

Khursheed Ali

Ph.D. Microbiology & Nanomaterials

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Citations: >257
h-index: 5
i10 index: 3

INDIAN
National



• Languages

Hindi (mother tongue)
English (fluent)
Urdu (fluent)

• Contribution through Research In:

- International Scientific Partnership Program (ISPP) at King Saud University, Riyadh Saudi Arabia.

• Education

Degree /Course	Institution/ Board	Final % age	Completion (Years)	DD/MM/YYYY From	To
Ph.D. in Agri. Microbiology.	Aligarh Muslim University, India	Degree Awarded	Five	01/02/2014	24/06/2019
M.Sc. in Agri. Microbiology.	Aligarh Muslim University, India	71	Two	26/07/2006	16/09/2008
B.Sc. in Biology & Chemistry.	MJP, Rohilkhand University, India	64	Three	01/07/2002	18/06/2005

- **Ph.D. Thesis Title:** *Green synthesis of nanoparticles and assessment of their anti-bacterial, anti-fungal and anti-proliferative activities.*
- **M.Sc. Dissertation Title:** *Studies on Isolation and Functional Diversity of Plant Growth Promoting Rhizobacteria.*

• Research Interests

- Synthesis of Green and Eco-friendly Nanoparticles
- Green synthesis of nanoparticles for human cancers and MDR bacteria.
- Biodegradable nanoparticles for target drug delivery against cancer tumors.
- Hydrogels with anti-MDR bacterial or anti-biofilm nanoparticles

• Details of employment/Fellowship

Fellowship/Post	Fellowship Source/ Employer	Duration	
		From	To
UGC Fellowship	United Grant Commission, India	01.02.2014	31.01.2018
Technical Officer	SRL, J.N. Medical College & Hospital, Aligarh, UP, India	24.01.2011	31.01.2014
Microbiologist	Allana Pvt. Ltd. India.	01.08.2010	31.01.2011
Microbiologist	Giex Pvt. Ltd. India.	01.10.2008	31.07.2010

• National Eligibility Test (NET) for Lecturership

ICAR-NET (August 2016) recognized by United Grant Commission (UGC) and Council of Scientific and Industrial Research (CSIR) Government of India, in the discipline of Agricultural Microbiology for eligibility of Lecturership/Assistant Professorship in India.

• Research Skills

Green synthesis of nanoparticles and nanomedicines, Transmission and Scanning Electron Microscopy, Energy Dispersive Spectroscopy, X-Ray Diffraction, Fourier Transformed Infra-Red Spectroscopy, Dynamic Light Scattering, Ultraviolet-Visible Spectroscopy, Flow Cytometry, Confocal Laser Scanning Microscopy, Fluorescent and Optical Microscopy, Cell culture techniques, Microbiological techniques, Comet Assay, Gas Chromatography-Mass Spectrometry, Molecular Biology Techniques, Immunological Techniques, Cytotoxicity Assays

● Skills

➤ Technical

- Microsoft Office Professional Plus 2016

➤ Statistical

- Sigma Plot 11

➤ Image Processing

- Adobe Photoshop
- ImageJ

➤ Reference Manager

- Mendeley
- EndnoteX7

➤ Other tools

- NOVA for AFM analysis
- Leica Microsystem for CLSM
- Powder-X for XRD
- Essential FTIR

● Workshops

1. National symposium cum workshop on "Exploring Biology Through Macromolecule" organized by the Interdisciplinary Biotechnology Unit, Aligarh Muslim University, Aligarh during February 26-27, 2020
2. Symposium cum Workshop on "Applications of Flow Cytometry in Plant & Crop Research" organized at National research Centre for Plant Biotechnology, IARI, New Delhi, India. 8th December, 2014.
3. Three day's work shop on "Implementation of ISO15189:2012 Quality standards in the HIV Testing Reference Laboratories" organized by National AIDS Control Organization (NACO), Ministry of Health and Family Welfare, Government of India, January, 21-23, 2014.
4. Three day's work shop on "Laboratory Quality Planning and Risk Management" organized by National AIDS Control Organization (NACO), Ministry of Health and Family Welfare, Government of India, New Delhi, India. July, 2-4, 2014.
5. Three day's workshop on "Facilitation on ISO 15189:2007 and strategic Information System" organized by National AIDS Control Organization (NACO), Ministry of Health and Family Welfare, Government of India, New Delhi, India. September 18-20, 2012.
6. Three day's workshop on "Calibration, Biosafety and strategic Information System" organized by National AIDS Control Organization (NACO), Ministry of Health and Family Welfare, Government of India, National Institute of Biologicals, NOIDA, India, July 12-14, 2011.

