



Dr. A. RAMARAO

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Vijayawada, India, 521137

- Passionate about Science Outreach and Education, Amateur Chemistry experiments and scientific writing and publication. Seeking for a position as an Assistant Professor in Chemistry to utilize my expertise and contribute to the field of scientific research and education.

Skills

Analytical document review GMP Data Integrity Audit trails Training MS-Office
Characterization Scifinder Reaxys Chemdraw ACD Labs etc. Student research guidance
Mentoring students Syllabus development Interdisciplinary collaboration Conference presentations
Teaching and Learning Strategies Research Ethics Academic Writing Student Assessment
Laboratory Investigations

Education

- **Krishna University**
Ph.D in Analytical Chemistry
Machilipatnam, India Aug 2024
"Analytical Method development and validation for the degradation and quantification of antiviral drugs"
- **University of Tartu, University Of Tartu**
Certification course in LC-MS Method Validation - LC-MS
Tartu, Estonia Nov 2023
- **Leipzig University**
Masters in Chemistry - Advanced Spectroscopy in Chemistry
Leipzig, Germany Oct 2011
 - Thesis "Derivatization of biologically relevant alpha-dicarbonyl compounds for LC-ESI-MS analysis"
- **Acharya Nagarjuna University**
Masters in Organic Chemistry
Andhra Pradesh, India Apr 2004
- **JKC College, Acharya Nagarjuna University**
B.Sc - Maths , Physics & Chemistry
Guntur, Andhra Pradesh Apr 2002

Experience

- **PB Siddartha College of Arts & Science**
Assistant Professor

- Participated in department meetings to provide input to colleagues about student achievement and improvement.
- Instructed students in lab by teaching safety protocols for proper use of chemicals and safe disposal of hazardous materials.
- Positive learning environment and handle conflicts and promote student engagements
- Contributed to the development of departmental curriculum, ensuring alignment with national standards and best practices in chemistry education.
- Attended meetings to develop and maintain strong and vibrant instructional institution.

● - Micro Labs Limited

Assistant Manager

Bangalore, Karnataka

Feb 2021 - Jun 2022

- Supervised day-to-day operations to meet performance, quality and service expectations.
- Managed Analytical quality assurance (AQA) team to ensure Quality control and Microbiology activities
- Mentored junior staff members in their professional development by offering guidance/support in their assigned roles.
- Provided hands-on Instruction and guidance to students during laboratory sessions, ensuring proper use of equipment, adherence to safety protocols, and accurate data collection and analysis
- Trained and coordinated with employees in understanding the important of Compliance
- Reviewed and/or wrote SOPs (Standard operating procedures) and work Instructions
- Responsible for investigation of Laboratory Incidents, OOS & OOT to comply FDA & MHRA
- Audit trail review of HPLC, GC, UV-Vis, FT-IR, Polari meter, Dissolution, KF etc

● - Natco Pharma Limited

Senior Executive

Hyderabad, Telangana

Dec 2017 - Feb 2021

- Analysis of raw materials, novel molecules/API Intermediates
- Analysis and report preparation of NMR, PXRD, HPLC, UV-Vis , FT-IR, UV-Vis, HPLC etc
- Review and archival of analytical documents, Inwards, log books to comply USFDA
- Mentored and supervised graduate Intern students
- Ability to work independently or collaborative environment
- Experienced in the preparation of weekly, monthly and yearly reports

● - Sriji Degree College

Visiting Faculty

Ongole, Andhra Pradesh

Jul 2015 - Dec 2015

Taught undergraduate level courses in Organic, analytical and physical chemistry

● - Aalto University

Project Employee

Helsinki, Finland

Aug 2012 - May 2014

- Assisted with day-to-day operations, working efficiently and productively with all team members.
- Worked effectively in fast-paced environments.
- Served as teaching assistant for Wood chemistry, General chemistry, Interfacial science, (Lab and lecture modules)
- Mentored numerous graduate students in their research projects and lab work
- Interaction study of Cellulose thin films with water and spreading properties (Morphology & Swelling studies) using Atomic force Microscopy, QCM-D Instruments
- Proven ability to learn quickly and adapt to new situations.
- Participated in team projects, demonstrating an ability to work collaboratively and effectively.

