

Armin Esfahani

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LANGUAGES

Persian, English, Turkish

EDUCATION

2022- current **Ph.D. in Chemical Engineering**,
Auburn University, Auburn, Alabama.

2015 - 2018 **M.Sc. in Polymer Engineering**,
Azad University, Science and Research Branch, Tehran, Iran.

Thesis Title: Improvement thermal conductivity of polymer blends (PP/PA) filled with hybrid fillers (BN/r-GO)

GPA:3.88/4.00.

2010 - 2015 **B.Sc. in Polymer Engineering**,
Azad University, Science and Research Branch, Tehran, Iran.

Thesis Title:Research about improvement of polymeric blend's thermal conductivity; the rheological and thermal conductivity study on PA/COC blend filled by Boron Nitride

WORK EXPERIENCES

2022- current **Teaching and Research Assistant** ,
Auburn University, Auburn, Alabama.

2015- 2021 **Teaching Assistant** ,
Advanced Rheology for Graduate student in SRBIAU,
Azad University, Science and Research Branch, Tehran, Iran.

2015- 2021 **Research Assistant under the supervision of Dr. Milad Mehranpour**,
Azad University, Science and Research Branch, Tehran, Iran.

TECHNICAL SKILLS

Polymer Processing Melt Mixing, Extrusion, Film Blowing

Characterization and Property Analysis DSC, TGA, FTIR, SEM, FESEM

Mechanical test and Rheometer Anton Paar MCR301 Physica, Dynamic Mechanical Analysis

Programming Languages Matlab, Python: **Google Certificate**

Analysis software ImageJ analysis, Material studio, Minitab

RESEARCH INTERESTS

- Polymer Composite
- Polymer's Rheology
- Rheology-Microstructure Relationships Of Polymer Blends
- Polymer Processing
- Smart Manufacturing
- Additive Manufacturing
- Machine Learning
- Data Science

PATENTS

Title “Antimicrobial quick kill film”, PCT application number: PCT/IB2019/050251

PUBLICATIONS

- Mohammad Aghvami-Panaha , Ao Wanga ,Mahyar Panahi-Sarmada , **Seyed Armin Seyed Esfahani** , Amir Abbas Seraji , Mehrnaz Shahbazi , Reza Ghaffarian , Seifollah Jamalpour , and Xueliang Xiao, A comparison study on polymeric nanocomposite foams with various carbon nanoparticles: adjusting radiation time and effect on electrical behavior and micro-cellular structure **International Journal Of Smart and Nano materials**, 2022. DOI: <https://doi.org/10.1080/19475411.2022.2107110>
- **Seyed Armin Seyed Esfahani**, Nikoo Ghahramani, Milad Mehranpour , Hossein Nazockdast, Rheological, thermal, and electrical characterization polyamide/polypropylene blend composites containing hybrid filler: boron nitride and reduced graphene oxide **SPE Polymers**, 2021. DOI: 10.1002/pls2.10041
- Nikoo Ghahramani, **Seyed Armin Seyed Esfahani**, Milad Mehranpour , Hossein Nazockdast, The effect of filler localization on morphology and thermal conductivity of the polyamide/cyclic olefin copolymer blends filled with boron nitride, **Journal of materials science**, 2018. DOI: 10.1007/s10853-018-2746-x
- Nikoo Ghahramani, **Seyed Armin Seyed Esfahani**, Milad Mehranpour , Hossein Nazockdast, Correlation between Rheology and Morphology of PA/COC Blends **34th International Conference of the Polymer Processing Society (PPS-34)**, 2018, Taipei, Taiwan.
- **Seyed Armin Seyed Esfahani**, nikoo ghahramani, Milad Mehranpour, Hossein Nazockdast. Non electrical conductive Graphene based composite with high thermal conductivity, **Polymer Processing Society Americas Regional Conference, Boston, Massachusetts, 2018**.
- **Seyed Armin Seyed Esfahani**, nikoo ghahramani, Milad Mehranpour, Hossein Nazockdast, Improvement Thermal Conductivity by surface modification. **33rd International Conference of Polymer Processing Society, Cancun, Mexico, oral presentation, December 2017**.
- **Seyed Armin Seyed Esfahani**, nikoo ghahramani, Milad Mehranpour, Hossein Nazockdast, enhanced thermal conductivity of polymer composites filled with hybrid fillers. **Europe Africa Conference 2017 of the Polymer Processing Society (PPS 2017)**, Dresden, Germany.
- A brief review about electricity generation from living plants in **Iranian association of polymer and chemical engineer's journal (APCHEN)**, Vol.2, NO. 5, Winter 2017.
- Nikoo Ghahramani, **Seyed Armin Seyed Esfahani**, Milad Mehranpour , Hossein Nazockdast, The rheological and thermal conductivity study on PA/COC blend filled by Boron Nitride. **32nd International Conference of the Polymer Processing Society (PPS-32)**, 2016, Lyon, France.

AWARDS AND HONORS

- 2015-2018 Top student in master program. (GPA= 18.30 out of 20 - 3.88 out of 4.00)
- 2017 Chosen as a representative of Polymer Engineering Department of Azad University for cooperation in Rheology Community of Iran.
- 2017 Chosen as a representative of Polymer Engineering Department of Azad University for cooperation in Iran Masterbatch & Compound Producers Association.
- 2016 Won award of the logo designing for Iranian society of rheology.
- 2010 Ranked among the top 0.6 percent(over 300,000 participant) in the national Entrance for public Universities in IRAN.