Dear Recruitment Team,
Intonation Research Laboratories
Hyderabad, India

I'm looking for suitable opportunities as a Sr. Research Associate/ (Sr)Scientist, in your reputed organization, which I believe would be the best place for me to put my skills and learnings to advance great science and research. I am currently a Post-Doctoral Research Associate in Cornell University, specializing in multi-step small molecule, peptide-lipid conjugation, solid phase syntheses and purifications. My interests vary from drug designing to medicinal chemistry and peptide conjugation, with rich understandings in the areas of anti-infective drug discovery. I come with the experience of working in a multi-cultural laboratory, working as an individual, and a team player as well. I am analytical minded, with a problem-solving approach. I believe my work here at Cornell has enabled me to handle multiple projects with ease, in addition to helping me in personal growth.

Prior to Cornell, I worked in CSIR-IICT, Hyderabad, as a DST-Inspire Research fellow, in the anti-infective drug discovery based on natural products. I learned good research, and technical skills; rational approach to drug designing, organic synthesis, and molecular docking studies. My work involved identification of chemically modifiable hotspots on the molecule, generate libraries of small molecules, purify, and characterize them. I was successful in establishing inter-departmental collaborations leading to good research publications. Mentoring an undergraduate, and two graduate students with multi-step organic synthesis and purification techniques taught me good, compassionate, and understanding leadership skills. Participating in Institute's activities enriched me with the value of team player and importance of its dynamics in an organization. My Master's program at NMIMS, Mumbai, involved multidisciplinary research projects, working with people from different departments, specially from pharmacology, in testing the libraries synthesized.

All the experiences I had academically have been extremely rewarding, and productive, shaping me into a good medicinal chemist that I am today. I strongly believe that it is in Industry where the real translation happens and I can apply my skills to their fullest in such an engaging, and exciting environment, in thinking out-of-the-box solutions for challenging issues.

I would very much appreciate the opportunity to interview for a suitable position. My curriculum vitae is enclosed for your perusal. Currently, I can be reached via email at pavanb.1488@gmail.com or pb456@cornell.edu or by phone at +1-607 280-9585 (USA number). I look forward to hearing from you soon.

Thank you for your time and consideration.

Sincerely,
Dr. Pavan Kumar. Bangalore

Bangalore Pavan Kumar (M.Pharm, Ph.D)

pavanb.1488@gmail.com; pb456@cornell.edu

www.linkedin.com/in/pavan-kumar-bangalore

Looking for a challenging position in Medicinal chemistry in a pharmaceutical or a biotech company.

SUMMARY

- Skills - multistep organic synthesis, Drug design and discovery, Autodock, Schrodinger, Peptide conjugate - synthesis and purification
- Instruments – Liberty Blue automated peptide synthesizer, Agilent HPLC and LCMS systems, FT-IR and NMR spectrophotometer.
- Softwares – MS OFFICE, Prism, Biorender (basics)
- Good communication skills, and team player. Language fluency in English, Hindi, and Telugu
- Published peer reviewed scientific articles in journals of international repute and participation/presentations in conferences

EDUCATION

CSIR-Indian Institute of Chemical Technology, Hyderabad, India

Ph.D., Chemical Sciences — Feb 2015- Jan 2021

SPP SPTM, NMIMS University, Mumbai, Maharashtra, India

Master of Pharmaceutical Chemistry — Jun 2011-May 2013

Gokaraju Rangaraju College of Pharmacy, Osmania University, India

Bachelor of Pharmacy (Pharmaceutical sciences) — Jun 2007-May 2011

RESEARCH EXPERIENCE

Cornell University, Ithaca, New York, USA

Postdoctoral Research Associate — Mar 2021-present

- Development of automated solid-phase methods to synthesize Oligo-Thioetheramides for biological applications
- Synthesis and purification of milli-gram scale peptide-lipid conjugates as antiviral agents (SARS and Measles viruses)
- Support in peptide synthesis (upto 5mer) in the lab for antibacterial activities

CSIR-Indian Institute of Chemical Technology, Hyderabad, India

DST-INSPIRE Research Fellow — 2021

- Thesis: Semi-synthetic derivatives of Usnic acid as potential antimicrobial agents. Successfully designed, identified various modifiable features on the molecule for furthering the drug discovery process. Involved in collaborated projects with scientists from Applied Biology and Mass spectrometry divisions
- In depth working knowledge on HPLC, LC-MS and IR spectroscopy instruments

CSIR-Indian Institute of Integrative Medicine, J&K, India

Junior Research Fellow, Department of Medicinal Chemistry 2014

- Underwent coursework training in Analytical chemistry, Medicinal chemistry, and Organic chemistry
- Helped senior colleagues in chemical synthesis and purification of various small molecules for biological applications

SPP SPTM, NMIMS University, Mumbai, Maharashtra, India

Research fellow 2013

- Thesis: Design and synthesis of 1,3,4-oxadiazole compounds based on 4-nitropyrrole scaffold. Involved in synthesis, purification, and characterization of libraries of 4-nitropyrrole and 3,4-dibromopyrrole scaffolds as anti-infective agents resulting in several successful publications
- Gained extensive knowledge on multi-step organic synthesis, molecular modeling, and instrument handling
- Interdisciplinary project: In vivo evaluation of anti-inflammatory effect of 4,5-Dibromopyrrole based thiazolidinones using rat paw – carrageenan method
- Assisted colleagues in collaborated projects and trained people from other departments in various organic synthetic and purification techniques
- Awards – University first rank in Pharmaceutical Chemistry, NMIMS.

