA. (Aug 2013 -16) w/tenure.
3. **Assistant Professor**, Department of Industrial Technology,
   Jackson State University, Jackson, Mississippi, USA. (August 2007 – July 2013).
   Received **ATMAE Faculty Excellence Award 2011** for Teaching, Research, and Service.
   Received the departmental **Outstanding Faculty for Research Award 2012**.
4. **Faculty Fellow**, Summer Faculty Research Program, United States Navy and Air Force, Naval Surface Warfare Division, Dahlgren, Virginia, and Tyndall Air Force Base, Florida. USA. (May-Aug, 2014, 2013, 2011, 2010).
5. **Research Fellow**, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina, USA. (June 1, 2007 - July 30, 2007).
6. **Teaching Assistant**, Departments of Engineering Technology and Systems Engineering, University of Arkansas at Little Rock, Little Rock, Arkansas, USA. (January 1, 2005 - May 30, 2007).
7. **Adjunct Professor**, University of Arkansas at Little Rock, Little Rock, Arkansas, USA. (August 1, 2004 - December 30, 2004).
8. **Assistant Professor**, University of Information Technology and Sciences, Dhaka, Bangladesh. (January 1, 2004 - July 30, 2004).
9. **Lab Administrator**, Oklahoma City University, Oklahoma City, Oklahoma, USA. (January 1, 2000 - August 30, 2001).
10. **Management Consultant**, Institute of Water Modeling, Dhaka, Bangladesh. (December 1, 1997 - August 15, 1999).
11. **Technical Advisor**, Material and Metallurgy Engineering Company, Bangkok, Thailand. (April 1, 1995 - November 30, 1997).

TEACHING EXPERIENCE AND INTERESTS

- Computer Integrated Manufacturing (CIM)
- Programmable Logic Controller (PLC)
- Manufacturing Processes
- Lean Production
- Polymer Processing
- Advanced Manufacturing Processes
- Total Quality Management
- Plant Layout and Facilities Planning
- Research Techniques in HRD/Technology
- Research Trends in Industry
- Value Stream Management
- Advanced Production Management
- Logistics and Supply Chain Management
- Advanced Supply Chain Management
- Materials Testing and Machine Design
- Production and Inventory Management
- Statics and Materials Mechanics
- Hydraulics and Fluid Power, Hydraulic and Pneumatic Module Lab
- Computer Aided Drafting (AutoCAD, Inventor)
- Advanced Computer Aided Drafting (SolidWorks, Pro-E)
- Motion and Time Study
- Licensing and Certification - ATMAE
- Introduction to Aerosol Science and Technology

TEACHING EVALUATION BY STUDENTS

The average score of the teaching evaluation was 4.75. Students were asked to evaluate the teaching effectiveness of various classes taught on a 1 to 5-point scale. 1 represents the lowest and most negative impression, which is unsatisfactory, 2 for some extent satisfactory, 3 for very satisfactory, 4 for exceeding expectations, and 5 represents the highest and most positive impression. The following table summarizes the overall ratings for the respective courses.

Course Number and Title	Overall Rating (1 to 5 point scale)
Advanced Manufacturing Processes	4.90
Lean Production	4.75
Plant Layout and Facilities Planning	4.80
Polymer Processes	4.71
Research Trends in Industry	4.60
Total Quality Management (UG/Grad)	4.75

LEAD ORGANIZER OF MIDDLE AND HIGH SCHOOL SUMMER CAMPS

Lead Organizer and Instructor, **3D Printing and Robotics** summer camp every year since 2018. Twenty attendees ranged from 8th to 11th grade. Activities include a) industrial plant tour, b) designing 3D models of machine parts and miniature rockets (~300 ft. flight) using CAD and manufacture of these models using additive 3D printing technology and laser cutter, and c) programming robotics at a virtual factory.

SELECTED AWARDS & HONORS

1. **William E. Warner Minilectureship Award 2025** awarded by the Epsilon Pi Tau, International Honor Society for Professions in Technology.
2. **Paul T. Hiser Exemplary Publication Award 2022,** awarded by the Epsilon Pi Tau, International Honor Society for Professions in Technology.
3. **Outstanding Faculty Research Award 2019,** awarded by the Soules College of Business, The University of Texas at Tyler.
4. **ACA Scholarship Award 2018,** awarded by the Epsilon Pi Tau, International Honor Society for Professions in Technology.
5. **Best Faculty Award 2012 for Research,** awarded by the College of Science, Engineering and Technology, Jackson State University
6. **Faculty Excellence Award 2011, selected from 97 ATMAE-accredited college and university program faculties in the nation,** awarded by the Association of Technology, Management, and Applied Engineering (ATMAE) for demonstrated excellence in teaching, research, and service in an academic career.
7. **US Navy Summer Faculty Fellowship Award;** Naval Surface Warfare Center, Virginia. (2013-15).
8. **US Air Force Summer Faculty Fellowship Award;** Tyndall Air Force Base, FL. (2010, 2011).
9. **ASME Early Career Technical Conference Presentation Award** (2009, 2010).
10. **Biltmore Who's Who Honored** in United States of America (July 2009).
11. **Research Achievement Award**, American Association of Bangladesh Pharmaceutical Scientists. (November 15, 2008).
12. **Graduate Student Research Forum Award**, University of Arkansas at Little Rock. (2006, 2007).

13. **NIEHS Fellowship Award** from the National Institutes of Health. (June 2007).
14. **Best Student Research Award**, Arkansas Society for Public Health Education. (March 2007).
15. **Faculty Inductee**, Alpha Epsilon Lambda, Engineering Professional Honor Society. (October 2006).
16. **Winner of the United States National Collegiate Award**, US Achievement Academy. (Sep 2001).
17. **Graduate Inductee**, Upsilon Pi Epsilon, Computing Professional Honor Society. (May 2001).

LICENSURES & CERTIFICATIONS

- **Certified Lean Six Sigma Black Belt (CLSSBB)**, since 2024, Certified by the Association of Technology, Management and Applied Engineering (ATMAE) for the USA.
- **Certified in Effective College Instruction** since 2022, Certified by the Association of College & University Educators (ACUE) and the American Council on Education (ACE).
- **Certified Senior Manufacturing Specialist (CSMS)**, since 2011, Certified by the Association of Technology, Management and Applied Engineering (ATMAE) for the USA.
- **Certified Educational Robot Training Instructor** by FANUC America Corp. (June 2017)
- **Engineer Intern**, Texas Board of Professional Engineers, Louisiana Professional Engineering, and Land Surveying Board, since 2003.

PROFESSIONAL MEMBERSHIP & LEADERSHIP

- **Professional Member**, Association of Technology, Management and Applied Engineering (ATMAE).
- **Chapter Trustee,** Delta Gamma Chapter, Epsilon Pi Tau, The UT Tyler, 2018 – To date
- **Professional Member**, Intl. Society of Toxicology (SOT) and Texas Lone Star SOT. 2021- To date
- **Professional Member**, American Society of Mechanical Engineers (ASME), 2010-2016.
- **Member**, American Association for Aerosol Research, 2006-2009.
- **Member**, American Association of Pharmaceutical Scientists, 2006-2008.
- **Member**, Mississippi Academy of Science, since 2008.
- **Life Member**, Alpha Epsilon Lambda.
- **Life member**, Upsilon Pi Epsilon.