Annex to CV

● Research Publications

[A] Summary of Research Publications: N = 21

- (a) Research Papers: **09**
- (b) Book Chapters: **02**
- (c) Poster/Paper Presented/Contributed to National/International Conferences/Symposia: **10**

[B] Articles Published in Scientific Journals

S. No.	Journal	ISSN No.	Impact Factor	SCImago Journal Rank (Quartile)
1.	Material Science and Engineering C (Elsevier)	1873-0191	5.88	1.15 (Q1)
2.	Photochemistry and Photobiology B: Biology (Elsevier)	1011-1344	4.38	0.77 (Q1)
3.	ACS Omega	2470-1343	2.58	0.75 (Q1)
4.	PLoS One	1932-6203	3.53	1.1 (Q1)
5.	Process Biochemistry (Elsevier)	1359-5113	2.95	0.72 (Q2)
6.	Journal of Colloid and Interface Science (Elsevier)	0021-9797	7.48	1.45 (Q1)
7.	Journal of Biomolecular Structure and Dynamics (Taylor & Francis)	0739-1102	3.3	0.5 (Q2)
8.	Journal of Microbiological Methods (Elsevier)	0167-7012	1.8	0.64 (Q3)
9.	Biomolecules (MDPI)	2218-273X	4.6	1.61 (Q1)
10.	Plants Medica (Congress Abstract)	14390221	2.34	0.57 (Q1)

