# DEEKSHI ANGIRA


## CONTACT

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## EDUCATION

November 2019
PhD: Chemistry (Molecular Biology and Protein Biochemistry)
**Indian Institute of Technology Gandhinagar**, Gandhinagar, Gujarat, India
Thesis: "Molecular insight into the mechanism of human GSAP and P. aeruginosa G6PI: Biochemical and Biophysical studies"

September 2011
M.Sc.: Biochemistry
**Doon PG Paramedical College And Hospital**, Dehradun, Uttarakhand, India
Dissertation: "To study the sensitivity of PCR, BACTEC 460 and ZN Staining for the detection of Mycobacterium Tuberculosis"

April 2009
B. Sc.: Biotechnology
**Vallabh Government College**, Mandi, Himachal Pradesh, India Subjects: Biotechnology, Zoology and Chemistry

## LANGUAGES

English Hindi

## CERTIFICATIONS

- Completed ' **Drug Discovery'** an online non-credit course authorized by **University of California San Diego** and offered through Coursera.
- Completed ' **Targets, Assays & Screening**' an online non-credit course authorized by Novartis and offered through Coursera.

## PROFESSIONAL SUMMARY

Dedicated and driven Assistant Professor in Biotechnology with a strong foundation in molecular biology, protein biochemistry, and structural biology. Committed to fostering academic excellence through innovative, student-centered teaching, while actively engaging in impactful research. Experienced in leading and contributing to high-level scientific investigations, with a passion for mentoring future scientists and advancing knowledge at the intersection of biotechnology and life sciences.

## ACCOMPLISHMENTS

- Granted **Fulbright Nehru Postdoctoral Fellowship 2021**
- Granted **DBT-RA Fellowship 2021**
- Qualified **CSIR-NET JRF-Life Science with AIR** 70, 2013
- Qualified **GATE- Life Science** (96 percentile), 2013
- **PDB Best Poster Award** at 24th Congress and General Assembly of the International Union of Crystallography, Hyderabad, India, 2017
- **Best Poster award** at RSC West India Section Meeting of Research Scholars-2016, Gujarat, India, 2016
- **Best Poster award** at 3rd Nirma Institute of Pharmacy International Conference (NIPiCON-2016), Gujarat, India

## WORK HISTORY

Feb 2025 - Present
**Assistant Professor, Department of Biotechnology, Dr. Harisingh Gour Vishwavidyalaya, Sagar, MP.**

- Teaching
- Research

May 2022 - May 2024
**Fulbright Nehru Postdoctoral Researcher**, ***University of Texas Southwestern Medical Center***, Dallas, Texas

- Delving in the Era of Precision Medicine for Colorectal Cancer via KRASG13D Mutant as a Potential Target
- Advisor: Dr Kenneth Westover
- Contributed to and actively participated in research conception, design and execution to address defined problems.
- Conducted thorough literature reviews to inform experimental design and maintain awareness of current trends in the field.
- Presented research findings at international conferences, fostering knowledge exchange among peers.
- Established productive collaborations with interdisciplinary teams to address pressing scientific questions.
- Overcame technical challenges by troubleshooting equipment issues or refining experimental procedures as necessary.

March 2020 - February 2022
**Postdoctoral Researcher**, ***Indian Institute of Science***, Bangalore, Karnataka

- Biochemical Investigation of the res gene product in type III RM system of Helicobacter pylori
- Advisor: Prof Desirazu Narasimha Rao

July 2013 - August 2019
**Teaching Assistant**, ***Indian Institute of Technology***, Gandhinagar, Gujarat

- Conducted experimental demonstrations for B.Tech and M.Tech students, enhancing their practical understanding.
- Operated advanced equipment such as Circular Dichroism, FPLC protein purification systems, and Single Crystal X-ray diffraction instruments independently.
- Designed projects and mentored interns, contributing to their academic and professional growth.

October 2011 - July 2012
**Lecturer**, ***Doon (PG) Paramedical College and Hospital***, Dehradun, Uttarakhand

- Instructed B.Sc and M.Sc courses in Medical Laboratory Technology, Biotechnology, and Biochemistry, engaging an average of 30 students per class.
- Developed quizzes, examination papers, and home assignments for various courses, ensuring comprehensive assessment of student Knowledge.

