Name: Mohammad Amiri

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### BSc.

**University**: Islamic Azad University (Science and Research Branch)

Major: Material Engineering- Ceramic Materials



Thesis: Fabrication of PMC Composite and Compare its Mechanical Properties with Polyethylene Resin

Supervisor: Dr. S. Baghshahi

### Msc.

**University**: Sharif University of Technology

Major: Nanomaterials

Thesis: The Study of Structure and Mechanical Properties of Thermoplastic Starch/Polyethylene Alloy

Nanocomposite Reinforced by Nanoclay

Supervisors: Prof. R. Bagheri, Dr. M. A. Faghihi Sani

## PhD

Thesis:

**Supervisors**:

# **Research Experience:**

- Research Assistant in International Nanobiotechnology Group, Harvard Medical School, Harvard-MIT Division of Health Sciences and Technology, Iran University of Medical Sciences. 2013-Present
- Research Assistant in Polymeric Materials Research Group, Sharif University of Technology.
  2011-2014.
- Iranian Patent about Fabrication of PMC Composites Reinforced with Fiberglasses. Patent Number: 64320, 2010.
- Presentation of Seminars on "Nanotechnology in Agriculture". College of Agriculture and Natural Resources, University of Tehran. 2014.

# **Job Experience:**

- The best Quality Control Manager in Tehran Province Industries by the Iranian National Standard Organization. 2012.
- Iranian Industrial Patent about Fabrication of Black Refractory Facade Brick. Patent Number: ID-8351, 2013.
- Member of the Codification Committee of "Firebox Brick for Residential Fireplaces-Specifications". Iranian National Standard Organization Number: 18886, 1st. Edition, 2014.

### **Publications:**

### -ISI Papers

- 1) Smart Micro/Nano Particles in Stimulus-Responsive Drug/Gene Delivery Systems. Chemical Society Review, 45, (2016), 1457-1501. DOI: 10.1039/C5CS00798D.
- **2)**Temperature-Responsive Smart Nanocarriers for Delivery of Therapeutic Agents: Applications and Recent Advances. ACS Applied Materials & Interfaces, 8 (33), (2016), 21107–21133.
- DOI: 10.1021/acsami.6b00371.
- **3)** Thermoplastic starch/ethylene vinyl alcohol/forsterite nanocomposite as a candidate material for bone tissue engineering. Materials Science and Engineering: C, 69, (2016), 301–310.
- DOI: org/10.1016/j.msec.2016.06.043.
- **4)**Carbon nanotubes part I: preparation of a novel and versatile drug-delivery vehicle. Expert Opinion on Drug Delivery, 12(7), (2015), 1071-87. DOI: 10.1517/17425247.2015.1003806.
- **5)**Carbon nanotubes part II: a remarkable carrier for drug and gene delivery. Expert Opinion on Drug Delivery, 12(7), (2015), 1089-105.DOI: 10.1517/17425247.2015.1004309.

### - Conferences Articles

- **1)**Evaluating The Effect of OrganomodifiedNanoclay on Mechanical properties of LDPE/Thermoplastic starch blends In Presence of PE-g-MA. 5th International Conference on Nanostructures (ICNS5), 2014–Kish Island, Iran.
- **2)**Study on Physical and Mechanical Properties of Bagasse Fiber/Thermoplastic Starch Biocomposite. The 4th International Conference on Composites Characterization, Fabrication and Application, 2014–Tehran, Iran.
- **3)**Review of Applications of Biodegradable Polymer based Nanocomposites in the Electricity and Energy Industries. 2th Professional Conference of Nanotechnology in the Electricity and Energy Industries, 2014–Tehran, Iran.
- **4)**Study of Mechanical Properties of Thermoplastic Starch/Polyethylene Alloy Nanocomposite Reinforced by Nanoclay. 2th Professional Conference of Advanced Polymers in Food Packaging, 2013—Tehran, Iran.
- **5)**Preparation and Mechanical properties of Thermoplastic Starch/LDPE/Organo-modified Clay Nanocomposite. Composites Week@Leuven, 2013—leuven, Belgium.
- **6)**Quality Improvement of Clay Bricks on the basis of ISIRI7 Quality Control System. 9th Iranian Ceramic Congress (ICerS9), 2013–Tehran, Iran.
- **7)**Production of Fiberglass-Reinforced Composites and Investigation of its Mechanical Properties. 8th Iranian Ceramic Congress (ICerS8), 2010– Tehran, Iran.

### -Scientific Research Journals

1) The reinforcing effect of montmorillonite on thermoplastic starch/low density polyethylene matrix nanocomposite. Advances in Nanocomposite Research, Accepted, Onlined.