

CURICULUM VITAE

Personal Information

Name: Mohammad Mahdi Taheri
Date of Birth: June 17, 1986
Nationality: Iranian
Marital Status: Married
E-mails: mmtaheri@tums.ac.ir, taheri24@gmail.com
Mobile Phone: +989126065378
Assistant Professor, Pharmaceutical Biomaterials Department, Faculty of Pharmacy, Tehran university of medical sciences.

Education

- **Post-doc (2020-2022)** Functionalizing polystyrene polymer surface for development of cell culture vessels
- **Post-doc (2017-2020)** 3D Bio-printer, Iran university of medical science, Tehran, Iran
- **Post-doc (2015-2017)**
In-Situ Nanomedicine Laboratory of Department of Bioengineering at the University of Illinois at Chicago, United States of America
- **PhD (2011-2015)**
Degree: Doctor of Philosophy of Mechanical Engineering
Thesis Title: Synthesis and characterization of dental composite incorporated with Fluoridated Hydroxyapatite nanorods and carbon nanotubes
Organization: Department of Materials Engineering, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM), Malaysia
- **M.Sc. (2009-2011)**
Degree: Master of Materials Engineering
Course work with thesis (CGPA: 3.83 out of 4)
Organization: Department of Materials Engineering, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM), Malaysia
- **B.Sc. (2004-2009)**
Degree: Bachelor of Science in Materials engineering- Majored in Ceramic
Organization: Department of Materials Engineering, Science and Research campus of Islamic Azad University, Tehran, Iran.

- **Pre-university course (2003-2004)**

Degree: Pre-university degree, Mathematics and Physics

Institute: Mofid high School, Tehran, Iran

Research interests

- Drug delivery and biomaterials.
- Dental materials.
- Phase change materials.
- Nanotechnology.
- 3D bio-printer.

Linguistic Skills

Persian: Mother tongue and technical

English: Fluent

Professional Experiences

- The NDT inspector in Mehr Abad Airport in Tehran Iran, part time, Jun 21, 2008-sep 15, 2008
- Member of International Association of Computer Science and Information Technology (IACSIT).

Participation and lectures

- International conference, Optoelectronics and advanced materials, Johor, UTM.
- Workshop on Tabletop SEM with Integrated EDS, SIRIM, Malaysia.
- Workshop on Nano mechanical Testing, presenter Prof Ben Beake, Faculty of Mechanical, UTM.
- Mohammad Mahdi Taheri, "Coating biocompatible material on carbon Nano tube", UTM.
- Mohammad Mahdi Taheri, "synthesis of carbon nano tube methods", Islamic Azad University.
- Mohammad Mahdi Taheri, A.staki, "Introduction to semiconductors", Islamic Azad university.

Skills

- Having worked with:
 - TEM
 - FESEM/SEM (operator)
 - XRD

- XPS
 - FTIR/TGA/DTA(operator)
 - UV-Vis/Raman spectroscopy (operator)
 - Analyzer Optical microscopy
 - Hardness devices
- Cell culture (have experience with L 929, MG-63 cells)
 - Software: Visual basic, C++,Adobe Software (After effect, Photoshop, Premier),3D Studio Max, MS Office

Publications

- 1) “Bioactive nanoparticles derived from marine brown seaweeds and their biological applications: a review”, **Mohammad Mahdi Taheri**, Bioprocess and Biosystems Engineering, Pages 1-14. (**Impact Factor: 3.3**)
- 2) “An in vitro and in vivo study of electrospun polyvinyl alcohol/chitosan/sildenafil citrate mat on 3D-printed polycaprolactone membrane as a double layer wound dressing”, **Mohammad Mahdi Taheri**, International Journal of Biological Macromolecules, Volume 269, Pages 131859. (**Impact Factor: 7.7**)
- 3) “Exploring the potential of metal and metal oxide nanomaterials for sustainable water and wastewater treatment: a review of their antimicrobial properties”, **Mohammad Mahdi Taheri**, Chemosphere Volume 335 Pages 139103. (**Impact Factor: 8.1**)
- 4) “Optimization of the Mechanical Properties and the Cytocompatibility for the PMMA Nanocomposites Reinforced with the Hydroxyapatite Nanofibers and the Magnesium Phosphate Nanosheets”, **Mohammad Mahdi Taheri**, Materials, Volume 14, Issue 19, Pages 5893. (**Impact Factor: 3.623**)
- 5) “Novel PMMA bone cement nanocomposites containing magnesium phosphate nanosheets and hydroxyapatite nanofibers”, **Mohammad Mahdi Taheri**, Materials Science and Engineering: C Volume 109, April 2020, 110497. (**Impact Factor: 7.328**)
- 6) “Experimental Investigation of an Innovative Configuration for New Marine Current Turbine”, **Mohammad Mahdi Taheri**, Journal of Renewable Energy, volume 125, pp 32 · September 2018- (**Impact Factor: 4.981**)
- 7) “An innovative configuration for new marine current turbine”, **Mohammad Mahdi Taheri**, Journal of Renewable Energy, volume 120, pp 413 · May 2018- (**Impact Factor: 4.981**)
- 8) “Surface morphology and corrosion behavior of hydroxyapatite coated Co-Cr implant: effect of sintering conditions”, Mostafa Rezazadeh Shirdar, **Mohammad Mahdi Taheri**, Journal of Material 2017 – (**Impact factor:1.86**)

