

(CV of Dr. Madhu Khatri)

1. **Name** : Dr. Madhu Khatri
2. **Designation** : Assistant Professor
and Wellcome trust/DBT IA early career fellow
3. **Department** : Biotechnology Engineering, UIET, Panjab University
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5. **Phone-** 91-9780021944(M)



6. **Educational Background:**

Degree	Subject	University	Year
PHD	Biomedical Engineering and Biotechnology	University of Massachusetts (intercampus program) MA, USA	2012
MS	Biomedical Engineering and Biotechnology	University of Massachusetts, MA, USA	2009
MSc	Genetics	University of Delhi, India	2005
BSc	Zoology	University of Delhi, India	2003

7. **Research Areas:** Nanotechnology and Nano Environmental Health and Safety

8. **Ongoing Project:**

S.No.	Agency	Title	Amount sanctioned (in Rupees)	Duration
1	Wellcome trust/ DBT Early Career Fellowship	Nanomaterial Hazard Identification: High throughput toxicity assessment using Zebra fish model.	1.62 Crore	2015-2020

9. **Experience:**

Job Title	Institute	Duration
Assistant Professor	UIET, Panjab University, Chandigarh	August 2014-Present
Scientist	Institute of Nanoscience and Technology, Mohali, Panjab	March 2014-August 2014
Post Doctoral Research Associate	University of Massachusetts, MA, USA	May 2012- September 2013
Teaching and Research Assistant	University of Massachusetts, MA, USA	September 2007- May 2012
Junior Research Fellow	University of Delhi	June 2005- August 2007

10. List of Publications:

- Sood K, Kaur Jasreen, **Khatrig M*** (2017). Comparative neurotoxicity of zinc oxide nanoparticles by crawling assay on *Drosophila melanogaster*. International Journal of Engineering Technology Science and research. 4:4; 440-444. **(IF:2.1)**
- Kaur S, **Khatrig M**, Singh G (2017). Isolation and characterization of prokaryotic laccases. International Journal of Advanced Technology in Engineering and Sciences 5:3,127-130. **(IF:2.8)**
- **Khatrig M**, Bello D, Martin J, Bello D, Gore R, Demokritou P, Gaines P (2017). Chronic upper airway inflammation and systemic oxidative stress from nanoparticles in photocopier operators: Mechanistic insights. Nanoimpact 5:133-146. **(IF: 4.5)**
- Sehrawat S, Reddy PBJ, Suryawanshi A, **Khatrig M**, Rouse BT (2014). An approach to control relapse of inflammatory lesions after discontinuation of primary therapy. (Plos One 9(5): e98051. doi:10.1371/journal.pone.0098051). **(IF: 3.7)**
- Singh B, **Khatrig M**, Nanda S (2014). Regulating nanomedicines: need for paradigm shift. Chronocile Pharmabiz, 13th Anniversary Issue. January: 14-16.
- Pal AK, Bello D, Hsieh SH, Schmidt D, **Khatrig M**, Gaines P, Rogers E (2014). Screening for oxidative damage by engineered nanomaterials: A comparative evaluation of FRAS and DCFH. Journal of Nanoparticle Research 16:2167; DOI 10.1007/s11051-013-2167-3. **(IF: 2.1)**
- **Khatrig M***, Bello D, Pal AK, Martin J, Gu A, Gassert T H, Woskie S, Gaines P (2013). Evaluation of cytotoxic, genotoxic and inflammatory responses of nanoparticles from photocopiers in three human cell lines. Particle and Fibre Toxicology, DOI: 10.1186/10.1186/1743-8977-10-42. (* **Co-corresponding author**) **(IF: 9.2)**
- **Khatrig M***, Bello D, Gaines P, Martin J, Pal AK, Gore R, Woskie S (2013). Nanoparticles from photocopiers induce oxidative stress and upper respiratory tract inflammation in healthy volunteers. Nanotoxicology, Aug; 7(5): 1014-27. (* **Co-corresponding author**)**(IF: 7.8)**
- **Khatrig M***, Bello D, Pal AK, Woskie S, Gassert TH, Demokritou P, Gaines P (2013). Toxicological effects of PM0.25-2.0 particles collected from a photocopy center in three human cell lines. Inhalation Toxicology, Sept; 25(11): 621-632. (* **Co-corresponding author**) **(IF:1.9)**
- Schuenke MD, Day DS, Bouchard M, Hellstrand K, **Khatrig M**, Carriero JE. (2010) "Effect of Osteopathic Manipulation on Interstitial Concentrations of Inflammatory Markers." Medicine & Science in Sports & Exercise: Volume 42 - Issue 5 - p 387.**(IF:3.7)**
- **Khatrig M** and Rajam M V (2007) "Targeting Polyamines of *Aspergillus nidulans* by siRNA Specific to Fungal *Ornithine Decarboxylase* gene" Medical Mycology 45:3, 211-220. **(IF: 2.4)**