HOLDING OFFICE PROFESSIONAL ASSOCIATIONS

1. **President**, ATMAE Micro and Nanotechnology Division (2019 - 2022).
2. **Program Evaluator**, ATMAE Accreditation Visiting Team (every year since 2016).
3. **Exam Commission Member**, ATMAE Certified Manufacturing Specialist (2010-2025).
4. **Advisory Board Member**, Kilgore College Maintenance and Corrosion Technology Programs, Texas, 2017- to date
5. **Advisory Council Member**, East Texas Advanced Manufacturing Academy, Longview, TX. 201- To date
6. **Chair,** Executive Committee of the ASME Mississippi Chapter (2013-2016).
7. **Vice Chair**, Executive Committee of the ASME Mississippi Chapter (2010-2012).
8. **College and Student Relations,** Officer of the ASME Mississippi Chapter (2011-2012).
9. **Faculty Advisor & University Liaison**, Society of Manufacturing Engineers MS Chap. (2007-2016)

JOURNAL EDITORIAL BOARD MEMBER

1. **Editorial Board Member**, Intl. Journal of Management and Engineering Integration. (since 2008).
2. **Associate Editor**, ASME Early Career Technical Conferences and Journals. (since 2012).
3. **Editorial Reviewer**, Journal of Manufacturing and Design Science. (since 2014).
4. **Editorial Reviewer**, Advances in Mechanical Engineering. (since 2013).
5. **Editorial Reviewer**, ATMAE J. of Technology, Management, and Applied Engineering (since 2013).
6. **Promotion & Tenure Dossier Reviewer**, 2013, Southern Illinois University Carbondale, IL, USA.
7. **Editorial Reviewer**, JSU Journal of The Researcher, Jackson, Mississippi. (2009-2016).
8. **Invited Reviewer**, International Journal of Environmental Science and Technology. (since 2024)
9. **Invited Reviewer**, Aerosol Science and Technology Journal. (since 2011).
10. **Invited Reviewer**, AAPS Journal of Pharmaceutical Science and Technology. (since 2009).

GRANTS & SCHOLARSHIPS REVIEW PANELIST

1. Panelist, NSF Graduate Research Fellowship Program (GRFP), (every year since 2013).
2. Panelist, NIH Grant Proposals at the Center for Scientific Review (CSR), National Institute of Health (since Aug 2012).
3. Panelist, American Society for Engineering Education and the Dept of Defense SMART Scholarship Review Panel, (since 2011).

PH.D. DISSERTATION EXAMINER AND M.S. RESEARCH

1. Examined Doctoral Dissertation (February 2014), "A novel framework of cloud-based e-learning architecture for higher education." Ph.D. Candidate: M. A. H. Masud, Charles Stuart University, NSW, Australia.
2. Examined Doctoral Dissertation (August 2012), "Effect of Wire EDM parameters on surface integrity in the machining of aluminum alloy", Ph.D. Candidate: P. Srinivasa Rao, Department of Mechanical Engineering, Andhra University College of Engineering, India.
3. Supervised Master's Research (January 1, 2010 - August 31, 2010), "Biosimulation of aerosol deposition in the human lung." MS Student: Vijay Maddipatla.

SUPERVISED GRADUATE AND UNDERGRADUATE RESEARCH

1. Supervised two graduate student research on Toyota grant-funded Logistics and Intelligent Transportation Systems, "Multi-Criteria Route Selection Model Utilizing Linear Programming to Optimize Incident". (May 2015 – August 2016). PhD Students: Kendrick Walker and Di Wu.
2. Supervised Research, REO Grant Funded by MS-INBRE, "Computational simulation of Micro- and Nano-Particle Deposition inside Mouse Lung Model". (May 2016 – Aug 2016). REO Student: Breaunna Lewis.
3. Supervised Research, REO Grant Funded by MS-INBRE, "Computational Simulation of Micro- and Nano-Particle Deposition inside Human Lung Model." (May 2015 – Aug 2015). REO Student: Anupria Davenport.
4. Supervised Research, REO Grant Funded by MS-INBRE, "Measurement of Particle Size and Charge Distributions of Asthma Drug Dry Powder Inhaler Aerosols." (May 2013 – Aug 2013). REO Student: Marina Ali.

5. Supervised Research, Research Grant Funded by MS-INBRE, "Electromechanical Phenomena of Drug Delivery Device Generated Submicron Particles." (August 2012 – May 2013). Undergraduate Research Assistant: Beruh Dejene and Ieshia Hubbard.
6. Supervised Research, REO Grant Funded by MS-INBRE, "Characterizing principles of laboratory graded aerosols generated from pressurized metered-dose aerosol generators." (June 1, 2009 - August 31, 2009). REO Student: Courtney L. Johnson.
7. Supervised Research, REO Grant Funded by MS-INBRE, "Respiratory aerosol characterization comparisons between the electronic single particle aerodynamics relaxation time analyzer and TSI aerodynamic particle sizer spectrometer." (June 1, 2008 - August 31, 2008). REO Student: Allen Sinegal.

ADVISORY COMMITTEE MEMBER OF INTERNATIONAL CONFERENCE

1. **Member, Advisory Committee**, International Conference on Mechanical Engineering and Renewable Energy, Chittagong University of Engineering and Technology, Chittagong, Bangladesh. Every year since 2011.

JUDGING AND CHAIRING NATIONAL CONFERENCE SESSIONS

1. **Judge**, The UT Tyler Student Research Showcase, Honors Program, and the Center for Teaching and Learning (every year since 2017).
2. **Judge**, Students Robotics Competition organized by the Manufacturing Division of ATMAE at the Annual Conference since 2013.
3. **Session Chair**, American Society of Mechanical Engineers Early Career Technical Conference, University of Alabama, Birmingham, November 3, 2013.
4. **Session Chair**, American Society of Mechanical Engineers Early Career Technical Conference, University of Alabama, Tuscaloosa, October 2, 2009.
5. **Session Chair**, International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, Florida, March 9, 2009.

ORGANIZER OF REGIONAL WORKSHOP

1. **Organizer of Regional Workshop (thrice)**, American Society of Mechanical Engineers (ASME) District-F annual workshop was organized during the Engineers Week celebration at JSU campus on February 17-22, 2014; February 16-21, 2012 and November 8, 2012 for the first time at JSU.

NATIONAL & INTERNATIONAL CITATIONS OF SCHOLARLY WORK

1. Google Scholar - total 240 as of 22 June 2025
2. Scholars Work at UT Tyler – 2710 downloads of 70 papers from 34 countries since registered in 2018.

Please see all at a glance at the end of this CV.

SCIENTIFIC PUBLICATIONS

The entire Research Profile is available at https://works.bepress.com/mohammedali/.