● Specific Description of Research Papers, N= 09

1. **Khursheed Ali**, Quaiser Saquib, Bilal Ahmed, Maqsood Siddiqui, Javed Ahmad, Majed Al-Shaeri, Abdulaziz Al-Khedhairi, Javed Musarrat (2020) Bio-functionalized CuO nanoparticles induced apoptotic activities in human breast carcinoma cells and toxicity against *Aspergillus flavus*: An In vitro approach, *Process Biochemistry*. 91:387-397. <https://doi.org/10.1016/j.procbio.2020.01.00> (SCI IF: 2.95).
2. **Khursheed Ali**, Bilal Ahmed, Sabiha M. Ansari, Sourabh Dwivedi, Quaiser Saquib, Abdulaziz A. Al-Khedhairi, Majed Al-Shaeri, Mohd Saghir Khan and Javed Musarrat (2019) Comparative in situ ROS mediated killing of bacteria with bulk analogue, Eucalyptus leaf extract (ELE)-capped and bare surface copper oxide nanoparticles. *Materials Science and Engineering: C*, 100: 747-758, <https://doi.org/10.1016/j.msec.2019.03.012> (SCI IF: 5.88).
3. **Khursheed Ali**, Bilal Ahmed, Mohammad Saghir Khan, Javed Musarrat (2018) Differential surface contact killing of pristine and low EPS *Pseudomonas aeruginosa* with Aloe vera capped hematite (α -Fe₂O₃) nanoparticles. *Journal of Photochemistry and Photobiology B: Biology*. 188:146-158. <https://doi.org/10.1016/j.jphotobiol.2018.09.017> (SCI IF: 4.38).
4. **Khursheed Ali**, Faizan Abul Qais, Sourabh Dwivedi, Eslam M. Abdel-Salam, Sabiha M. Ansari, Quaiser Saquib, Mohammad Faisal, Abdulaziz A. Al-Khedhairi, Majed Al-Shaeri & Javed Musarrat (2017) Titanium dioxide nanoparticles preferentially bind in sub-domains IB, IIA of HSA and minor groove of DNA. *Journal of Biomolecules and Structure Dynamics*. <http://dx.doi.org/10.1080/07391102.2017.1361339> (SCI IF: 3.3).
5. **Khursheed Ali**, Sourabh Dwivedi, Ameer Azam, Quaiser Saquib, Mansour S. Al-Said, Abdulaziz A. Alkhedhairi, Javed Musarrat (2016) Aloe vera extract functionalized zinc oxide nanoparticles as nanoantibiotics against multi-drug resistant clinical bacterial isolates. *Journal of Colloid and Interface Science*, 472: 145–156 <https://doi.org/10.1016/j.jcis.2016.03.021> (SCI IF: 7.48).
6. **Khursheed Ali**, Bilal Ahmed, Sourabh Dwivedi, Quaiser Saquib, Abdulaziz A. AlKhedhairi and Javed Musarrat (2015) Microwave accelerated green synthesis of stable silver nanoparticles with Eucalyptus globulus leaf extract and their antibacterial and antibiofilm activity on clinical isolates *PLOS One*. e0131178. <https://doi.org/10.1371/journal.pone.0131178> (SCI IF: 3.53).
7. Javed Musarrat, **Khursheed Ali**, Mohammad Azam Ansari, Qaisar Saquib, M Siddiqui, Shams Tabrez Khan, Abdulaziz A. Al-Khedhairi (2015) Green Synthesis of nanoparticles and their role as nano-antibiotics and anti-biofilm agents. *Planta Medica* 01/2015; 81(5): OA44. DOI:10.1055/s-0035-1545126. (IF: 2.34).
8. Tijo Cherian, **Khursheed Ali**, Saher Fatima, Quaiser Saquib, Sabiha M. Ansari, Hend A. Alwathnani, Abdulaziz A. Al-Khedhairi, Majed Al-Shaeri, Javed Musarrat (2019) Myristica fragrans bio-active esters functionalized ZnO nanoparticles exhibit antibacterial and antibiofilm activities in clinical isolates. *Journal of Microbiological Methods*, 166:105716 <https://doi.org/10.1016/j.mimet.2019.105716> (SCI IF: 1.8)
9. Bilal Ahmed, Fuad Ameen, Asfa Rizvi, **Khursheed Ali**, Hana Sonbol, Almas Zaidi, Mohammad Saghir Khan, Javed Musarrat (2020) Destruction of Cell Topography, Morphology, Membrane, Inhibition of Respiration, Biofilm Formation, and Bioactive Molecule Production by Nanoparticles of Ag, ZnO, CuO, TiO₂, and Al₂O₃ toward Beneficial Soil Bacteria. *ACS Omega*, <https://dx.doi.org/10.1021/acsomega.9b04084> (SCI IF: 2.58).
10. Tijo Cherian, **Khursheed Ali**, Quaiser Saquib, Mohammad Faisal, Rizwan Wahab and Javed Musarrat (2020) Cymbopogon Citratus Functionalized Green Synthesis of CuO-Nanoparticles: Novel Prospects as Antibacterial and Antibiofilm Agents. *Biomolecules*. 10:169. doi: 10.3390/biom10020169 (SCI IF: 4.6)

● Book Chapters, N=2

1. **Khursheed Ali**, Tijo Cherian, Saher Fatima, Quaiser Saquib, Mohammad Faisal, Abdulrahman A. Alatar, Javed Musarrat, Abdulaziz A. Al-Khedhairi (2020) Role of solvent system in green synthesis of nanoparticles. In Q. Saquib, M. Faisal, A.A. Kedhairi, A. A. Alatar (Eds.), *Green Synthesis of Nanoparticles: Applications and Prospects*, Springer. DOI: 10.1007/978-981-15-5179-6
2. **Khursheed Ali**, Tijo Cherian, Saher Fatima, Quaiser Saquib, Mohammad Faisal, Abdulrahman A. Alatar, Javed Musarrat, Abdulaziz A. Al-Khedhairi (2020) Surface Engineering Techniques Associated with Stability, Biocompatibility and Toxicity of Nanoparticles. In Q. Saquib, M. Faisal, A.A. Kedhairi, A. A. Alatar (Eds.), *Green Synthesis of Nanoparticles: Applications and Prospects*, Springer. DOI: 10.1007/978-981-15-5179-6.