11. Books/Book Chapters:

- Bioanalytical Techniques, Girsharan Singh and **Madhu Khatrig**, Kalyani Publishers, ISBN: 9789327260908, 2016.
- Dimple Chopra, Kailash C Gupta , Shweta Sharma, **Madhu Khatrig**, Beldeu Singh and Bhupinder Singh, Nanostructured Drug Delivery: Toxicological Challenges and Safety Issues, Nanobiomedicine Nanomedicine- Vol 1, Edited by B.S. Bhoop, Jagat R Kanwar OP katara, Series ISBN 1626990506, Book ISBN-1626990514, Studium Press LLC, 2015, 493-534.

12. Conferences/ Workshops organized and attended:

- **Oral presentation** in Annual Fellows Meeting, Organized by Wellcome trust/ DBT (17th- 19th May 2018), Delhi.

- **Organizer**, Start-Up and Innovation Workshop at UIET, Panjab University on 22nd march 2018
- **Participated** in Workshop on Access to Technology for Innovations and Establishing a Technology and Innovation Support Center (TISC) Network at MGSIPA Complex, Chandigarh (4th -5th Dec 2017)
- **Invited Speaker**, Nanomission School on Nanoscience and Nanotechnology: Biological Science, INST, Mohali (9th Nov 2017)
- **Poster Presentation**, Women Scientist Conclave, IISF 2017, Anna University, Chennai (15-16 Oct 2017)
- **Instructor and Organizer**, Panjab University Foundation/Laboratory workshop on Biorisk Management, Chandigarh (11th -15th Sept 2017)
- **Organizer and Coordinator**, BRM trainer development program workshop, Panjab University, Chandigarh (26th -30th June 2017)
- **Paper presentation**, 3rd International Conference on Recent Development in Engineering and Sciences, Humanities and Management, NITTR, Chandigarh (26th March 2017)
- **Attended** Management and Leadership Workshop, New Delhi (16th-17th March 2017)
- **Poster presentation**, 9th Chandigarh Science Congress, Chandigarh (9th March –11st March 2017).
- **Attended** Faculty Development Programme on Effective Teaching, UIET, Panjab University (9th-14th Jan 2017)
- **Attended** 113 Orientation Course, HRDC, Panjab University (29th Nov-26th Dec 2016)
- **Organizing member**, Biocamp 2016, Panjab University, Chandigarh (10-11 Nov 2016)
- **Instructor and Organizing member**, Foundational and Laboratory Level Biorisk Management, Panjab University Chandigarh, (November 2-10, 2016)
- **Instructor**, India Biorisk Management Workshop, New Delhi (5-6 September, 2016)
- **Poster presentation**, 8th Chandigarh Science Congress, Chandigarh (27th Feb –1st March 2016).
- **Organizing member and podium presentation**, NanoSciTech, Chandigarh (18-20th Feb 2016).
- **Attended** Global Initiative for Academic Networks course on Emerging and Prevalent Infections, Organized by IISER Mohali, Punjab (27th Jan-6th Feb 2016).
- **Participated** in Biorisk Management Trainer Development Program (Curriculum Development Track), Organized by Sandia National Laboratory, USA and Panjab University, Chandigarh (14-18 Dec 2015).
- **Poster session judge** at Australia- India Strategic Research Fund Meeting on Advanced Nanomaterials for Energy, Optoelectronics and Biological applications, Organized by INST, Mohali Punjab (25th-27th Nov 2015).
- **Podium presentation** at NanoSciTech, Panjab University, Chandigarh (Feb 20th, 2016).
- **Poster presentation** at Annual Fellows Meeting, Organized by Wellcome trust/ DBT (5th- 6th Nov 2015).
- **Plenary speaker** at national symposium on Current Issues in Public Health and Human Welfare, Organized by Centre for Public Health, Panjab University (PU), Chandigarh (March 11, 2015).
- **Invited speaker** at One day Conclave on Nanobiotechnology, Organized by INST Mohali (21st Dec 2014).
- **Podium presentation** at NanoSciTech, Panjab University, Chandigarh (Feb 15th, 2014).
- **Podium presentation** at 244th ACS National Meeting & Exposition, Philadelphia, Pennsylvania, USA (August 19-23, 2012).
- **Podium presentation** at 5th International Symposium on Nanotechnology, Occupational Safety and Health, Boston, MA, USA (Aug 11th, 2011).
- **Poster presentation** at Gordon Research Conference, Waterville, NH, USA (May 30th -June 3rd 2011).