Peer-Reviewed and Refereed Journals (Selected)

1. **Ali, M.** (2025). Electrostatic effects on the transport and dispersion of micro-nano pharmaceutical powders. *Journal of Technology, Management, and Applied Engineering* (accepted).
2. **Ali, M.** (2025). Big Data Driven Manufacturing and Industry 4.0. *Data Centric Engineering* (accepted).
3. **Ali, M.** (2025). A novel technique of investigating Big Data to determine academic performance in the college. *Journal of College Student Development (under peer review*).
4. **Ali, M.** (2024). Big data-driven innovations thrive in the supply chain. *Journal of Technology, Management, and Applied Engineering*, doi: https://doi.org/10.31274/jtmae.16138
5. **Ali, M.** (2023). Lean Six Sigma body of knowledge for healthcare industry administrators: implementation of lessons learned in applied engineering. *Journal of Technology Studies*, 48(1), 18-32. DOI:10.21061/jts.410. https://scholarworks.uttyler.edu/tech_fac/11
6. **Ali, M.** (2023). Predictability augmentation by in-silico study to in-vivo and in-vitro results of lung doses of airborne fine and ultrafine particles inhaled by humans at industrial workplaces. *Nature Environment and Pollution Technology, 22*(4), 1911-1920. DOI: 10.46488/NEPT.2023.v22i04.017 https://neptjournal.com/upload-images/(17)D-1493.pdf
7. **Ali, M.** (2022). Multiple path particle dosimetry modeling employability to complement in-vitro ultrafine particle toxicity study. *Current Trends in Engineering Science, 2*(2). DOI:10.54026/CTES/1017. https://scholarworks.uttyler.edu/tech_fac/10/
8. **Ali, M.** (2021). Computational fluid dynamics simulation of inhaled submicron bioaerosol particles flow and deposition in the human lung. *International Journal of Modern Engineering*, 22(1), 5-11. https://scholarworks.uttyler.edu/tech_fac/7/ https://ijme.us/issues/fall2021/X__IJME%20fall%202021%20v22%20n1.pdf#page=7
9. **Ali, M.** (2020). Novel technique to analyze the effects of cognitive and non-cognitive predictors on students course withdrawal in college. *Technology Interface International Journal*, 20(2), 36-41. https://scholarworks.uttyler.edu/tech_fac/5/
10. **Ali, M.** (2019). Mechanistic implications of mouthpiece design geometry on successful generation and delivery of aerosolized submicron to nano-sized particles from respiratory drug delivery device. *International Journal of Modern Engineering*, 20(1), 12-19. https://scholarworks.uttyler.edu/tech_fac/8/
11. **Ali, M.** (2019). Self-regulated learning pedagogy for teaching applied engineering and technology class. *Journal of Technology, Management and Applied Engineering*, 35(1), 1-11. https://scholarworks.uttyler.edu/tech_fac/1/ https://www.iastatedigitalpress.com/jtmae/issue/1084/info/
12. **Ali, M.** Gutting, B.W., and van-Hoek, M.L. (2017). Multiple path particle dosimetry for prediction of mouse lung deposition of nanoaerosol particles. *International Journal of Advanced Research in Engineering and Technology*, 8(4), 10-20. https://scholarworks.uttyler.edu/tech_fac/3/ https://iaeme.com/Home/article_id/IJARET_08_04_002
13. **Ali, M.** (2016). Antimicrobial agent treated filtering face-piece respirators for inactivation of airborne viruses during environmental catastrophe. *International Journal of Innovations in Biological and Chemical Sciences*, 9(1), 39-46. https://scholarworks.uttyler.edu/cgi/preview.cgi?article=1004&context=tech_fac https://whitesscience.com/product-category/ijibcs/volume-9-ijibcs
14. **Ali, M.** (2015). Effects of three dry powder inhalers on deposition of aerosolized medicine in the human oral-pharyngeal-laryngeal regions. *Journal of Drug Design and Research,* 2(1), 1009-1015. https://scholarworks.uttyler.edu/tech_fac/2/ DOI : https://doi.org/10.47739/2379-089X/1009
15. **Ali, M.** (2014). Engineered aerosol medicine and drug delivery methods for optimal respiratory therapy. *Journal of Respiratory Care*, 59(10), 1608-1610. DOI: https://doi.org/10.47739/2379-089X/1009. http://rc.rcjournal.com/content/respcare/59/10/1608.full.pdf https://scholarworks.uttyler.edu/tech_fac/13

16. **Ali, M.**, and Ibrahim, E.A. (2013). Determination of particle aerodynamic size distributions and viability of aerosolized H1N1 virus. *ASME Early Career Technical Journal*, 12(1), 1-7. https://scholarworks.uttyler.edu/cgi/preview.cgi?article=1006&context=tech_fac

17. Ibrahim, E.A. and **Ali, M.** (2012). Comparative effects of forces acting on swirling annular liquid sheets. *ASME Early Career Technical Journal*, 11(1), 228-235. https://scholarworks.uttyler.edu/cgi/preview.cgi?article=1007&context=tech_fac

18. **Ali, M.**, and Ibrahim, E.A. In-vitro investigation of the aerodynamic performance of Collison nebulizer in generating biological aerosols. *Journal of Aerodynamics* (under peer review)

19. **Ali, M.**, (2012), Novel method for inhalation control of workplace anthropogenic pollutant particles. *Journal of Particles and Particles Systems Characterization*, 29(4), 311-318. https://doi.org/10.1002/ppsc.200900089. https://scholarworks.uttyler.edu/cgi/preview.cgi?article=1008&context=tech_fac

20. **Ali, M.**, and Ibrahim, E.A. (2011). Computational investigation of particle settling effects on inhaled submicron bioaerosol deposition in the human lung. *ASME Early Career Technical Journal*, 10(1), 1-5. https://scholarworks.uttyler.edu/cgi/preview.cgi?article=1009&context=tech_fac

21. **Ali, M.** (2011). Mechanical Human Lung for Inhalation Toxicity Research. Peer Reviewed Conference Proceedings of the International Conference on Mechanical Engineering and Renewable Energy (ISSN Number: 2221-2213). https://icmerecuet.org/?page_id=131

22. **Ali, M.**, Mazumder, M. K., Martonen, T. B. (2010). Measurements of electrodynamic effects on the deposition of MDI and DPI aerosols in a replica cast of human oral-pharyngeal-laryngeal airways. *Journal of Aerosol Medicine and Pulmonary Drug Delivery, 22*(1), 35-44. https://doi.org/10.1089/jamp.2007.0637 https://scholarworks.uttyler.edu/cgi/preview.cgi?article=1014&context=tech_fac https://www.researchgate.net/publication/23266686

23. **Ali, M.** (2010). In-silico simulation of electrostatic charge effects on inhaled aerosol particle deposition in the human lung. *ASME Early Career Technical Journal*, 9(1), 75-79. https://scholarworks.uttyler.edu/cgi/preview.cgi?article=1010&context=tech_fac

24. **Ali, M.** (2010). A novel method of characterizing medicinal drug aerosols generated from pulmonary drug delivery devices. *PDA Journal of Pharmaceutical Science and Technology,* 64, 364-372. https://pubmed.ncbi.nlm.nih.gov/21502037/ https://scholarworks.uttyler.edu/cgi/preview.cgi?article=1011&context=tech_fac

25. **Ali, M.**, and Johnson, C. L. (2010). Characterizing principles of laboratory-graded aerosols generated from pressurized metered dose aerosol generators. *Journal of the Mississippi Academy of Sciences*, 55 (1), 125-126. https://msacad.org/journal/jan10journal/jan10.pdf