February 2011 - April 2011
**Research Intern**, ***Auroprobe Research Laboratories***, Ghaziabad, Uttar Pradesh

- To study the sensitivity of PCR, BACTEC 460 and ZN Staining for the detection of Mycobacterium Tuberculosis

## TRAINING/ WORKSHOP

- Fulbright Visiting Scholar Workshop on Scientific Manuscript Publishing & Peer Reviews, Fulbright Grant Training Center, 2024
- Virtual training for Visiting Fulbright Professional Grant Development Workshop, Fulbright and IIE, 2023
- Science Communication Workshop, Wellcome Trust/ DBT India alliance, 2017
- Workshop and training on Mammalian Cell Culture Techniques, NIPER Ahmedabad, Gujarat, 2017

## PUBLICATIONS

- To Explore the Binding Affinity of Human γ-Secretase Activating Protein (GSAP) Isoform 4 with APP-C99 Peptides, Angira, D., Chaudhary, S., Abiramasundari, A., and Thiruvenkatam, V., ACS Omega, 8, 14, 13435-13443, 2023
- Structural and strategic landscape of PIKK protein family and their inhibitors: An overview, Angira, D., Shaik, A., and Thiruvenkatam, V., Frontiers in Bioscience, 25, 1538-1567, 2020
- Synthesis and characterization of a new class of phenothiazine molecules with 10H-substituted morpholine and piperidine derivatives: a structural insight, Hussain, J., Angira, D., Hans, T., Dubey, P., Kirubakaran, S., and Thiruvenkatam, V., Journal of Molecular Structure, 1219, 128546, 2020
- Characterization of P. Aeruginosa glucose 6-phosphate isomerase: a functional insight via in-vitro activity study, Angira, D., Natarajan, N., Dedania, S. R., Patel, D. H., and Thiruvenkatam, V., Current Topics in Medicinal Chemistry, 20, 29, 2651-2661, 2020
- Insights into supramolecular assembly formation of diethyl aryl amino methylene malonate (DAM) derivatives assisted via non-covalent interactions, Shaik, A., Angira, D., and Thiruvenkatam, V., Journal of Molecular Structure, 1192, 178-185, 2019
- Investigation of nicotinamide and isonicotinamide derivatives: A quantitative and qualitative structural analysis, Purushothaman, G., Angira, D., and Thiruvenkatam, V., Journal of Molecular Structure, 1197, 34-44, 2019
- Tracing the GSAP-APP C-99 interaction site in the β-amyloid pathway leading to Alzheimer's Disease, Angira, D., Chikhale, R., Mehta, K., Bryce, R. A., and Thiruvenkatam, V., ACS Chemical Neuroscience, 10, 8, 3868-3879, 2019
- Exploring a solvated dimer of Gefitinib: a quantitative analysis, Angira, D., Shaik, A., Kirubakaran, S., and Thiruvenkatam, V., Acta Crystallographica Section C: Structural Chemistry, 74, 8, 944-950, 2018
- Structural investigation and in-silico characterization of Plasmepsins from Plasmodium falciparum, Nair, D. N., Singh, V., Angira, D., and Thiruvenkatam, V., J. Proteom. Bioinform, 9, 181-195, 2016
- Induction of KRAS G13D dimers as a therapeutic strategy for colorectal cancer, Deekshi Angira, Lianbo Li, Zhiwei Zhou, Seungheon Lee, Joseph Ready, Kenneth Westover, Cancer Research, 03/15/24, 84, 6_Supplement, 1806, 10.1158/1538-7445.AM2024-1806
- Characterization of RAS assembly architectures in living cells, Zhou, Z., Li, X.-X., Meyer, C., Zhang, Y.-A., Angira, D., and Westover, K., Cancer Research, 04/01/23, 83, 2619, 10.1158/1538-7445.AM2023-2619
- Gamma secretase activating protein as profound target for Alzheimer's disease, Angira, D., and Thiruvenkatam, V., Acta Crystallographica Section A, 08/01/17, C1187, 10.1107/S2053273317083875