

TEXAS STATE VITA

I. Academic/Professional Background

A. Name: Dr. Maedeh Amiri

Title: Associate Professor of Instruction

B. Educational Background

<i>Degree</i>	<i>Year</i>	<i>University</i>	<i>Major</i>	<i>GPA</i>	<i>Thesis/Dissertation</i>
Doctorate	2015-2017	Texas State University, San Marcos	Materials Science, Engineering, and Commercialization	4.0	Polymer/clay nanocomposite self-assembly for gas barrier films application
Master's	2012-2014	Texas State University, San Marcos	Industrial Technology (Concentration: Manufacturing).	4.0	An Agent-based model for supplier selection in Digital Manufacturing Market
Bachelor's	2005-2009	Mazandaran University of Science and Technology	Industrial Engineering Concentration: Systems Analysis	3.2	Management information systems of a law office (MIS) city of Babol

C. University Experience

<i>Position</i>	<i>University</i>	<i>Dates</i>
Assistant Professor of Instruction	Texas State University	Fall 2024-present
Lecturer	Texas State University	Spring 2018-spring 2024
Postdoctoral Research Associate	Texas State University - Chemistry Department	Feb-Sep 2018
Research Associate, and Trainer	Texas State University - Advanced polymer processing lab	May-December 2018
Teaching Assistant	Texas State University - Engineering Department	Spring 2015, Fall 2015
Teaching Assistant	Texas State University- Technology Department	Fall 2014

D. Relevant Professional Experience

<i>Position</i>	<i>Entity</i>	<i>Dates</i>
Consultant	Nabaco. Inc	July 2016-present
Director of QC	Nabaco.Inc	2019-2022
Intern -Quality assurance	Freezing Modern Industrial Company	summer2009

E. Other Professional Credentials (licensure, certification, etc.)

Certification:

Certified Many faces of Autism, Ohio university, September 2023

Certified Adult and pediatric first Aid/CPR/AED, American Red Cross, June 2023

Certified Lean Six Sigma Green Belt Certification, Institute of Industrial and Systems Engineers, October 2021

Certified Occupational Safety and Health Standards for General Industry, OSHA Safety Training Institute, June 2021

Certified Mastering SQF, Edition 9, (safety Quality for food), Registrar Corp Food Safety Training, September 2021

Certified Teaching online, Summer 2020

Certified Six Sigma -Yellow Belt- Six Sigma.us, Austin, 2014

Certified SAS- macro programing Language- SAS Institute Inc, Austin ,2014

Experienced in:**Writing Business Plan and SBIR Proposals**

Project Management: Product Design and Development, Enterprise Resource Planning (ERP), System Analysis and Design, Layout Planning and Simulation

Programming: Pascal, C#, HTML (Web Page Design), Java script, Java, SAS, R

Software: Minitab, Auto CAD, Catia, Lingo, Arena, primavera (p3), Portage, Simio, Design-Expert, Creo, Any Logic, Microsoft SQL Server , ERP SAP, Microsoft Project, Visio, Win QSP

Manufacturing: Injection molding, Extrusion, inkjet 3D Printing, extruder, Palletizer, tensile tester

Instruments: Scanning Electron Microscope (SEM), Transmission electron microscopy (TEM), Atomic-force microscopy (AFM), X-Ray Diffraction (XRD), profilometer, UV-VIS spectrometer, DLS (Dynamic Light Scattering), TGA (Thermal Gravimetric Analysis), DSC (Differential Scanning Calorimetry), Dynamic Mechanical Analysis (DMA), Oxygen Transmission, GC

