

PROFILE

Name: Dr. Mohammad. Momina Shanwaz

Educational Qualifications: B. Tech, M. Tech, PhD

Designation: Assistant Professor

Department: Biotechnology

Date of joining Maris Stella: 17.07.2025



I Academics

Degree	Institution/University	Year
PhD in Biotechnology	National Institute of Technology Warangal	2024
M. Tech Biotechnology	Acharya Nagarjuna University	2019
B. Tech Biotechnology	Andhra University	2017

II Professional Experience

Position Held	Institution	Year
iCET Fellow in iCET secretary	Indian Institute of Technology Hyderabad	2024-2025

III Academic & Administrative Roles at Maris Stella

- Assistant professor in Biotechnology Department

IV Academic Contributions to other Institutions

V Professional Memberships

- Life Member, ISCB - International Society for Computational Biology

VI Refresher Courses / Orientation Courses / Short Term Courses Done

VII Workshops / FDPs / Training Programmes Attended

- Online continuing education program conducted by NITW, The Department of Biotechnology on topic “Current trends in data analysts through hands-on experience.” 31st August- 4th September, 2020. Online.
- Five-Day Online Faculty development program on “Effective teaching and learning practices in computational biology” conducted by Department of Biotechnology associated with Teaching Learning Centre (TLC), NIT Warangal, 15-19 march, 2021.
- Online workshop by Decode life workshop on topic “Genome Informatics second edition- 2021” 6-20 December, 2021. Online.

VIII Research Contribution

(i) Area(s) of Research: Drug Design, Bioinformatics, Nanotechnology, Plant drug analysis

(ii) Research Papers Published

1. Structural analysis of biogenic copper oxide nanoparticles, and their bio-activity assessment. Mohammad, M. S., & Perugu, S. BioNanoscience journal, 2023 13, 2265–2275. Impact Factor- 3. 44
<https://doi.org/10.1007/s12668-023-01168-0>
2. An aromatic plant bioactive compound corymbosin from Vitex negundo–mediated synthesis of zinc oxide nanoparticles, characterization, and their bioactivity against selected cancer cell lines and microbial pathogens. Mohammad, M. S., & Perugu, S. Biomass Conversion and Biorefinery, 2023, 1-14. Impact Factor- 3.77
<https://doi.org/10.1007/s13399-023-04195-9>
3. Bioactivity studies and Insilico studies of the isolated compound from ancient plant Vitex negundo against breast cancer. Mohammad, M. S., & Perugu, S. Journal of Molecular Structure. 15 September 2023,, Volume 1288, 135762 Impact Factor-4.4
<https://doi.org/10.1016/j.molstruc.2023.135762>
4. Anti-bacterial Effect and Characteristics of Gold Nanoparticles (AuNps) Formed with Vitex negundo Plant Extract. Shanwaz, M., & Shyam, P. Applied Biochemistry and Biotechnology, 2022, 1-14. Impact Factor- 3.1 <https://doi.org/10.1007/s12010-022-04217-8>
5. Synthesis of Silver Nanoparticles from Vitex negundo Plant by Green Method and their Bactericidal Effects. Shanwaz, M. M., & Shyam, P. Letters in Applied NanoBioScience (LIANBS), 2021 Volume 12, Issue 2, 2023, 59. Impact Factor-1.47
<https://nanobioletters.com/wp-content/uploads/2022/03/LIANBS122.059.pdf>
6. A Review Analysis of Insomnia: Age, Gender, Career, and Efficient Behavior Methods Perspectives, Perugu Shyam, Momina S Mohammad, Indian Journal of Sleep Medicine, April– June 2020 Volume 15 Issue 2

(iii) Research Papers Presented

1. Md. Momina Shanwaz, and Perugu. Shyam, Role of Flavones in Ovarian Cancer Prevention by Insilco Approach. Proceedings of International Conference on Drug Discovery (ICDD) 2020 at BITS Hyderabad from 29 Feb-2 March 2020, Abstract Available at SSRN: <https://ssrn.com/abstract=3531487>. Poster presentation.
2. Md. Momina Shanwaz, and Perugu. Shyam, Insilco analysis of biologically active plant products against cancer causing agents. Two-Day Online National Conference on Biological, Biochemical, Biomedical, Bioenergy, and Environmental Biotechnology (NCB4EBT 2021) at

- NITW from 29-30 January, 2021. Abstract available at <http://10.21467/abstracts.109>, Oral presentation.
3. Md. Momina Shanwaz, and Perugu. Shyam, Women contribution towards Bioinformatics. International Conference Women Empowerment in Science and Technology (ICWEST 2021) at NITW from 8-10 march 2021. Abstract Available, Oral presentation.
 4. Md. Momina Shanwaz, and Perugu. Shyam, Barriers to women in science 2022. International Conference On 'Women in Learning And Leadership' (IcWILL - 2022) at NITW from 8-9March,2022, Oral presentation.
 5. Md. Momina Shanwaz, and Perugu. Shyam, green synthesis of silver nanoparticles from Vitex negundo (2022) International Conference On Engineering and Advancement In Technology (ICEAT 2022) conference to be conducted in 8-9 July,2022. Abstract Available, Oral presentation.
 6. Md. Momina Shanwaz, and Perugu. Shyam, Green synthesis of gold nanoparticles from bioactive compound of an aromatic plant Vitex negundo, characterization and evaluation of their bioactivity. Proceedings of International Conference on Current Trends and Future Prospects of Plant Biology &14th Plant Sciences Colloquium at HCU, 23-25 February, 2023. Abstract Available, Poster Presentation.

(iv) Books / Chapters in Books Published

1. Improving abiotic stress tolerance in plants book chapter-Aquaporins, A Promising Gene Family for Tackling Stresses for Crop Improvement, Rahul B. Nitnavare, Aishwarya R. Shankhapal, Momina Shanwaz, Pooja Bhatnagar-Mathur, Palakolanu Sudhakar Reddy, CRC Press, 2020, 18 page. <https://www.taylorfrancis.com/chapters/edit/10.1201/9780429027505-12/aquaporins-rahul-nitnavare-aishwarya-shankhapal-momina-shanwaz-pooja-bhatnagar-mathur-palakolanu-sudhakar-reddy>
2. Tribo-Behaviors of Biomaterials and their Applications book chapter- Role of Biomaterials in the Health Care System, Momina Shanwaz Mohammad, Perugu Shyam, CRC Press, Taylor Francis, 2024, 10 pages <https://www.taylorfrancis.com/chapters/edit/10.1201/9781003384847-2/role-biomaterials-health-care-system-momina-shanwaz-mohammad-perugu-shyam>