● Presentations in International Conferences/Symposia, N=09

1. **Khursheed Ali**, Bilal Ahmed, Sourabh Dwivedi, Quaiser Saquib, Abdulaziz A. Al-Khedhairi, Javed Musarrat (2018). *Bio-inspired Eucalyptus globulus Terpenoids Encapsulated Copper (II) Oxide Nanoparticles Synthesis and Intracellular Uptake and ROS Mediated Killing of Bacterial and Human Breast Carcinoma (MCF-7) Cells*. **International Conference on Future Diagnostic, Therapeutic and Theragnostic Modalities**, Aligarh Muslim University, Aligarh, December, 29-31, 2018.
2. **Khursheed Ali**, Sourabh Dwivedi, Bilal Ahmed, Quaiser Saquib, Abdulaziz A. Alkhedhairi, Md. Saghir Khan, Javed Musarrat (2017) *Green synthesis of hematite (α -Fe₂O₃) nanoparticles using aqueous Aloe vera leaf extract and their antibacterial and antibiofilm activities*. **International Conference on Advances in Agricultural and Biodiversity Conservation for Sustainable Development**. Chaudhary Charan Singh, University, Meerut, October 27-28, 2017.
3. Rumman Zaidi, Sourabh Dwivedi, **Khursheed Ali**, Ameer Azam, Javed Musarrat (2016). *Green synthesis of silver nanoparticles using Azadirachta indica aqueous leaf extract and their antibacterial and antibiofilm activity*, **International Conference on Nanotechnology (ALIGARH NANO-V) and STEM-Education and Research**, March 12-15, 2016.
4. Bilal Ahmed, **Khursheed Ali**, Sourabh Dwivedi, Quaiser Saquib, Abdulaziz A. Alkhedhairi, Javed Musarrat (2015). *Allium cepa as A Model for Assessment of Cytotoxicity and Genotoxicity and Oxidative Stress Induced by Zinc Oxide Nanoparticles*. **Annual Conference of Association of Microbiologists of India**, Jawaharlal Nehru University, New Delhi, December 7-10, 2015.
5. Saher Fatima, Sourabh Dwivedi, **Khursheed Ali**, Quaiser Saquib, Abdulaziz A. Alkhedhairi and Javed Musarrat (2015). *Isolation and Characterization of Biofilm Forming Oral Bacteria and the role of abiotic stress on Biofilm Formation*. **Proceeding of the "Annual Conference of Association of Microbiologists of India"**, Jawaharlal Nehru University, New Delhi, December, 7-10, 2015.
6. Zarrin Haris, Sourabh Dwivedi, **Khursheed Ali**, Quaiser Saquib, Abdulaziz A. Alkhedhairi and Javed Musarrat (2015). *Impact of metal oxide nanoparticles on plant growth promoting rhizobacteria and their secondary metabolites*. **Annual Conference of Association of Microbiologists of India**, Jawaharlal Nehru University, New, Delhi-December, 7-10, 2015.
7. **Khursheed Ali**, Bilal Ahmad, Sourabh Dwivedi, Mohd Azam Ansari, Quaiser Saquib, Abdulaziz A. Alkhedhairi and Javed Musarrat (2014). *Green Synthesis and Characterization of Silver Nanoparticles with Eucalyptus globulus extract as Broad-Spectrum Nano-antibiotics*. **Proceedings of the International Conference on Recent Advances in Nanosciences and Nanotechnology (ICRANN-2014)**, Jawaharlal Nehru University, New Delhi, December, 15-16, 2014.
8. Tijo Cherian, **Khursheed Ali**, Sourabh Dwivedi, Quaiser Saquib, Abdulaziz Al-Khedhairi, Javed Musarrat (2014) *Zinc oxide nanoparticles as potential antibacterial agent against the multidrug resistant Escherichia coli clinical isolates*. **Proceedings of the 2nd International Conference on Nanostructured Materials and Nanocomposites**, Mahatma Gandhi University, Kottayam, Kerala, India, December, 19-21, 2014.
9. **Khursheed Ali**, Saher Fatima, Sabiha M. Ansari, Quaiser Saquib, Sourabh Dwivedi, Hend A. Alwathnani, Majed Al-Shaeri, Abdulaziz A. Al-Khedhairi, Javed Musarrat (2019) *Aloe vera capped hematite nanoparticles amplify the oxidative stress, DNA damage and mitochondrial alterations to trigger apoptosis in human breast cancer (MCF-7) cells*. **International Conference on Genomics and Proteomics Pertaining to Biological Sciences**. Aligarh Muslim University, Aligarh, November 5-7, 2019.

● Review Activity, N= 03

S. No.	Journal	Publisher	Impact Factor	Number of reviews
1.	Saudi Journal of Biological Sciences	Elsevier	2.80	02
2.	SN Applied Sciences	Springer	--	01
Total				03

REFERENCES



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