

Dr. K.Sujatha Drug Discovery Research Laboratory



Dr. K.Sujatha

M. Pharm. PhD

Professor & Vice-Principal

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https://scholar.google.com/citation
s?user=o55Bw6QAAAAJ&hI=en

Research Focus

Synthesis and Pharmacological activities of novel heterocyclic compounds, Development of Antidiabetic and Antiviral herbal nanoparticles. Analytical method development and its validation.

Personal Profile

Dr.K.Sujatha is a renowned academician with 27 years of experience in teaching and research. Her contributions towards the scientific community include contribution of research publications (65) and granted patents (4). The field of work included conventional synthesis and computational methodologies Analytical method development and validation, phytochemical quantification using advanced spectroscopic analysis for drug discovery. She has participated and presented papers in various National and International conferences. Received certificate appreciation for the best research paper in Dr. P. D. Sethi annual award-2011. She is a recipient of GATE Young Faculty Researcher Grant from SRIHER (DU) and has also received grant from PCI for the conduct of CPE programs. Her other marked achievements include, subject expert in the domain of Pharmaceutical Chemistry, NBE, Ministry of Health and Family Welfare, New Delhi.

Team Members



- Ms. K. Sravani- Research Fellow Assessing the development and spread of antimicrobial resistance from pharmaceutical effluents in South India.
- Mr. Chakkali Ayyana Research Fellow Brain Targeted novel flavonoid formulation for the treatment of cognitive impairment.
- Ms. Deepika .B Research Fellow Formulation and evaluation of Matrix type sustained release drug delivery systems.
- Ms. P. Sravani Research Fellow Design and Characterization of pulmospheres for the treatment of idiopathic pulmonary fibrosis.
- Mr. Jainendra Kumar Jain Research Fellow Development and Validation of liquid Chromatography analytical method for the simultaneous determination of the kinase inhibitors including cleaning validation in pharmaceutical manufacturing activities.
- Ms. Yemi Reddy Padma Research Fellow Synthesis, Characterization, Anti-sarcoma and Anti-tubercular evaluation of Pyridinethiazole containing Azetidinone and Thiazolidinone derivatives.
- Ms. Sindhu Research Fellow Exploring the association of ESR1 and ESR2 gene polymorphisms with metabolic syndrome in Peri and Post-Menopausal women
- Mrs. Racha Umadevi Research Fellow Design and Synthesis Of Quinoxaline Bearing Hybrid Molecules Taraeted For Anti-Cancer And Anti-Inflammatory Activities.

Key Publications

- Sravani Kamatham, Manoharan Seeralan, Uma Sekar, and Sujatha Kuppusamy, et al. Development and Validation of UFLC-MS/MS Analytical Method for the Simultaneous Quantification of Antibiotic Residues in Surface Water, Groundwater, and Pharmaceutical Waste Water Samples from South India. ACS Omega. 2024; 9(11): 12801– 12809. https://doi.org/10.1021/acsomega.3c08566
- Ajitha Azhakesan, Sujatha Kuppusamy, et al. Analytical Quality by Design-Assisted HPLC Method for Quantification of Canagliflozin and Stability Studies. ACS Omega. 2023;8(8):7407-7414.

https://doi.org/10.1021/acsomega.2c06038

- Siri Chandana M, Sujatha K, Ajitha A, Pentu Narendra, Sonia K, et al. QbD Based Stability Indicating RP-HPLC Method Development and Validation for the Estimation of Favipiravir—an Eco-Friendly Approach, J AOAC. 2024; 107(3):377-386. doi: 10.1093/jaoacint/qsae009
- 4. Chakali Ayyanna, Sujatha Kuppusamy, and Pasala Praveen Kumar, et al. An Overview of Pharmacological Activities and Beneficial Effects of 3-Hydroxyflavone Macromol. Symp. 2024: 413(2), 1-7, doi: 10.1002/masy.202300078
- 2024; 413(2), 1-7. doi: 10.1002/masy.202300078
 Sravani Kamatham, S. Manoharan, Uma Sekar, K. Sujatha, et al. AMR Mitigation: From Regulations to Alternatives. Adv. Biores.2023; 14 (4): 334-346. doi: 10.15515/abr.0976-4585.14.4.334346.

Project

Current:

1. Targeting ER-positive metastatic breast cancer with coumarinsulfonamide scaffolds as steroidal sulfatase inhibitors in the treatment of breast Cancer.

Funding Agency: SRIHER (DU).

Duration: 2024-2025

Description: Receiving a grant of 1.0 Lakhs from SRIHER (DU) as the Co-Investigator, with Dr. Srimathi from SRFOP, SRIHER, as a Principal investigator.

2. Exploring the association of ESRI and ESR2 gene polymorphisms with metabolic syndrome in Peri and Post-Menopausal women. Funding Agency: SRIHER (DU)

Duration: 2024-2025

Description: Receiving a grant of 1.0 Lakhs from SRIHER (DU) as the Co-Investigator, with Dr. S. Sindhu from SRFOP, SRIHER, as a Principal investigator.