II. TEACHING

A. Courses Taught:

<i>Courses</i>		<i>Semester</i>
TECH 4392	Micro and Nano Manufacturing	Spring 2019, Fall 2019
TECH 3354	Lean Systems and Principle	Spring 2019, Fall 2019, Spring 2020, Spring 2021, Spring 2022, Spring 2023, Spring 2024, Spring 2025
TECH 3364	Quality Assurance	Spring 2019, Fall 2019, Spring 2020, Fall 2021, Spring 2021, Fall 2022, Fall 2023, Fall 2025
TECH 4380	Industrial Safety	Summer 2019, Fall 2019, Fall 2021, Spring 2021, Fall 2022, Spring 2022, Spring 2023, Fall 2023, Spring 2024, Fall 2024, Spring 2025, Fall 2025
TECH 5387	Advanced Facilities Planning	Spring 2019, Spring 2020, Spring 2021, Spring 2022, Spring 2023, Spring 2024
TECH 5387-Remote	Advanced Facility Planning(online)	Spring 2025
TECH 3357	Facilities Planning and Design	Spring 2019, Spring 2020, Spring 2021, Spring 2022, Spring 2023, Spring 2024, Spring 2025
TECH 4397-Independent study	SPCL Problems	Spring 2019
TECH 5384	Problems in Technology	Spring 2019, Fall 2019
TECH 1311	Engineering Graphic Design	Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024

C. Graduate Theses/Dissertations, Honors Theses, or Exit Committees (if supervisor, please indicate):

Sarah Hutcheson, Major in Master of Science in Chemistry, December 2021,
 “MECHANICAL PROPERTIES OF POLYMER-CLAY NANOCOMPOSITE THIN
 FILMS “

Directed project Committee member for Dinesh Kartic Meda, December 2021,” Supply Chain
 Traceability in Discrete Manufacturing”

Directed project Committee member for Ekundayo Akinwale, May 2021,” The Environmental
 Impact of 5G Network Technology”

Directed project Committee member for Justin Edwards, fall 2020,” Improving 6-S Operations at
 Applied Materials.”

D. Courses Prepared and Curriculum Development:
 TECH 5387.252, Advanced Facility Planning, Continuing & Professional Education, Spring
 2025

E. Funded External Teaching Grants and Contracts:
 Nontenure Line Faculty Workload Release application for approval, 2025-202

I. Other:

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press)

1. Patent (if not refereed, please indicate)

US Patent Pending: Molecularly Self-assembling Nanocomposite Barrier Coating for Gas
 Barrier Application and Flame Redundancy, Gary W. Beall, Ray Cook, **Maedeh D.
 Amiri**, 2018

2. Articles

a. Refereed Journal Articles:

1. “Performance evaluation on nanocomposite clay modified rubberized binders.
 International Journal of Pavement Research and Technology “Vigneswaran, S., Yun, J.,
 Kim, H., **Amiri, M. D.**, & Lee, S.-J, 2025

2. "The Application of Clay-Based Nanocomposite Hydrogels in Wound Healing" Zahra Rezanejad Gatabi, Niloofar Heshmati, Mehri Mirhoseini, Maedeh Dabbaghianamiri, Arabian Journal for Science and Engineering, Springer Berlin Heidelberg, 2023
3. "Design of smart nanomedicines for effective cancer treatment" Niloofar Heshmati Aghda, Maedeh Dabbaghianamiri, James W Tunnell, Tania Betancourt, International Journal of Pharmaceutics, Elsevier, 2022
4. "The accuracy of electrical impedance tomography for breast cancer detection: a systematic review and meta-analysis" Zahra Rezanejad Gatabi, Mehri Mirhoseini, Nasrin Khajeali, Iman Gatabi, Maedeh Dabbaghianamiri, Sara Dorri, The Breast Journal, Hindawi, 2022
5. "Self-assembled Montmorillonite clay-poly vinyl alcohol nanocomposite as a safe and efficient gas barrier" **Maedeh D.Amiri**, El-shazly M. Duraia, and Gary W. Beall, Results in Materials, 7, 2020.
6. "Self-Assembling Nanostructured Intercalates Via Ion-Dipole Bonding" **Maedeh D. Amiri**, and Gary Beall, Dalton Transactions, 2018.
7. "Formation of Periodic Size-Segregated Stripe Pattern via Directed Self-assembly of Binary Colloids and Its Mechanism" Sayantan Das, El-Shazly M. Duraia, Orlin D. Velez, **Maedeh D.Amiri**, and Gary W. Beall, Applied surface science, 2018
8. "Improvement Approach for Gas Barrier Behavior of Polymer/Clay Nanocomposite Films" Maedeh **D. Amiri**, Sayantan Das, and Gary Beall, Advances MRS, 2017.

b. Non-refereed Articles:

1. "An Improved Measurement Algorithm for Increasing the Accuracy of Sing-Around Type Ultrasonic Flow Meters", J. R. Gatabi, I. R. Gatabi, M. Soltani, P. Mohammadi, **Maedeh D.Amiri**, S. Ebrahimi, Mechanika, 2012 Volume 18(2): 209-2133-
2. "A Novel Property of the Conservative Vector Fields", I. R. Gatabi, **Maedeh D.Amiri**, Mohammad Soltani, Pooria Mohammadi, J. R. Gatabi, European Journal of Scientific Research, Vol. 52 Issue 3(2011).

