

Dr. SHARAD S

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An enthusiast of biotechnology, skilled at plant tissue culture, animal cell culture, microbiological and molecular biology lab procedures along with usage of bioinformatic tools. Also expertised in handling and performing HPLC, Spectroscopic (Fluorescence and UV-Vis) techniques.

Qualification:

2015/June – 2021/October	PhD in Biotechnology (BMS College of Engineering)
2011/August – 2013/September	M-Tech in Bioinformatics (PES institute of Technology)
2007/July – 2011/July	B E in Biotechnology (PESIT – Autonomous under VTU)
2005/August – 2007/August	PUC in PCMB (Sri Bhagawan Mahaveer Jain College)

Skills:

- HPLC (Shimadzu) and Fluorescence Spectroscopy (Perkin Elmer).
- UV-Vis spectroscopy (Thermo Fisher: GENESYS).
- Bio-informatic analysis (in-silico docking, ADME studies, sequence analysis).
- Plant/ animal tissue culture and Phytochemical analysis.
- Microbiology and molecular biology (antibacterial, antifungal, staining and culture techniques).
- Proficient in Microsoft word, excel, power point, HTML, CAED (Solid edge).

Research experience:

- Research work based on the simulation of the cervical cancer pathway to identify the novel candidate genes.
- Mechanistic approach in studying the mode of action of phytochemicals in diabetic pathways.
- Molecular docking of phytochemicals with key molecules to study their interactions.
- ADME studies in identifying the most potent/effective phytochemical in plant extracts.

Responsibilities:

- Research Lab Assistant in management of several biotechnological laboratories.
- Mentoring UG students for plant tissue culture projects.
- Teaching Assistant in handling Genetic engineering and Immunology along with Bio-pyhton and Heat and Mass transfer laboratory.

Work experience:

- Teaching Assistant at BMS College of Engineering for Genetic Engineering and Immunology, Heat and Mass Transfer, Bio-python (from 2022 to 2023).
- A freelance translator of SWAYAM (Biology subject) course modules (English to Kannada) assigned by LTRC, IIIT-Hyderabad from 2022.
- Member Research at “Punarva” (a venture lab at PESU - PVL) (from 2021 to 2022).
- Project Assistant (under DST funded project) entitled “Feasibility study to develop instrumentation and field studies on in-situ extraction of tender coconut water from coconut tree” (2014-2015).
- Establishment and maintenance of medicinal garden at BMS College of Engineering (May 2015).
- Cultivation of medicinal, aromatic and common plants by hydroponics and aeroponics (June 2015).
- Extraction of aromatic and essential oils from medicinal plants at PESU (March 2021).

Consultancy works handled:

- Performed HPLC analysis of plant extracts and in-organic solvents (Consultancy works from RV College of Engineering, Dravidian university, Rani Chennamma University, Atrimed Pharmaceuticals Pvt. Ltd., Victoria hospitals).
- Performed fluorescence spectroscopy of organic solvents (Consultancy works from BNMIT and Dayanandsagar University).
- Performed the phytochemical analysis to quantify the constituents in the herbal formulations (Consultancy work from Miracle drinks).

Achievements:

- Resource Person for two days Hands on Workshop on Plant tissue culture at PES University.
- Had a pivotal role in establishment and set-up of a plant tissue culture laboratory (Punarva – PESU venture lab) in PESU.
- Successful in standardizing and producing 15 varieties of tissue cultured medicinal, aromatic and ornamental plants within a short span of time.
- Identifying the suitable handheld, lightweight, easy to use equipment for extracting coconut water from intact coconut.

Publications and Presentations:

- Articles published: 5 (Communicated: 01)
 - RI score: 1.1 (A simple and efficient micropropagation protocol for developing plantlets of *Exacum bicolor* Roxb. -an endangered, ornamental, and antidiabetic herb, DOI: 10.22159/ajpcr.2021v14i5.40966).
 - RI score: 3.5 (Comparison of phytochemical components in leaves and stems of *Exacum bicolor* Roxb. by GCMS, DOI: 10.20959/wjpps20177-9655).
 - RI score: 3.9 (Bioprocessing of Areca husk in solid state fermentation using *Trichoderma viride* for cellulose production, DOI: 10.36106/ijar).
 - ADME analysis of the crude extracts of *Exacum bicolor* Roxb. and in vitro screening for antioxidant, antimicrobial and cytotoxicity assays. Asian Journal of Chemistry; Vol. 34(10) 2022, 2633-2638, (DOI: <https://doi.org/10.14233/ajchem.2022.23847>).
 - A chapter on “A simple & efficient micropropagation protocol for developing plantlets of *Exacum bicolor* roxb.- an endangered, ornamental and antidiabetic herb” in Recent Advances in Pharmaceutical Sciences - Volume 8.
- Oral presentation: 2
 - At CSIR-IICT Platinum Jubilee International Conference on Biotechnological Research and Innovation for Sustainable Development (XV BRSI Convention and V Asia-Oceania Algae Innovation Summit (AOAIS)) held at CSIR-Indian Institute of Chemical Technology, Hyderabad.
 - Awarded with a cash prize in the CHEMCORE 2011 National level conference organized by MVJ College of Engineering.
- Poster presentation: 1
 - Presented a poster on “Induction of florets in *Exacum bicolor* Roxb an endangered plant species” in a young researcher’s rapid presentation session at BioSD 2018 International conference in CSIR-Hyderabad.
- Sequence submitted to NCBI - Genbank: 1
 - The RBCL chloroplast genes of *Exacum bicolor* Roxb. were sequenced and has been deposited in Genbank with accession no. MN603761.

Additional Info:

- Qualified in the KSET examination.
- Recipient of TEQIP scholarship for four years at BMSCE.
- Qualified and recipient of the GATE scholarship for two years at PESIT.
- Trained in plant tissue culture techniques and acclimatization of plantlets at Indo-American Hybrid Seeds Pvt. Ltd. (INDAM).
- Seminars and conferences (FDP) attended: 15

Personal info:

Name SHARAD. S. ACHAR
Languages Kannada, Hindi & English