LEADERSHIP AND MENTORING SKILLS

- Mentored undergraduate and graduate students during PhD tenure at IICT in synthesis, purification techniques, taught courses drug design and medicinal chemistry to incoming graduates as a part of coursework
- Assisted in conducting laboratory experiments for undergrads in M.Pharmacy and trained colleagues from other departments in synthetic techniques as a part of their interdisciplinary projects
- Organized events [academic and cultural] during Master's and PhD tenure
- Taught Medicinal chemistry, biochemistry, pharmacology and conducted practical examinations in the same during my teaching tenure. Assisted the management in PCI [Pharmacy council of India] inspections.

SKILLS

- **Medicinal Chemistry**: Drug discovery | Structure & Fragment based drug design | Multi-step organic synthesis | Peptide synthesis | Purification techniques | NMR spectroscopy | Mass spectrometry | HPLC | FT-IR |
- **Instruments**: Agilent HPLC | Prep-HPLC | LC-MS | Perkin-Elmer FT-IR | UV-VIS spectrophotometer | Bruker/Avance NMR spectrophotometer |
- **Interpersonal skills**: Effectively collaborated and communicated with colleagues and scientists from interdisciplinary fields outlining hypotheses and objectives while having stimulating discussions on the subject
- **Computer skills**: MS OFFICE (word/Excel/Powepoint/Onenote), Molecular modeling suites (Autodock/Schrodinger/Pymol/DiscoveryStudio)

- **Communication skills**: Good written and oral communication (publications/posters). Fluency in English/Hindi/Telugu. Effectively communicate technical matters across the board

SELECTED PUBLICATIONS

- ***Pavan Kumar Bangalore***, et al., "Bismorpholino-Triazine Containing Chalcones as Anti-Infective Agents. A Study on Antiviral, Antibacterial and Anti-Tubercular Properties", (Manuscript submitted to *European Journal of Medicinal Chemistry*, *2022*)
- ***Pavan Kumar Bangalore***, et al., "Usnic acid enaminone-coupled 1,2,3-triazoles as antibacterial and antitubercular agents", *Journal of Natural Products*, 2020, *83*, 26-35.
- Jyoti Kannoujia, ***Pavan Kumar Bangalore***, Srinivas Kantevari, Prabhakar Sripadi, "Identification and characterization of impurities in an insecticide, bifenthrin technical", *Journal of Mass Spectrometry*, 2020, *55*, e4605.
- Rajesh A. Rane, and ***Pavankumar Bangalore***, et al., "Novel synthetic compounds inspired from antifeedant marine alkaloids as potent bacterial biofilm inhibitors", *Bioorganic Chemistry*, 2015, *61*, 66-73.
- Rajesh A. Rane, and ***Pavan Kumar Bangalore***, et al., "Synthesis of novel 4-nitropyrrole-based semicarbazide and thiosemicarbazide hybrids with antimicrobial and anti-tubercular activity", *Bioorganic and Medicinal Chemistry Letters*, 2014, *24*, 3079-3083.
- Rajesh A. Rane, ***Pavankumar Bangalore***, et al., "Synthesis and evaluation of novel 4-nitropyrrole-based 1,3,4-oxadiazole derivatives as antimicrobial and anti-tubercular agents", *European Journal of Medicinal Chemistry*, 2013, *70*, 49-58.
- Rajesh A. Rane, ***Pavankumar Bangalore***, et al., "Synthesis and evaluation of novel marine bromopyrrole alkaloid-based hybrids as anticancer agents", *European Journal of Medicinal Chemistry*, 2013, *63*, 793-799.

CONFERENCES

- "(*E*)-3-(4-((*E*)-(2-(4,6-dimorpholino-1,3,5-triazin-2-yl) hydrazineylidene)methyl)phenyl)-1-aryl-prop-2-en-1-ones as potent antiviral and antitubercular agents", in INTERNATIONAL CONFERENCE ON DRUG DISCOVERY 2020", organized by BITS-Hyderabad campus, Telangana.
- "Usnic Acid Enaminone-Coupled 1,2,3-Triazoles as Antibacterial and Antitubercular Agents", in 9th Ramanbhai Foundation International Symposium on Current Trends in Healthcare, "Advances in New Drug Discovery and Development (February 2020)", organized by Zydus Cadilla, Ahmedabad, Gujarat.
- 21st CRSI National symposium in chemistry (July 2017) organized by CSIR-Indian Institute of Chemical Technology, Hyderabad, Telangana, India.
- "Design, synthesis and docking studies on 1,3,4-oxadiazole compounds based on 4-nitropyrrole scaffold", in 19th ISCB international conference (March-2013) at MLSU, Udaipur, Rajasthan, India.
- 1st prize in "Young Innovators Choice Competition, ICT-Mumbai" for presenting a novel solution to petroleum industry problem (Jan-2012)