- 9) "Evaluating hydrothermal synthesis of fluorapatite nanorods: pH and temperature", Mostafa Rezazadeh Shirdar, **Mohammad Mahdi Taheri**, Ali Keyvanfar, Arezou Shafaghat, Journal of Experimental Nanoscience (2017) – (Q4 – Impact factor: 0.9).
- 10) **Mohammad Mahdi Taheri**, et al. "Surfactant-Assisted Hydrothermal Synthesis of Fluoridated Hydroxyapatite Nanorods", Ceramic international Volume 41, Issue 8, September 2015, Pages 9867–9872. (Q1, Impact factor: 2.6)
- 11) "In situ synthesis of hydroxyapatite-grafted titanium nanotube composite" Mohammad Mahdi Taheri, Mostafa rezazadeh Shirdar, Arezou Shafaghat, Ali Keyvanfar, Journal of Experimental Nanoscience (2016) – (Q4 – Impact factor: 0.9)
- 12) Tests and methods of evaluating the self-healing efficiency of concrete: A review, Nasiru Zakari Muhammad, Mohammad Mahdi Taheri, et. al. Construction and Building Materials, 112, Pages 1123-1132. (Q2-Impact factor: 3.69)
- 13) **Mohammad Mahdi Taheri**, et al. "Green synthesis of silver Nanoneedles using shallot" (Transactions of Nonferrous Metals Society of China "Accepted in April 2015") .(Q2, Impact factor: 1.17)
- 14) **Mohammad Mahdi Taheri**, et al. "Novel dental composite reinforced with fluoridated hydroxyapatite nanorods and hydroxyapatite coated carbon nanotubes" (submitted to Acta biomaterialia "under review") (Q1, Impact factor: 6.025)
- 15) **Mohammad Mahdi Taheri**, et al. "Fluoridate Hydroxyapatite nanorods as novel fillers for improving the properties of dental composite: Synthesis and application", Materials & Design Volume 82, 5 October 2015, Pages 119–125. (Q1, Impact factor: 3.5)
- 16) Mostafa Rezazadeh Shirdar, Izman Sudin, **Mohammad Mahdi Taheri**, et al. "A novel hydroxyapatite composite reinforced with titanium nanotubes coated on Co-Cr-based alloy", Vacuum, Available online 10 September 2015, in press. (Q2, Impact factor: 1.8)
- 17) Mostafa Rezazadeh Shirdar, **Mohammad Mahdi Taheri**, et al. "Hydroxyapatite-Titania nanotube composite as a coating layer on Co-Cr-based implants: mechanical and electrochemical optimization", Ceramics International, In Press. (Q1, Impact factor: 2.6)
- 18) Farnaz Naghizadeh, Ali Doostmohammadi, Fatemeh Roozbahani, Nida Iqbal, **Mohammad Mahdi Taheri**, Sangeetha Vasudevaraj Naveen, Tunku Kamarul. "Rice Husk Derived Bioactive Glass-Ceramic as a Functional Bioceramic: Synthesis, Characterization and Biological Testing", Journal of Non-Crystalline Solids, Volume 427, 1 November 2015, Pages 54–61. (Q1, Impact factor: 1.766)
- 19) Payam Nejat, Fatemeh Jomehzadeh, **Mohammad Mahdi Taheri**, Mohammad Gohari, and Muhd Zaimi Abd Majid. "A global review of energy consumption, CO₂ emissions and policy in the residential sector (with an overview of the top ten CO₂ emitting countries)." Renewable and Sustainable Energy Reviews 43 (2015): 843-862. (Q1, Impact factor: 5.901)
- 20) Safaa N. Saud, E. Hamzah, T. Abubakar, H. R. Bakhsheshi-Rad, S. Farahany, A. Abdolahi, **Mohammad Mahdi Taheri**. "Influence of Silver nanoparticles addition on the phase

transformation, mechanical properties and corrosion behaviour of Cu–Al–Ni shape memory alloys." *Journal of Alloys and Compounds* 612 (2014): 471-478. (**Q1, Impact factor: 2.999**)