3. Conference Proceedings

a. Refereed Conference Proceedings:

1. “Agent-based Simulation and Modeling for Service Allocation in the Digital Manufacturing Market”, **Maedeh D. Amiri**, Farhad Ameri, and Jesus Jimenez, International Journal of Agent Technologies and Systems (IJATS), Volume 7, Issue 2, 2015.
2. “An Agent-based Model for Supplier Selection in Digital Manufacturing Market”, **Maedeh D. Amiri**, Farhad Ameri, and Jesus Jimenez, Preceding of Third Annual World Conference of the Society for Industrial and System Engineering (SISE), 2014.

3. . Other Works in Print:

a. Works not in Print

1. Papers Presented at Professional Meetings:

“Improvement Approach for Gas Barrier Behavior of Polymer/Clay Nanocomposite Films
“Maedeh **D. Amiri**, Sayantan Das, and Gary Beall, MRS Spring Meeting & Exhibit, Phoenix, Arizona, April 2017

2. Invited Talks, Lectures, and Presentations:

- “Clay composite Films for food “, **Invited speaker, NASA High School Summer Camp, Texas state university, 2023.**
- Barrier Improvement Approach for polymer/clay composite Films”, **invited speakers conference, Rome, Italy, 2023.**
- “Food packaging” , **Invited Speaker**, MSEC seminar course, Texas state university, 2022.
- “Improvement Approach for Gas Barrier Behavior of Polymer/Clay Nanocomposite Films “Maedeh **D. Amiri**, Sayantan Das, and Gary Beall, MRS Spring Meeting & Exhibit, Phoenix, Arizona, April 2017.
- “Polymer/Clay Nanocomposite Self–Assembly Approach for Gas Barrier Film Applications “**Maedeh D. Amiri**, Caleb Martin, and Gary Beall, MRS Spring Meeting & Exhibit, Phoenix, Arizona, March 30, 2016.
- “An Investigation on the Effects of the Metal Surface Coating Factors on the Mechanical Properties of the Parts Fabricated by the Fully Dense Freeform Fabrication Process”, Bahram Asiabanpour, Abbas Fahami, Aron Zamora, and **Maedeh D. Amiri**, Seventh

Annual International Research Conference for Graduate Students, San Marcos, November 17, 2015.

- “An Agent-based Model for Supplier Selection in Digital Manufacturing Market”, **Maedeh D. Amiri**, Farhad Ameri, and Jesus Jimenez, the Society for Industrial and System Engineering (SISE), San Antonio, 2014.

3. Consultancies:

NABACO, Inc, July 2019-presnt

4. Workshops:

- 3/10/2020: “Teaching First-Generation Students: Practical Tips for the Classroom” to increase my teaching skills for first generation student
- 3/24/2020: Zoom for Faculty and during online semester, I learned vey fast to move on zoom and learned Setup and conduct classes, lectures, or meetings, - Manage an online audience,- Share content and engage with participants,- Record sessions (including enabling Captions),- Enable and customize the Waiting Room (for Virtual Office Hours)
- 10/29/20: Finding Funding with Pivot, this workshop supports the university’s goal to achieve significant progress in research and creative activity as measured by national standards by expanding support to the research community.
- 9/6/2020: Cybersecurity Training
- 12/29/2020: Equal Employment Opportunity (EEO) & Title IX training
- Canvas basic Training, 2020
- 3/29/2021, Final Grading Workshop (Faculty/Instructor Session, Texas State University
- 3/23/2021, Grad College Shop Talks – Grants Part IV: Creating a Budget for a Grant Proposal, Texas State University
- 4/15/2021, Women’s Leadership Symposium: Dynamic Women, Diverse Paths, zoom webinar, Texas state university
- 4/1/2021: Waterjet Training, Alkek library, Texas State University
- 4/03/2020: 3D Printer Training, Alkek library, Texas State University
- 9/6/2021: Cybersecurity Training
- 9/6/2020: Cybersecurity Training
- 12/29/2020: Equal Employment Opportunity (EEO) & Title IX training
- Canvas basic Training
- 07/03/2023: Cybersecurity Training
- 07/03/2023: Ethical workplace
- 07/03/2023: Equal opportunity training for supervisors
- 23/01/2024: Preventing Harassment and Discrimination
- 09/09/2022: Cybersecurity Training
- 10/03/2022: Ethical workplace
- 10/03/2022: Equal opportunity training for supervisors
- 02/20/2022: Preventing Harassment and Discrimination
- 07/03/2023: Cybersecurity Training
- 07/03/2023: Ethical workplace

