

Mahbod Abrisham



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Summary

- Mahbod Abrisham has graduated (2020) M.Sc. at Department of Polymer Engineering and color technology in Amirkabir University.
- He earned his B.Sc. in Polymer Engineering from Science and Research Branch at Islamic Azad University in 2017.
- His research interests focus on shape memory polymer composites and dielectric elastomer composites for actuators and high energy storage applications.

Education

- ❖ **M.Sc. in Polymer Engineering – Processing** 2017 – 2020
Amirkabir University of Technology (Tehran Polytechnic) Tehran, Iran

Thesis title: “Thermoplastic Polyurethane Nanocomposites Comprising Solo- and Hybrid-Montmorillonite and Carbon Nanotubes: A Comprehensive Assessment of Mechanical and Shape Memory Performance”.

Supervisor: Dr. G. Mir Mohamad Sadeghi

- ❖ **B.Sc. in Polymer Engineering – Polymer Industries** 2012 – 2016
Azad University, Science and Research Branch Tehran, Iran

Project title: “Antifouling Polymers in Marine Applications”

Supervisor: Dr. R. Jahanmardi

Research Interests

- Polymer Nanocomposites
- Porous Structures
- Hybrid Nanocomposites
- Shape memory Polymers (SMPs)
- Aerogels
- Polymers Mechanical Properties

Work Experience

- ❖ **Quality Control** (June 2014 – June 2016)
Chabahar Green Pipe Company
- ❖ **Engineering Intern** (January 2016 – March 2016)
Golbarg-e-Fajr Company

Award & Honors

- Top Rank in MSc University Entrance Examination (Below 100) May 2017

Technical & Research Experience

- **Academic Reviewer**
Journal of Applied Polymer Science Oct. 2020 – Present
- **Scientific Researcher**
Amirkabir University of Technology (Tehran Polytechnic) Tehran, Iran
Sep. 2017 – Present
- **Project Coordinator & Advisor to Graduate Students**
Amirkabir University of Technology (Tehran Polytechnic) Tehran, Iran
Sep. 2018 – Present
- **Research & Development Lecturer to Undergraduate and Graduate Students**
Science Core of Polymer Industry Engineering (SCOPIE) Tehran, Iran
Topics: Scopus, Web of Science, Academic Microsoft, ScienceDirect, Google Scholar, ResearchGate, Scimago, Mendeley, etc.

Publication

Review Papers:

1. M. Panahi-Sarmad, **M. Abrisham**, M. Noroozi, ... & B. Zahiri, "[Deep focusing on the role of microstructures in shape memory properties of polymer composites: A critical review](#)", **Eur. Polym. J.** 117 (2019) 280–303. doi:10.1016/j.eurpolymj.2019.05.013.
2. M. Noroozi, M. Panahi-Sarmad, **M. Abrisham**, ... & B. Zahiri, "[Nanostructure of Aerogels and Their Applications in Thermal Energy Insulation](#)", **ACS Appl. Energy Mater.** 2 (2019) 5319–5349. doi:10.1021/acsaem.9b01157.
3. **M. Abrisham**, M. Noroozi, M. Panahi-Sarmad, ... & L. Uzun, "[The role of polycaprolactone-triol \(PCL-T\) in biomedical applications: A state-of-the-art review](#)", **Eur. Polym. J.** 131 (2020) 109701. doi:10.1016/j.eurpolymj.2020.109701.
4. M. Panahi-Sarmad, M. Noroozi, **M. Abrisham**, ... & V. Goodarzi, "[A Comprehensive Review on Carbon-Based Polymer Nanocomposite Foams as Electromagnetic Interference Shields and Piezoresistive Sensors](#)", **ACS Appl. Electron. Mater.** (2020). doi:10.1021/acsaelm.0c00490.
5. A. Amirkiai, **M. Abrisham**, X. Xiao, & M. Panahi-Sarmad, "The principles and up-to-date progress of rubbery composites in shape memory actuators: A comprehensive review" – **Submitted to Progress in Polymer Science**

Journal Papers:

1. M. Panahi-Sarmad, V. Goodarzi, A. Amirkiai, M. Noroozi, **M. Abrisham**, ... & A. Asefnejad, "[Programing polyurethane with systematic presence of graphene-oxide \(GO\) and reduced graphene-oxide \(rGO\) platelets for adjusting of heat-actuated shape memory properties](#)", **Eur. Polym. J.** 118 (2019) 619–632. doi:10.1016/j.eurpolymj.2019.06.034.

2. M. Panahi-Sarmad, **M. Abrisham**, M. Noroozi, ... & H.A. Khonakdar, "[Programing polyurethane with rational surface-modified graphene platelets for shape memory actuators and dielectric elastomer generators](#)", **Eur. Polym. J.** (2020). doi:10.1016/j.eurpolymj.2020.109745.
3. **M. Abrisham**, M. Panahi-Sarmad, G. Mir Mohamad Sadeghi, ... & A. Amirkiai, "[Microstructural design for enhanced mechanical property and shape memory behavior of polyurethane nanocomposites: Role of carbon nanotube, montmorillonite, and their hybrid fillers](#)", **Polym. Test.** 89 (2020) 106642. doi:10.1016/j.polymertesting.2020.106642.
4. A. Amirkiai, M. Panahi-Sarmad, G.M.M. Sadeghi, M. Arjmand, **M. Abrisham**, ... & H. Nazockdast, "[Microstructural design for enhanced mechanical and shape memory performance of polyurethane nanocomposites: Role of hybrid nanofillers of montmorillonite and halloysite nanotube](#)", **Appl. Clay Sci.** 198 (2020) 105816. doi:10.1016/j.clay.2020.105816.
5. P. Dehghan, M. Noroozi, G.M.M. Sadeghi, **M. Abrisham**, ... & M. Panahi-Sarmad, "[Synthesis and design of polyurethane and its nanocomposites derived from canola-castor oil: Mechanical, thermal and shape memory properties](#)", **J. Polym. Sci.** (2020) pol.20200474. doi:10.1002/pol.20200474.

Certifications & Workshops

- ❖ **International Computer Driving License (ICDL)** Jun. 2010
Ministry of Interior Tehran, Iran
- Certificate of Completion
- ❖ **Basics of MATLAB Programming** Jul. 2017
Arad Elm Institute Tehran, Iran
- Certificate of Completion
- ❖ **Thermal Analysis** Sep. 2018
Bim Gostar Taban Co. Ltd. Tehran, Iran
- Workshop – By Dr. H. Manafi

References

Available upon request.