- 21) Mostafa Rezazadeh Shirdar, Sudin Izman, **Mohammad Mahdi Taheri**, Mahtab Assadian, Mohammed Rafiq Abdul Kadir. "Effect of Post-Treatment Techniques on Corrosion and Wettability of Hydroxyapatite-Coated Co–Cr–Mo Alloy." *Arabian Journal for Science and Engineering* 40, no. 4 (2015): 1197-1203. (**Q3, Impact factor: 0.36**)
- 22) Mahtab Assadian, Mostafa Rezazadeh Shirdar, Mohd Hasbullah Idris, S. Izman, Davoud Almasi, **Mohammad Mahdi Taheri**, and Mohammed Rafiq Abdul Kadir. "Optimisation of Electrophoretic Deposition Parameters in Coating of Metallic Substrate by Hydroxyapatite Using Response Surface Methodology." *Arabian Journal for Science and Engineering*: 1-11. (**Q3, Impact factor: 0.36**)
- 23) Sajjad Jafari, **Mohammad Mahdi Taheri**, and Jamaliah Idris. "Thick hydroxyapatite coating on Ti-6Al-4V through sol-gel method." *Advanced Materials Research* 341 (2012): 48-52.
- 24) Sajjad Jafari, **Mohammad Mahdi Taheri**, and Jamaliah Idris. "Bioactive Coating on Stainless Steel 316 L through Sol-gel Method." In *Advanced Materials Research*, vol. 383, pp. 3944-3948. 2012.
- 25) Hossein Gilani, Sajjad Jafari, Roozbeh Gholami, Ali Habibolahzadeh, **Mohammad Mahdi Taheri**. "Fabrication and mechanical testing of the aluminum foam produced by sintering and dissolution process." *Applied Mechanics and Materials* 121 (2012): 3289-3293

Book Chapter

1. **Book Chapter**, Orthopedic nanomaterials (chapter 16) , *Orthopedic Biomaterials – Advances and Applications*, Tolou Shokuhfar, Emre Firlar, Mostafa Rezazadeh Shirdar, **Mohammad Mahdi Taheri**, Springer (2017)

Conferences

- 1) Jamaliah Idris, Noor Sabariah Mahat, **Mohammad Mahdi Taheri**, "Duplex Coating Of Black Ceramic Coating For Copper And Stainless Steel Substrate" CSM 2014, University of Westminster, London, UK.
- 2) **Mohammad Mahdi Taheri**, Mohammad sakhawat hussain, "Orientation of Multi walled Carbon nanotubes in electric field", ESciNano2012, Malaysia.
- 3) Mohammad Reza Daron Parvar, **Mohammad Mahdi Taheri**, Meysam keshavarz ,Arvin Eskandari, "Synthesis and modification of nanostructured NiCrAlY powders by using a planetary ball mill for application at thermal barrier coatings", INSC 2011, Malaysia.

Certificates

- 1) **International Gold Prize**, Seoul International Invention Fair 2015 (SIIF 2015), Issuer: Korea Invention Promotion Association, Cooling Wall.
- 2) **International Gold Prize**, Seoul International Invention Fair 2015 (SIIF 2015), Issuer: Korea Invention Promotion Association, Suscrete.
- 3) **International Gold Prize**, Seoul International Invention Fair 2015 (SIIF 2015), Issuer: Korea Invention Promotion Association, PAWDEX.
- 4) **ITEX GOLD MEDAL**, 26th international invention, innovation & technology exhibition, 2015 Malaysia.
- 5) **GOLD AWARD**, Invention and innovation exhibition, 9th Malaysian road conference 2014.

PATENT DRAFTING

Five patents drafting in Intellectual Property Corporation of Malaysia (MyIPO) including:

1. Patent 1- Cooling wall Sandwich Panel - IP: PI2015002693.
2. Patent 2- Method for Stable Suspension of Carbon Materials - IP: PI2015002690.
3. Patent 3- Water-based Thermal Conductive Fluid - IP: PI2015002692.
4. Patent 4- A Method for Web Service Composition Process- IP: PI2016000152.
5. Patent 5- A Method for privacy and security linkage for web service composition- IP: PI2016300002

Voluntary Grants Involvement

- 1) **Grant No.** (Q.J130000.2509.06H44); **Title of project** (Development of Cooling Storage Wall with Application of Nano Phase Change Material (Pcm) Suitable for Housing Development in Malaysia); **Project Leader** (Prof. Dr. Zaimi).
- 2) **Grant No.** (R.J130000.7909.4S042); **Title of project** (Development of Bio-Material for Strengthening Reinforced Concrete Structure); **Project Leader** (Prof. Dr. Zaimi).
- 3) **Grant No.** (Q.J130000.2609.11J04); **Title of project** (Adaptive Energy Behaviors: Design for Sustainable Energy Efficiency Behaviour in Cooling Indoor Environment of Office Building in Tropical Regions); **Project Leader** (Dr. Ali Keyvanfar).
- 4) **Grant No.** (Q.J130000.2709.01K41); **Title of project** (Sustainable Energy Efficient: Energy Intensity of Users Satisfaction from Energy Behavior in Building Design); **Project Leader** (Dr. Ali Keyvanfar).

reviewer of journal articles

1. Reviewer of surface innovation journal
2. Reviewer of JOM (journal of material)

Google Scholar's (Citation):

Total citations: 2781

h-index: 15

i10- index: 15