● - Leipzig University

Research Assistant

LEIPZIG, Germany

Oct 2011 - Jul 2012

- Participated in lab meetings and project presentations.
- Prepared samples for analysis by performing complex sample preparation tasks.
- Trained and supervised junior technicians in laboratory protocols.
- Led Undergraduate Laboratory classes, Instructing students in experimental techniques and safety protocols while fostering a collaborative learning environment.
- Performed analytical tests on samples for LC-MS & NMR analysis
- Contributed to the publication of research articles in peer-reviewed journals, showcasing expertise in various topics.
- Managed laboratory equipment and resources, ensuring proper maintenance and optimal functionality.
- Optimized lab equipment usage, significantly reducing operational costs and downtime.
- Implemented rigorous quality control measures, elevating standard of research outputs.

Syngene International Limited -BBRC

Scientist

Bangalore, Karnataka

Mar 2007 - Sep 2009

- Mentored junior scientists, elevating overall expertise within team.
- Enhanced laboratory efficiency by streamlining experimental protocols.
- Developed new chemical compounds with improved properties, meeting and exceeding project goals.
- Synthesis, Purification and characterization of Organic and Inorganic compounds
- Peptide synthesis and characterization
- Characterization of synthesized compounds with a full suite of spectroscopic techniques (NMR, IR, UV-Vis) and MS techniques.
- Fostered collaborations with international research teams, enriching scope of scientific inquiry.

TCG Life Sciences (Chembiotek)

Research Chemist

Kolkata, West Bengal

Oct 2005 - Feb 2007

- Synthesis of pharmaceutical active molecules from mg to Pilot level for USA based client
- Carried out laboratory tests and experiments to analyze, identify and isolate chemical compounds.
- Familiar with column chromatography, crystallization techniques to purify compounds
- Execution of projects in timely manner and reporting to supervisor on day to day activities
- Increased product quality by designing and executing experiments to optimize chemical processes.

Dr Reddys Laboratories

R & D Trainee Officer

Hyderabad, Telangana

Mar 2005 - Sep 2005

- Supported department objectives by completing assigned tasks accurately and efficiently.
- Streamlined workflow processes by identifying areas for improvement and proposing feasible solutions.
- Involved in the synthesis of Anticancer drugs

Honors & Awards

- Erasmus Mundus Scholarship, Received to pursue Euro master Program in Advanced Spectroscopy in Chemistry funded by European Union, 2009-2011

Certifications

- Received Certificate in LC-MS Method development (2ECTS) from University of Tartu, Estonia, 2024
- Received Certificate on "Fascinating spectra of magic compounds" from International Summer School on Molecular Spectroscopy by ASC Consortium, Oppurg, Germany, 2010.

Publications

- Stability Indicating RP-HPLC Method for estimation of Eight Critical Impurities present in Lucasamide and their degradation Impurities, Manuscript submitted under review.
- Insilico Studies on 1,2,4-Thiadiazole-Imidazoles as Potential Anticancer Agents, Current Trends in Biotechnology and Pharmacy, Vol. 18(4) 2085-2106, October 2024 DOI: 10.5530/ctbp.2024.4.54
- Simultaneous Estimation of Dolutegravir and Rilpivirine and their Impurities using RP-HPLC, Oriental Journal of Chemistry, 40, 1, 40-48, 2024.
- Analysis of Forced degradation products in Rilpivirine using RP-HPLC and peak purity evaluation, Oriental Journal of Chemistry, 39, 6, 1534-1539, 2023.
- Analytical Method development and Validation of stability Indicating RP-HPLC Method for the simultaneous estimation of Dolutegravir, Emtricitabine and Tenofovir disoproxil fumarate, International journal of Membrane Science and Technology, 10, 3, 3295-3302, 2023.
- In vitro-In vivo simulation studies on Capecitabine loaded Niosomes intended for brain targeting, Current Trends in Biotechnology and Pharmacy, 17, 3, 2023.
- Bio-Analytical Method development and validation for simultaneous determination of Sofosbuvir and Ledipasvir in human plasma in bulk form by RP-HPLC, Journal of Cardiovascular Disease Research, 12, 5, 2021.
- Forced degradation stability Indicating assay study of Atorvastatin calcium amorphous by HPLC with PDA Detector, GIS Science Journal, 8, 7, 2021.
- Ultrasound assisted Cu-Catalyzed decarbonylative Sonogashira coupling-cyclization strategy: Synthesis and evaluation of 3-heteroarylmethylene isoindolin-1-ones against SIRT1, Journal of Molecular Structure, 1250, 131788, 2021.
- Derivatization of Methyl Glyoxal for LC-ESI-MS analysis-Stability relative sensitive of different derivatives, Molecules 23 (11), 2994 doi:10.3390/molecules23112994, 2018
- Correlation between cellulose thin film supramolecular structures and interactions with water, Soft Matter, 11, 4273-4282, 2015
- Artifacts in amine analysis from anodic oxidation of organic solvents upon electro spray ionization for mass spectrometry, European Journal of Mass spectrometry, 18, 3, 301-312, 2012