26. **Ali, M.**, Mazumder, M. K., Martonen, T. B. (2009). Measurements of electrodynamic effects on the deposition of MDI and DPI aerosols in a replica cast of human oral-pharyngeal-laryngeal airways. *Journal of Aerosol Medicine and Pulmonary Drug Delivery, 22*(1), 35-44. https://doi.org/10.1089/jamp.2007.063

27. **Ali, M.** (2009). Operating performance comparisons between laser doppler velocimetry and time of flight techniques." *Journal of Management and Engineering Integration,* 2(2), 1-13. https://scholarworks.uttyler.edu/cgi/preview.cgi?article=1012&context=tech_fac https://www.journalmei.com/_files/ugd/f76c8e_435c560adc77488db883346f24f49533.pdf

28. **Ali, M.** (2009). Mechanical tracheobronchial model for human lung inhalation study. *ASME Early Career Technical Journal*, 8(1), 133-139. https://scholarworks.uttyler.edu/cgi/preview.cgi?article=1013&context=tech_fac

29. **Ali, M.**, and Sinegal, A. (2009). Respiratory aerosol characterization comparisons between the electronic single particle aerodynamics relaxation time analyzer and TSI aerodynamic particle sizer spectrometer. *Journal of Mississippi Academy of Science, 54*(1), 93-94. https://msacad.org/journal/jan09journal/jan09.pdf

30. **Ali, M.**, Reddy, R. N., Mazumder, M. K. (2008). Electrostatic charging effect on workplace aerosol particle deposition in a hollow throat cast. *Journal of Electrostatics, 66*(7-8), 401-406.

https://doi.org/10.1016/j.elstat.2008.02.005
https://scholarworks.uttyler.edu/cgi/preview.cgi?article=1015&context=tech_fac

31. **Ali, M.**, Ejiwale, J. A., Mazumder, M. K. (2008). Investigation of the electromechanical properties of asthma medicinal drugs using laser Doppler velocimetry. *Journal of Mississippi Academy of Science, 53*(1), 103-104. https://msacad.org/journal/jan08journal/jan08.pdf

32. **Ali, M.**, Reddy, R. N., Mazumder, M. K. (2008). Simultaneous characterization of aerodynamic size and electrostatic charge distributions of inhaled dry powder inhaler aerosols. *Journal of Current Respiratory Medicine Review, 4*(1), 2-5. http://dx.doi.org/10.2174/157339808783497819. https://www.eurekaselect.com/article/27178. https://scholarworks.uttyler.edu/cgi/ir_submit.cgi

33. **Ali, M.**, Reddy, R. N., Mazumder, M. K., Milanova, M. G., Zhang, J., Biris, A. S. (2007). Electrostatic charge polarity effect in inhaled aerosol deposition in the glass bead tracheobronchial airway model. *Journal of Arkansas Academy of Science, 61*(1), 20-26. https://scholarworks.uark.edu/jaas. https://scholarworks.uttyler.edu/tech_fac/4/

34. **Ali, M.**, Wu, N., Good, M. L. (2006). Analysis of the effects of cognitive and non-cognitive predictors on college performance: an innovative application of decision tree and association rules. *The Journal of Computing Sciences in Colleges, 21*(5), 43-44.

35. **Ali, M.**, Speece, M. W. (1997). Competitiveness of Bangladeshi ready-made garment. *Journal of Euro-Asian Management, 3*(2), 1-30. https://ssrn.com/abstract=2576101.

Book Chapters

1. **Ali, M.** (2020). Big Data Driven Manufacturing and Supply Chain in Industry 4.0. In *Big Data in Supply Chain Management*, edited by Arun Nambiar, pp. 1-17, IGI Global Publishing, Hershey, PA, USA.

2. **Ali, M.** (2010). Pulmonary Drug Delivery. In *Handbook of Non-Invasive Drug Delivery Systems*, edited by Vitthal Kulkarni, pp. 209-246, Elsevier Inc., Amsterdam, The Netherlands.
https://scholarworks.uttyler.edu/tech_fac/12
ISBN: 9780815520252. https://doi.org/10.1016/B978-0-8155-2025-2.10009-5

Presentations and Peer-reviewed Conference Proceedings (Selected)

1. **Ali, M**. ATMAE Annual Conference 2025, "Impact of Mouthpiece Design Geometry on the Mechanistic Generation and Effective Delivery of Submicron to Nanoscale Aerosolized Particles in Respiratory Drug Delivery Devices." Memphis, Tennessee. (Oct 22-24, 2025).

2. **Ali, M**. ATMAE Annual Conference 2024, "Electrostatics and Van-der Waals forces effects on micro and nano pharmaceutical powders in drug manufacturing." Las Vegas, Nevada. (Oct 28-31, 2024).

3. **Ali, M.** East Texas Research Conference 2024, "Electrodynamic blending of pharmaceutical drug powders." The UT Tyler, Tyler, Texas. (April 12, 2024).

4. **Ali, M**. ATMAE Annual Conference 2023, "Electrodynamic processing of micro and nano pharmaceutical powders enhances blended ordered mixture." Atlanta, Georgia. (Oct 25-27, 2023).

5. **Ali, M**. and Miller, M. ATMAE Annual Conference 2022, "Electromechanical effects on micro and nanoparticles generated from drug delivery devices and their implications in flow and deposition efficiency." Louisville, Kentucky. (Nov 9-11, 2022). http://scholarworks.uttyler.edu/tech_fac/9

6. **Ali, M.** and Johnson, NM. SOT: Micro & Nanoparticle Safety Annual Conference 2022, "In-silico simulation of ultrafine and nanoparticles toxicity burdens." San Diego, California. (March 27-31, 2022).

7. **Ali, M.** ATMAE Annual Conference 2021, "Computational simulation of the lung doses of air-borne fine and ultrafine particles inhaled by humans at industrial workplaces." Orlando, Florida. (Nov 3-5, 2021).

8. **Ali, M.** "Lean six sigma applied engineering curriculum for healthcare administration majors." *Proceedings of ASEE Annual Conference and Exposition*, Long Beach, California. (July 26-28, 2021).