- 07/03/2023: Equal opportunity training for supervisors
- 23/01/2024: Preventing Harassment and Discrimination
- **10/01/2024: Registered Student Organization (RSO) Risk Management Training**
- 5/3/2024: SEED Project: **Mentoring Training in person**, Ingram, Texas state university (Faculty Mentoring Workshop Hone your skills to maximize student research outcomes)
- **5/17/2024: SEED Project: Mentoring Training in person Ingram**, Texas state university (Faculty Mentoring Workshop Hone your skills to maximize student research outcomes)
- 07/03/2024: Cybersecurity Training
- 07/03/2024: Ethical workplace
- 07/03/2024: Equal opportunity training for supervisors
- 01/23/2024: Preventing Harassment and Discrimination
- 05/05/2025 - Promotion for Nontenure Line Faculty
- 09/09/25 - Developing Narratives for Non-Tenure Line Promotion
- 09/15/25 - Promotion for Non-Tenure Line Faculty

5. Other Works not in Print:

- a. Works “submitted” or “under review”
 1. Chitosan-Based Coatings for Food, Pharmaceutical and Medical Applications, submitted at Materials Today Communications
 2. “Hydrogel-Based Novel Wound Dressing: Advancements in Bioactive Materials for Enhanced Healing” submitted at Macromolecular Bioscience

D. Fellowships, Awards, Honors:

- Rice Business Plan competition, Houston, 2019
 - NASA best invention for space exploration award, \$75,000
 - Best Texas award, \$25,000, awarded from the Texas Business Hall of Fame
 - 4th place in the elevator pitch contest, \$2,500 award
- New Ventures competition, American University of Sharjah, Dubai, 2019, won \$8,000 award.
- New Venture competition, Temple, TX, 2019, won \$10,000 first prize
- New Venture competition, Texas State University, 2018, won one of three \$20,000 prizes.
- Student Government Scholarship, Texas State University, 2017
- Graduate College Scholarship, Texas State University, 2017
- Dissertation Support Fellowship Award, Graduate College, Texas State University, 2017
- Women in Science and Engineering scholarship, College of Science, Texas State University, 2015
- Outstanding Researcher Awarded, Department of Engineering Technology, Texas State University, 2014

IV. SERVICE

A. Institutional

1. University:
 - Attending Bobcat days
 - Attending annual commencement ceremonies
 - Serving as a member of the graduate faculty
 - **Advisor, of Central Texas Biodiversity Bunch, Texas state university Chapter, August 2024**

Conference Judge:

- WISE (Women in Science), College of Science, Texas State University, 2020
- Graduate Research Conference (GRCC), Texas State University, 2024

2. College:
 - Judge for International Research Conference for Graduate Students, College of Science and Engineering, Texas State University, 2021

3. Department/School:
 - Attending ABET Accreditation meeting
 - Attending Nontenure line meeting

B. Professional:

1. Conference Paper Reviewer:

- **Technical reviewer**, Sustainability, MDPI, March 2024-present
- **Technical reviewer**, minerals, MDPI, February 2024-present
- **Technical Reviewer**, MRS Advances, May 2016-present

C. Community:

1. Leading a community cleanup environment (central Texas biodiversity Bunch)
2. **IISE (Institute of Industrial and Systems Engineers) Member**, 880244334, 2021
3. **Alpha Chi National College Honor Society, member**, Texas State University, 2017