- **Poster presentation** at CHN industry day showcase at University of New Hampshire, USA (24th May 2011).
- **Podium presentation** at UConn Health Center-UMass Lowell Sturbridge Symposium Semi-Annual Meeting, USA: May 16, 2011.
- **Poster presentation** at ENEBC Boston, USA (25th April 2009).
- **Poster presentation** at Annual Student Research Symposium, UMASS, USA (28th April 2009).
- **Poster presentation** at All India Botanical Conference held at Dehradun (24-26th, Oct. 2005).

13. Achievements/Awards:

- Awarded **Travel grant** from Defense Threat Reduction Agency, USA to attend European biosafety congress, Madrid, Spain (24-28 April 2017)
- Awarded **Travel grant** from Sandia National Laboratory, USA for attending Management and Leadership Workshop, New Delhi (16th-17th March 2017)
- Awarded **Second prize** in poster presentation, Biocamp 2016, Panjab University, Chandigarh (10-11 Nov 2016)
- Awarded **Travel award** from Sandia National Laboratory, USA for attending India Biorisk Management Workshop, New Delhi (5-6 September, 2016)
- Awarded **Travel award** by YIM to attend 7th Young investigator meeting, Srinagar (28th march-1 April 2015)
- Certified by Sandia National Laboratory, USA for Class 6.2 Dangerous Goods Shipping (April, 2014).
- Awarded Post Doctoral Fellowship by Centre for High-rate Nanomanufacturing, UML, MA, USA. (June 2012).
- Awarded Travel Award from Gordon Research conference, Waterville, NH, USA: May (30th - June 3rd 2011).
- Awarded Junior research Fellowship by CSIR, India (June 2005).
- Awarded South-Campus Endowment Scholarship, University of Delhi, India (July 2004).
- First Rank Holder during Bachelors' at University of Delhi (July 2003).

14. PhD & M.E/M.TECH thesis supervised/supervising:

S.No	Name of the Student	Degree	Status
1	Ms. Jasreen Kaur	PhD	In Progress
2	Mr. Nitish Kumar	PhD	In Progress
3	Ms. Kritika Sood	M.E	Completed 2017
4	Ms. Sukhman Kaur	M.E	Completed 2017
5	Ms. Satinder Pal Kaur	M.E	Completed 2017
6	Ms. Archita Shama	M.E	In Progress
7	Mr. Kanika Sood	M.Tech	In Progress
8	Mr. Harpreet Singh	M.E	In Progress