9. **Ali, M.** ATMAE Annual Conference 2020, “Micro and nanoparticle spectrometry: a comparison between laser doppler velocimetry and time of flight techniques.” Louisville, Kentucky. (Oct 7-9, 2020).
10. Miller, M. and **Ali, M.** ATMAE Annual Conference 2020, “Insights to a successful ATMAE accreditation: tips to keeping standards in compliance.” Louisville, Kentucky. (Oct 7-9, 2020).
11. **Ali, M.**, Miller, M., Lawrence, H., and Fazarro, D. ATMAE Annual Conference 2019, “Aerodynamic effects on nano and sub-micron respiratory drug particles flow and deposition efficiency.” Charlotte, North Carolina. (Nov 6-8, 2019).
12. **Ali, M.** 14th International Manufacturing Science and Engineering Conference 2019, “Manufacturing design effects on aerosolized particles from respiratory drug delivery devices.” Pen State Erie, Pennsylvania. (June 10-14, 2019). https://scholarworks.uttyler.edu/fac_posters/18
13. **Ali, M.** East Texas Research Conference 2019, “Manufacturing process implications on aerosolized submicron to nano-sized particles from respiratory drug delivery devices.” The UT Tyler, Tyler, Texas. (May 9-10, 2019).
14. **Ali, M**., Miller, M., Lawrence, H., and Fazarro, D. ATMAE Annual Conference 2018, “Mechanistic implications of mouthpiece design geometry on successful generation and delivery of aerosolized submicron to nano-sized particles from respiratory drug delivery device.” Kansas City, Missouri. (Nov. 7-9, 2018).
15. Miller, M**., Ali, M**., and Lawrence, H. ATMAE Annual Conference 2018, “The new ATMAE learning management system: streamlining certification and training.” Kansas City, Missouri. (Nov. 7-9, 2018).
16. **Ali, M.**, Donaldson, S., Miller, M., Lawrence, H., and Fazarro, D. ATMAE Annual Conference 2017, “Automatic identification data capture towards robust material handling: a key learning pedagogy for warehousing class.” Cincinnati, Ohio. (Nov 1-3, 2017).
17. Miller, M**., Ali, M**. Donaldson, S., Lawrence, H., and Fazarro, D. ATMAE Annual Conference 2017, “Does offering certifications assist in the recruitment of undergraduate majors?” Cincinnati, Ohio. (Nov 1-3, 2017).
18. **Ali, M**. ATMAE Annual Conference 2016, “Self-regulated learning pedagogy for teaching applied engineering and technology class.” Orlando, Florida. (November 2-5, 2016).
19. Davenport, A., **Ali, M**. Mississippi Academy of Science 80th Annual Conference, “Computational simulation of micro- and nano-particle deposition inside human lung model.” Hattiesburg, Mississippi. (February 17-19, 2016).
20. **Ali, M**., Gutting B.W., and van-Hoek, M.L. 31st Southern Biomedical Engineering Conference, “Multiple path particle dosimetry simulation of respiratory deposition of nanoaerosol in the mouse lung.” New Orleans, Louisiana. (April 30–May 3, 2015).
21. **Ali, M.** ATMAE Annual Conference 2014, " A Novel Method of Determining the Manufacturing and Design Effects on Aerodynamic and Electromechanical Performance of Aerosol Particles Generated from Respiratory Drug Delivery Devices," Association of Technology, Management and Applied Engineering (ATMAE), St. Louis, MO. (November 21-23, 2014).
22. Ali, M., **Ali, M**. Mississippi Academy of Science 78th Annual Conference, “Measurement of particle size and charge distributions of asthma drug particles generated by dry powder inhalers.” Hattiesburg, Mississippi. (March 6-7, 2014).
23. **Ali, M.,** Ibrahim, E.A. ASME Early Career Technical Conference 2013, " Determination of particle aerodynamic size distributions and viability of aerosolized H1N1 virus." American Society of Mechanical Engineers, University of Alabama, Birmingham, Alabama. (November 2-3, 2013).
24. **Ali, M.,** Dejene, B. The 2013 MS-INBRE Annual Research Symposium, "Mechanistic Phenomena of Inhaled Submicron Bioaerosol Particles Flow and Deposition in the Human Lung." University of Southern Mississippi, Hattiesburg, Mississippi. (February 23, 2013).
25. Ali, M., Dejene, B., Hubbard, I., **Ali, M**. Mississippi Academy of Science 77th Annual Conference, “Electrochemical Determination of Aerodynamic Performance of Asthma Drug Particles Generated by Metered Dose Inhalers.” Hattiesburg, Mississippi. (February 21-22, 2013).

26. **Ali, M.,** Ibrahim, E.A. ASME Early Career Technical Conference 2012, "Comparative effects of forces acting on swirling annular liquid sheets." American Society of Mechanical Engineers, Georgia Institute of Technology, Atlanta, Georgia. (November 2 - 3, 2012).
27. **Ali, M.** NISBRE Conference 2012, "In-silico investigation of particle inertial impaction effects on inhaled submicron bioaerosol deposition in the human lung," National IDeA Symposium of Biomedical Research Excellence (NISBRE), Washington, DC. (June 25 - 27, 2012).
28. **Ali, M.** ICMERE Annual Conference 2011, "Mechanical Human Lung for Inhalation Toxicity Research," International Conference on Mechanical Engineering and Renewable Energy (ICMERE), Chittagong, Bangladesh. (December 24-26, 2011).
29. **Ali, M.**, Harnish, D. A., Heimbuch, B. K. et al. AAAR Annual Conference 2011, Accelerated attenuation of viability of bioaerosols by acquired oxidants. American Association of Aerosol Research (AAAR), Orlando, FL. (October 4 - 7, 2011).
30. **Ali, M.** ATMAE Annual Conference 2011, "A novel use of data mining on college students' academic performance," Association of Technology, Management and Applied Engineering (ATMAE), Cleveland, OH. (November 9 - 12, 2011).
31. **Ali, M.**, Ibrahim, E.A. ASME Early Career Technical Conference 2011, "Computational investigation of particle settling effects on inhaled submicron bioaerosol deposition in the human lung." American Society of Mechanical Engineers, Georgia Institute of Technology, Atlanta, Georgia. (Nov. 4-5, 2011).
32. **Ali, M.** ASME Early Career Technical Conference 2010, "In-silico simulation of electrostatic charge effects on inhaled aerosol particle deposition in the human lung." American Society of Mechanical Engineers, Georgia Institute of Technology, Atlanta, Georgia. (October 1 - 2, 2010).
33. Johnson, C., and **Ali, M.** American Association of Pharmaceutical Scientists Annual Conference and Exposition 2010, " Characterization principles aerosol medicine generated from asthma drug inhalers," American Association of Pharmaceutical Scientists, New Orleans, Louisiana. (November 14-18, 2010).
34. **Ali, M.** 2010 ATMAE Annual Conference, "A novel use of data mining on college students' withdrawals from registered courses," Association of Technology, Management and Applied Engineering (ATMAE), Panama City Beach, FL. (October 26 - 30, 2010).
35. **Ali, M.** American Association of Aerosol Research Annual Conference 2009, "Mouth-Throat Losses for Sitting versus Lying Administration of Respiratory Drug Aerosols," American Association of Aerosol Research, Minneapolis, Minnesota. (October 26, 2009).
36. **Ali, M.** ASME Early Career Technical Conference 2009, "Mechanical Tracheobronchial Model for Human Lung Inhalation Study," American Society of Mechanical Engineers, Tuscaloosa, Alabama. (October 2, 2009).
37. **Ali, M.** 15th International Conference on Industry, Engineering, and Management Systems, "A Novel Method of Characterizing Medicinal Drug Aerosols Generated from Pulmonary Drug Delivery Devices," Association of Industry, Engineering, and Management Systems, Cocoa Beach, Florida. (March 9, 2009).
38. **Ali, M.** 2008 National Association of Industrial Technology Annual Conference, "Design effects of asthma drug delivery devices on the emitted aerosol losses in the human mouth-throat region," Association of Technology, Management and Applied Engineering (Former NAIT), Nashville, TN. (November 18, 2008).
39. **Ali, M.** American Association of Pharmaceutical Scientists Annual Conference and Exposition 2008, " Electrical Polarity Effects on Liposome Endocytosis by Alveolar Epithelial Cells," American Association of Pharmaceutical Scientists, Atlanta, Georgia. (November 15, 2008).
40. **Ali, M.** 5th International Symposium on Recent Advances in Environmental Health., "A novel method to control workplace anthropogenic pollutant particles." NIH RCMI - Center for Environmental Health, JSU, MS, Jackson, Mississippi. (September 14, 2008).
41. **Ali, M.**, Reddy, R. N., Mazumder, M. K., American Association of Aerosol Research 2007 Annual Conference, "Electromechanical properties analysis of four pressurized metered dose inhalers by a single particle aerodynamic relaxation time analyzer," American Association of Aerosol Research, Reno, Nevada. (November 11, 2007).

