

# Dr. MD AMIR



## SUMMARY

A very motivated nanotechnologist works internationally with senior scientist and engineers. 8 years of research experienced with all domains of the material science and their development process for challenges applications.

## AREA OF RESEARCH WORK

**Field of expertise:** Nanotechnology, Nanoscience, Material Science and Applied Inorganic Chemistry

**Research domain:** Optical polishing materials, Flexible electronics devices, Nanoabrasive for precision optical polishing, Optical diffusers, Heterogeneous nanocatalyst, Magnetic nanomaterials, Electrochemical Sensors, Multifunctional textile materials, wearable devices

## EDUCATION

- **2023- Doctor of Philosophy:** Material Science and Engineering-Indian Institute of Technology (IIT) Delhi, India  
**PhD thesis title:** Development of SPION-based nanoabrasives for superfinish optical polishing
- **2016- Master of Science:** Bio and Nanotechnology Engineering (2014-2016)-Istanbul University, Turkey  
**Master thesis title:** Polyol synthesis of Boron substituted Fe<sub>3</sub>O<sub>4</sub> nanoparticles: its magnetic, electrical, Mössbauer and cation distribution investigation
- **2015- Bachelor of Science (Minor):** Environmental Engineering, Fatih University, Turkey
- **2014- Bachelor of Science:** Chemistry, Fatih University, Turkey

## SELECTED PUBLICATIONS

- G.S. Khan, S.W. Ali, **M. Amir**, V. Mishra, Nano-size abrasive and method of preparing, India patent: patent numbered 418063
- S.W. Ali, G.S. Khan, **M. Amir**, A Magnetic Nano-Photocatalyst and A Method of Preparation Thereof, Indian Patent: patent numbered 390911
- **M. Amir**, R. Sharma, V. Mishra, K.K. Pant, A.K. Agarwal, D. Kim, S.W. Ali, G.S. Khan, Functionalization of SPION nanoparticle with malic acid for the development of superfinish optical surface, Optics & Laser Technology 161 (2023) 109191
- **M. Amir**, V. Mishra, R. Sharma, F. Iqbal, S.W. Ali, S. Kumar, G.S. Khan, Development of magnetic nanoparticle based nanoabrasives for magnetorheological finishing process and all their variants, Ceramic International 49 (2023) 6254–6261
- **M. Amir**, V. Mishra, R. Sharma, S.W. Ali, G.S. Khan, Polishing performance of magnetic nanoparticles based nanoabrasive for superfinish optical surface, Applied Optics 61 (2022) 5179-5188
- **M. Amir**, V. Mishra, R. Sharma, S.W. Ali, G.S. Khan, Polishing performance of recyclable and reusable SiO<sub>2</sub> magnetic nanoparticle-based polishing-abrasive, Materials Today Proceeding 60 (2022) 773-776
- **M. Amir**, R. Sharma, V. Mishra, S.W. Ali, G.S. Khan, Polishing Performance of Magnetic Nanocomposites based Nanoabrasive, Materials Today Proceeding 56 (1) (2022) 549-554
- **M. Amir**, S.W. Ali, A. Baykal, G.S. Khan, Applied Organometallic Chemistry 35 (6) (2021) e6229
- **M. Amir**, H. Sözeri, A.D. Korkmaz, A. Baykal, Ceramic International 44 (2018) 988-992
- **M. Amir**, S. Güner, A. Yıldız, Journal of Magnetism and Magnetic Materials 421 (2017) 462–471
- **M. Amir**, U. Kurtan, A. Baykal, H. Sözeri, Journal of Material Science and Technology 32 (2016) 134-141
- **M. Amir**, A. Baykal, S. Güner, H. Güngüneş, H. Sözeri, Ceramic International 42 (2016) 5650-5658

## Contact

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### Google Scholar/ResearchGate

[MD Amir - Google Scholar](#)  
[Md Amir | ResearchGate](#)

## LANGUAGES

English, Hindi, Urdu, Turkish

## WORK EXPERIENCE

- ❖ **2013- Research Intern:** University of York, Yorkshire/England
- ❖ **2015- Research Fellow:** TUBITAK, Istanbul Turkey
- ❖ **2016- Researcher,** Istanbul University, Istanbul/Turkey
- ❖ **2018- Junior Research Fellow:** IIT Delhi, New Delhi/India
- ❖ **2020- Senior Research Fellow:** IIT Delhi, New Delhi/India
- ❖ **2023- Senior Project Scientist:** IIT Delhi, New Delhi, India