Conferences/Seminars/Workshops

- Poster presentation at International conference on Functional and Smart Materials (ICFSM-2K25), KBN college in collaboration with APSCHE, Vijayawada 2025.
- Participated in National level training workshop on " Conservation of micro fauna for riverine ecosystems for university professors at Wild Life Institute of India & National Mission for Clean Ganga (WII-NMCG), Dehradun organized by Ministry of Jalsakthi, India 2025
- Participated in "Intellectual property rights" workshop organized by JKC College, Guntur in collaboration with Govt India 2024.
- Participated in International conference in New age technologies in therapeutics-2024 in collaboration with AP Academy of Sciences, PB Siddhartha College of Arts & Science, Vijayawada 2024.
- Oral presentation on Bio-analytical method development and validation for simultaneous estimation of Sofosbuvir and Velpatsvir in spiked human plasma by RP-HPLC, ICONPAC-2024, KL University, Vijayawada, 2024
- Participated in the one week online FDP on Enhancing the academic and intellectual environment in the higher educational institutes, Krishna University, A.P, 2022.
- Poster Presentation at Andhra Pradesh Science Congress organized by Andhra Pradesh Akademi of Sciences, 2018
- Participated in International seminar on Technologies & Innovations for Societal advancement (TISA-2018), Vuyyuru, A.P, 2018
- Poster Presentation at 2nd Andhra Pradesh Science Congress organized by Andhra Pradesh Akademi of Sciences organized by NTR University of Health Science, Acharya Nagarjuna University & Krishna University, Vijayawada, 2016
- Participated in the National Seminar on Empowerment of Youth-Preparing for Future, Rajiv Gandhi National Institute of Youth development (YDP), PB Siddhartha College of Arts & Science, Vijayawada, 2015

- Poster presentation on Assessment of water interactions of nanoscaled cellulosic structures using surface sensitive methods, 4th International Colloids Conference, Surface Design and Engineering - Madrid, Spain 2014.
- Poster Presentation on Biorefinery products. Initial process piloting and material prototype production in the case of barriers, 3D-mouldable packaging and filters, Fubio seminar, Finnish Bioeconomic Cluster (FIBIC), Espoo, 2014
- Oral presentation on Interactions between butylated xylan and cellulose-Nano scale surface modification for effective barrier solutions, European Polysaccharide Network of Excellence (EPNOE) conference, Nice, France, 2013
- Poster presentation on Some aspects on efficient polysaccharide based barrier material development, Fubio annual seminar, VTT Finland, 2013
- Poster presentation on Derivatization of biologically relevant α -carbonyl compounds for LC-MS analysis, Leipzig Research Festival for Life Science, Germany, 2011
- Participated in the International Summer School on Molecular Spectroscopy, Fascinating spectra of magic compounds, ASC Consortium, Oppurg, Germany, 2010
- Participated in annual seminar held by the Institute of analytical chemistry and bio-analytical chemistry, supported by Internationals Promotions Program, Colidtz, Germany, 2010

VOLUNTEER WORK

Indian Chapter President 2013 - 2015
Erasmus Mundus Alumni Indian Chapter • Germany

Program Representative 2012 - 2013 & 2013-2014
Erasmus Mundus ASC Alumni Association • Leipzig, Germany

Research Interests

Analytical Method development

Structure Characterization

Impurity Profiling

Organic Synthesis

Natural product synthesis & Isolation

Bioproduct Chemistry

Nanomaterials