42. **Ali, M.**, Reddy, R. N., Mazumder, M. K., American Association of Pharmaceutical Scientists Annual Conference and Exposition 2007, "Real time analysis of charge and aerodynamic size distribution of dry powder inhaler aerosol particles," American Association of Pharmaceutical Scientists, San Diego, California. (September 24, 2007).
43. **Ali, M.**, Reddy, R. N., Mazumder, M. K., et al., Seventh International Conference on Mars, "Computational model for respiratory drug delivery in the Martian atmospheric environment," NASA Jet Propulsion Laboratory, CalTech, Pasadena, California. (July 9, 2007).
44. **Ali, M.**, Reddy, R. N., Mazumder, M. K., 2007 Electrostatic Society of America Annual Conference, "Electrostatic charge effects on dry powder inhaler aerosols drug delivery," Purdue University, West Lafayette, Indiana. (June 12, 2007).
45. **Ali, M.**, Reddy, R. N., Mazumder, M. K., et al., 91st Annual Conference of the Arkansas Academy of Science, "Glass bead tracheobronchial airways model for in-vitro studies of respiratory drug delivery," Arkansas Academy of Science, Russellville, Arkansas. (April 13, 2007).
46. **Ali, M.**, Mazumder, M. K., 2006 American Association of Pharmaceutical Scientists Annual Conference and Exposition, "Electrostatic effects on the transport and dispersion of pharmaceutical powders," American Association of Pharmaceutical Scientists, San Antonio, Texas. (October 6, 2006).
47. Berlinski, A., **Ali, M.**, Mazumder, M. K., International Conference of the American Thoracic Society-2006, "Aerosol characterization of nebulized Formoterol," American Thoracic Society, San Diego, California. (May 5, 2006).
48. **Ali, M.**, Mazumder, M. K., Sharma, R., Srirama, P. K., International Conference on Frontiers of Aerosol Dosimetry, "In-vitro studies of nebulizer aerosol particles deposition as a function of aerodynamic size and electrostatic charge in an anatomical throat cast," University of California Irvine, Irvine, California. (October 19, 2005).
49. **Ali, M.**, Mazumder, M. K., Sharma, R., Srirama, P. K., Chowdhury, P., Straub, K. D., International Conference on Frontiers of Aerosol Dosimetry, "War of the worlds: winning the battle against extraterrestrial dusts in human missions to Mars and the Moon," University of California Irvine, Irvine, California. (October 19, 2005).
50. Mazumder, M. K., **Ali, M.**, Sharma, R., Srirama, P. K., Calle, C. I., Pruessner, K., IEEE Industry Applications Society Conference, "Research needs in electrostatics for Lunar and Mars Space missions," IEEE, Hong Kong. (October 12, 2005).
51. Mazumder, M. K., **Ali, M.**, Sharma, R. et al., 3rd New England International Nanomanufacturing Workshop, "Biohazards of Lunar and Martian ultrafine dusts: strategies for measurement, mitigation and respiratory drug delivery," Northeastern University, Boston, Massachusetts. (June 1, 2005).

FUNDED RESEARCH GRANTS & CONTRACTS

1. Ali, M. (***Principal Investigator***), "Quantitative measurement of inhaled ultrafine particles by fetal mice using multiple path particle dosimetry," Sponsored by The UT Tyler Office of Research, Scholarship and Sponsored Programs, $7,195.00. (Sept 2020 – January 2023).
2. Ali, M. (***Principal Investigator***), "Mechanistic implications of mouthpiece design geometry and powder mixture homogeneities on successful generation of aerosolized submicron particles from respiratory drug delivery devices," Sponsored by Soules College of Business Healthcare Grant, $5,000.00. (July 2018 – July 2019).
3. Ali, M. (***Principal Investigator***), "Longview University Center Industrial Technology Summer Camp," Sponsored by The UT Tyler Internal Grant, $5,396.00. (May 1, 2018 – July 31, 2018).
4. Ali, M. (***Principal Investigator***), "Acquisition of Aerosol Particle Analyzers for Interdisciplinary , Collaborative Research and Education in Biomedical Engineering Program at Jackson State University," Sponsored by Dept. of Defense, United States Army Research, Development and Engineering Command, $470,636.00. (Sept 1, 2016 – August 31, 2017).
5. Ali, M. (***Senior Personnel***), William McHenry (PI) "Toyota Research and Workforce Development," Sponsored by Toyota Motors Corp., Corporate, $940,000.00. (Jan 1, 2014 – Dec 31, 2017).

6. Ali, M. (***Senior Personnel***), Kyle Bray (PI) "Verizon Minority Male Maker summer program – hands-on summer learning experience on solid modeling and 3D printing for Blackburn Middle School students," Sponsored by Verizon Communications, Corporate, $92,000.00. (June 1, 2015 – July 31, 2016).
7. Ali, M. (***Senior Personnel***), Wei Zhang (PI) "Implementing Self-Regulated Learning Assessment in Diverse STEM Learning Settings," Sponsored by NSF, Federal, $unknown. (Aug 1, 2014 – July 31, 2016).
8. Ali, M. (**Conference Travel Grant**) JSU Center for University Scholars $1,250 x 5 = $6,250, every year since 2010.
9. Ali, M. (***Principal Investigator***), "Simulation of Bioaerosol Particle Deposition in the Human Lung," Sponsored by NIH-NIGMS MS-INBRE, Federal, $49,993.00. (Jun 1, 2012 – May 31, 2013).
10. Ali, M. (***Principal Investigator***), "Simulation of Bioaerosol Particle Deposition in the Human Lung," Sponsored by NIH-NCRR MS-NBRE, Federal, $29,897.00. (Jun 1, 2011 – May 31, 2012).
11. Ali, M. (***Principal Investigator***), "Simulation of Bioaerosol Particle Deposition in the Human Lung," Sponsored by NIH-MFGN, Federal, $18,972.00. (Sept 1, 2010 – May 31, 2011).

Note: Though the titles of the above three grants are the same, each work focused on a particular component of electromechanical deposition mechanisms of submicron and nanoparticles.

12. Ali, M. (***Principal Investigator***), "In-vitro and Mathematical Simulation of Aerosol Particle Deposition in the Human Lung Airway," Sponsored by NSF MS-EPSCoR, Federal, $46,307.00. (Jan 1, 2010 – Dec 31, 2010).
13. Ali, M. (***Principal Investigator***), "In Vitro Investigation of the Electrostatic Charge Effect on Deposition of Asthma Drug Metered Dose Inhaler in the Oral-Pharyngeal-Laryngeal Region of Human Respiratory Airway," Sponsored by Center for University Scholars, Jackson State University, $13,910.00. (June 1, 2008 - July 31, 2008).
14. Ali, M. (***Senior Personnel),*** Dr. Mehri Fadavi (PI) JSU Department of Physics, Atmospheric and Geosciences), "Mississippi Academy for Science Teaching," Sponsored by NSF, Federal, $8.7m, Jan 1, 2008 – Dec 30, 2013.
15. Ali, M. (***REO Mentor***) - Mississippi Functional Genomics Network Summer Research 2008 & 2009 Grant, $12,000.00.

PENDING & UNFUNDED GRANTS

1. Ali, M. (***Principal Investigator***), " Quantitative Measurement of Inhaled Ultrafine Particles by Fetal Mice using Multiple Path Particle Dosimetry," Sponsored by UTT Office of Research and Scholarship, $9,859.00. (June 15, 2020).
2. Ali, M. (***Principal Investigator***), "Manufacturing Implications on Performances of the Respiratory Drug Delivery Devices," Sponsored by Academic Partnership, UTT Souls College of Business, $4,670.00. (June 15, 2018).
3. Ali, M. (***Principal Investigator***), "Two 3D printers -Dremel DigiLab 3D45 for LUC - Industrial Tech Lab," Sponsored by Phillips 66 Pipeline, Midland, TX, $4,000.00. (March 6, 2018).
4. Ali, M. (***Principal Investigator***, "Development of Biomedical Materials Curriculum for Biomedical Engineering Program," Sponsored by the NIH-NIGMS MS-INBRE, Federal, $36,270. (June 2016 – May 2017). (Pending)
5. Ali, M. (***Principal Investigator***, "Simulation of Nanoaerosol Particle Flow and Deposition Physics in the Respiratory Airway, Sponsored by the US Department of Defense (DoD), Federal, $330,000. (Aug 2015 – July 2018). (Unfunded)
6. Ali, M. (***Principal Investigator***, "Increased Enrollment and Retention, and Training for Manufacturing Specialist Certification for African-American Minority Students at Jackson State University, Sponsored by the U.S. Department of Education, Federal, $243,000. (Jan 2015 – Dec. 2018). (Unfunded)

7. Ali, M. (***Principal Investigator***), Tuluri, Francis, "Nuclear Technology Bridge Course Modules for Enhanced Minority Nuclear Technical Workforce," Sponsored by Nuclear Science and Security Consortium and Minority Serving Institution, Federal, $244,129. (Jan 1, 2013 – December 31, 2015. (Unfunded)
8. Ali, M. (***Principal Investigator***), "In-silico Simulation of Bioaerosol Particle Deposition in the Human Lung," Sponsored by NIH-AREA (Academic Research Enhancement Award), Federal, $468,877. (Jun 1, 2013 – May 31, 2016). (Unfunded)
9. Ali, M. (***Principal Investigator***), Colonias, John (Co-Principal), "RET: Aerosol Science and Engineering Research Experience for Jackson Public School District Science Teachers of Mississippi," Sponsored by National Science Foundation, Federal, $438,000. (Unfunded)
10. Ali, M. (***Principal Investigator***), Buck, Jessica L., "GSE/RES: Choosing Careers of African-American Women in STEM," Sponsored by National Science Foundation, Federal, $449,040. (Unfunded)
11. Ali, M. (***Principal Investigator***), Yuan, Pao-Chiang, "MRI: Acquisition of Aerosol Particle Analyzers for Interdisciplinary, Collaborative Research and Education in Jackson State University," Sponsored by National Science Foundation, Federal, $261,512. (Unfunded)
12. Ali, M. (***Senior Personnel***), Fadavi, Mehri (PI), "Mississippians Engaged in Research and Inquiry-based science Teaching—Project MERIT," Sponsored by Howard Hughes Medical Institute, Private, $2,200,000. (Unfunded)
13. Ali, M. (***Principal Investigator***), Payton, Marinelle (Co-PI), "Electromechanical Properties Effects on Pulmonary Drug Aerosol Particle Deposition in the Human Upper Respiratory Airways," Sponsored by Mississippi Functional Genomics Network, State, $469,481. (Unfunded)

ACADEMIC CITIZENSHIP & UNIVERSITY SERVICE

Departmental Service----------

1. Program Coordinator, Industrial Technology & Management, Dept. of Technology, LUC, (2016 – To date).
2. Promotion & Tenure Committee, Dept. of Technology (2017 – To date).
3. Program Advisor, Manufacturing & Design Technology, Student Advisory Committee, (2007 - 2015), JSU.
4. Committee Member, BS and MS Program Assessment Committee. (February 2, 2009 - 2015), JSU, UITS.
5. Faculty Advisor, Society of Manufacturing Engineers. (September 15, 2007 - 2016).
6. Coordinator, Accreditation by ATMAE (Association of Technology, Management, and Applied Engineering), 2010-2016, JSU.
7. Member, Chair Selection Committee of Technology Department, 2013-2014, JSU.

College Service----------

1. Member, UT Tyler Soules CoB Undergraduate Curriculum & Assessment Committee (Aug 2024 – To date.
2. Member, UT Tyler Soules CoB Graduate Curriculum and Assessment Committee (August 2024 – To date.
3. Member, UT Tyler Soules College of Business Awards & Scholarship Committee (2023 – To date).
4. Member, UT Tyler Soules College of Business Governance Committee (August 2021 – 2023).
5. Member, JSU CSET College Promotion and Tenure Committee. (August 2014 - 2016).
6. Member, JSU CSET College Sabbatical Committee. (August 2011 - 2016).
7. Member, JSU CSET College Performance Base Pay. (August 2013 - 2016).
8. Chair, JSU CPH Research Poster Sub-committee and Member of Steering Committee for Health Disparities Conference. (October 9, 2007 - 2013).

9. Judge, Jackson State University (JSU) Region II Science and Engineering Fair. (March 26, 2008 - 2016)

University Service----------

1. University Undergraduate Council at UT Tyler, (April 2024 – To date).
2. University Undergraduate Curriculum Committee at JSU, (August 15, 2010 - 2016).
3. University Faculty Personnel Committee at JSU, (August 15, 2010 – 2016).
4. Committee Member, JSU SACS Self Study Committee. (December 4, 2008 - 2013).
5. Committee Member, JSU Quality Enhancement Planning (QEP) at JSU, (September 18, 2008 - 2014).

FACULTY TEACHING, RESEARCH & PROFESSIONAL DEVELOPMENTS

1. **Training**, "Intro. to Injection Molding 360." Adams Engineers & Equipment, Jacksonville, TX. 30 July 2024
2. **Training**, "Online Certified Instructor." Office of Digital Learning, UT Tyler. (May 3, 2024).
3. **Coursework**, "ACUE Effective Teaching Practices." Association of College and University Educators. Fall-Spring, two semester-long coursework of 25 interactive learning modules (Sept 2021 – April 2022).
4. **Workshops**, Eight topics on Professional Development – UT Tyler Center for Excellence in Teaching & Learning - How Do I Help My Students; 33 Simple Strategies for Faculty (A guide to Teaching First Year and First- Generation Students; Who Are Our Undergraduate Students; Librarian Magic: Using Library Tools to Access and Manage Scholarly Literature; Evidence Based Practice in the Classroom; Student Research PLC Meeting; Designing Courses for Active Learning; How Emotion Impacts the Brain's Successful Learning and What To Do About It (Aug 2021 – April 2022).
5. **Symposium,** "Manufacturing Standards Education" NIST- Georgia Southern University. (June 1, 2022).
6. **Workshop**, " Additive Manufacturing Education Using Virtual Environment Resources" NSF - Tennessee Technological University. (Nov 30, 2021).
7. **Workshop**, "Micro Nano Tech Health and Safety." University of Minnesota. (June 1-4, 2021).
8. **Training**, "Diversity: Inclusion in the Modern Workplace." EVERFI and the UT Tyler. (Apr 15, 2021).
9. **Coursework**, "Self-Paced Teaching Online Academy." Center for Instructional Design, University of Texas at El Paso, Texas. (March 19 – April 5, 2021).
10. **Workshop**, "Material Handling Teachers Institute." College Industry Council on Material Handling Education and Texas State University, San Marcos, Texas. (July 23-26, 2019).
11. **Workshop**, "Advanced Automation, Robotic and Manufacturing Education for 21st Century Workforce Needs." Texas A & M University's Innovative Curriculum for Industrial Automation. Richland College, Dallas, Texas. (July 17, 2018).
12. **Training**, "FANUC Robots – Handling Tool Operation and Programming." FANUC America Corp. Rochester Hills, Michigan. (May 29 – June 2, 2017).
13. **Workshop**, "Automatic Identification and Data Capture," University of Memphis, Tennessee. (May 22-27, 2016).
14. **Workshop**, "ABET Fundamentals of Program Assessment," Dallas, Texas. (October 24, 2015).
15. **Training**, "Advanced Additive Manufacturing and 3D Scanning," Mississippi Polymer Institute, USM, Hattiesburg, Mississippi. (August 19, 2015).
16. **Workshop**, "SAP (Systems, Applications and Products) - Modules of Supply Chain, Transportation Logistics, Warehouse and Connected Manufacturing Operation Planning and Implementation," Las Vegas, Nevada. (March 29 – April 1, 2015)

17. **Training**, "CAD, CAM, CNC and 3D Additive Manufacturing," TechShop Workforce Development Center, Round Rock-Austin, Texas. (December 9-10, 2014).
18. **Workshop**, "NSF Major Research Instrumentation Award Proposal Follow-up Workshop," Quality Education for Minorities, Washington, DC. (November 15, 2013).
19. **Workshop**, "NSF Research Initiation Award Proposal Development Workshop," Quality Education for Minorities, Washington, DC. (April 18 -20, 2013).
20. **Continuing Education Program**, "ASME Leadership Training Course (LTC)," American Society of Mechanical Engineers. (February 28-March 3, 2013).
21. **Workshop**, "Implementation of the **PIC Microcontroller** Training System and Curriculum on **Embedded System Designs** in On-campus and Distance Classes," Association of Technology, Management and Applied Engineering (ATMAE). (Nov 15, 2012).
22. **Workshop**, "ATMAE Accreditation Member Training," Association of Technology, Management and Applied Engineering (ATMAE). (Nov 14, 2012).
23. **Workshop**, "JSU Course Redesign with Blackboard 9," The Center for Distance Learning and Instructional Technology (CDLIT). (July 2, 2012 - August 3, 2012).
24. **Continuing Education Program**, "ASME Leadership Training Course (LTC)," American Society of Mechanical Engineers. (March 1, 2012 - March 4, 2012).
25. **Continuing Education Program**, "ASME MS Section National Engineers' Week" Lecture," American Society of Mechanical Engineers. (February 21, 2012).
26. **Dept of Defense SMART Scholarship Evaluation Panel**, "The Science, Mathematics And Research for Transformation (SMART) Scholarship," American Society of Mechanical Engineers & Dept of Defense. (January 19, 2012 - January 21, 2012).
27. **Workshop**, "NASA MUREP Proposal Development Workshop," NASA and Marshall Space & Flight Center. (February 23, 2011 - February 24, 2011).
28. **Workshop**, "NIH Proposal Development Workshop," NIH and the University of Kentucky. (May 13, 2010 - May 19, 2010).
29. **Workshop**, "NSF Career Proposal Development Workshop," Quality Education for Minorities, Washington, DC. (February 19, 2010 - February 20, 2010).
30. **Workshop every year since 2008**, "Annual Conference Eliminating Health Disparities in Mississippi: Stroke and Obesity," JSU College of Public Health. 2008, 2009, 2010, 2011, 2012
31. **Workshop**, "Symposium on Advances in Atmospheric Modeling, Climate Change, and Geospatial / Visualization Technologies," NOAA (Conducted by Trent Lott Geo Spatial Visualization Research Center of Jackson State University, Mississippi). (July 30, 2009 - July 31, 2009).
32. **Workshop**, "MRI Proposal Development Workshop," Quality Education for Minorities, Washington, DC. (October 24, 2008 - October 25, 2008).
33. **Workshop**, "MARC: Summer Institute In Bioinformatics," NIH (Conducted by Pittsburg Super Computing Center, Carnegie Mellon University). (July 14, 2008 - July 25, 2008).
34. **Workshop,** "Introducing Science Faculty to Materials Science and Engineering," NSF (Conducted by the University of Alabama, Tuscaloosa). (June 8, 2008 - June 27, 2008).

NATIONAL & INTERNATIONAL CITATIONS OF SCHOLARLY WORK

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TITLE	CITED BY	YEAR
Pulmonary Drug Delivery M Ali Handbook of Non-Invasive Drug Delivery Systems, 209-246	72	2010
Electrostatic charge effect on respirable aerosol particle deposition in a cadaver based throat cast replica M Ali, RN Reddy, MK Mazumder Journal of Electrostatics 66 (7-8), 401-406	49	2008
Measurements of electrodynamic effects on the deposition of MDI and DPI aerosols in a replica cast of human oral-pharyngeal-laryngeal air M Ali, KM Mazumder, T Martonen Journal of Aerosol Medicine and Pulmonary Drug Delivery 22 (1), 35-44		
Engineered aerosol medicine and drug delivery methods for opti respiratory therapy M Ali Journal of Respiratory Care 59 (10), 1608-1610		
Simultaneous characterization of aerodynamic size and electrost charge distributions of inhaled dry powder inhaler aerosols M Ali, RN Reddy, MK Mazumder Journal of Current Respiratory Medicine Review, 4 (1), 2-5		
Research needs in electrostatics for Lunar and Mars space missions MK Mazumder, CI Calle, K Pruessner, R Sharma, PK Srirama, M Ali, ... Fourtieth IAS Annual Meeting. Conference Record of the 2005 Industry ...		
Competitiveness of Bangladeshi ready-made garment M Ali, MW Speece Journal of Euro-Asian Management 3 (2), 1-30		
Lean six sigma body of knowledge for healthcare industry administrators: implementation of lessons learned in applied engineering M Ali Journal of Technology Studies 48 (1), 18-32		

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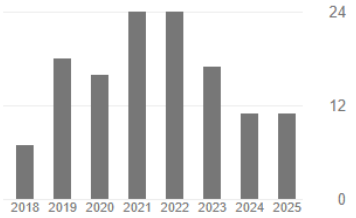

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