











Hands on Training On

PHYTOMEDICINES: EXTRACTION, PURIFICATION, IN VITRO & IN VIVO STUDIES

July 24th- 30th, 2022

Organized by

Department of Biochemistry, Kuvempu University Department of Biotechnology, Sahyadri Science College and

JSS Academy of Higher Education and Research, Mysuru



In association with

Department of Science and Technology (DST-STUTI), Government of India

For any details, Please contact

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ABOUT THE ORGANIZATIONS

KUVEMPU UNIVERSITY

Kuvempu University is located in Shankaraghatta near Bhadra river project, Shivmogga District, Karnataka, India. It was established in the year 1987 and named after a great kannada writer Sri Kuppalli



Venkatappa Puttappa (KUVEMPU), first jnanapitha awardee in kannada literature. The University has achieved a district academic profile and a cultural identity of its own. It offers a multidisciplinary academic program at the Undergraduate, Masters and Doctoral levels. The university is accreditated by NAAC with 'A' Grade and also awarded 81 ranking in all India level by National Institutional Ranking Framework (NIRF), MHRD, India. In the Scimago global and Indian ranking, Kuvempu University is placed 45 among the Indian Institutes. Kuvempu University has been placed 3rd in the Karnataka State University Ranking Framework (KSURF) list by getting 4 stars.

SAHYADRI SCIENCE COLLEGE

Sahyadri Science College is a constituent college of Kuvempu University, Shivamogga, Karnataka, India. Institution rests on strong academic foundation, blended with a



contemporary approach that sculptured young students into successful role models. This has been the legacy, for the past eight decades since its establishment in 1941.



JSS ACADEMY OF HIGHER EDUCATION & RESEARCH, MYSURU

JSS Academy of Higher Education & Research (AHER), formerly known as JSS University, was established in the year 2008 with four constituent colleges – JSS Medical College and Hospital, JSS Dental College and Hospital, JSS College of Pharmacy, Mysuru, and JSS College of Pharmacy, Ooty. In addition, JSS AHER has taken initiatives to enhance community health education and outreach activities by establishing departments of Water and Health (2011) and Health System Management Studies (2012). To expand our horizons in the field of Basic Health Science, the Faculty of Life Sciences with many basic and applied science departments was also initiated in the year (2013). JSS Mahavidyapeetha has been a guiding force providing support and encouragement to the JSS AHER and its initiatives.

JSS AHER has embarked on the international path through strategic initiatives and collaborations. These globalization efforts over the years have provided the students of JSS AHER and the healthcare professionals with an 1800-beds super-specialty tertiary care hospital, Mysuru. The hospital caters to a population of 3 – million people from all over Karnataka and India. This rich clinical environment along with dedicated faculty and physicians enables students and trainees to enhance their experience and professional development.

DEPARTMENT OF SCIENCE & TECHNOLOGY (DST-STUTI), GOI

The Department of Science and Technology (DST) is a department within the Ministry of Science and Technology in India. It was established in May 1971 to promote new areas of science and technology and to play the role of a nodal department for organizing, coordinating, and promoting Scientific and Technological activities in the country. It gives funds to various approved scientific projects in India. It also supports various researchers in India to attend conferences abroad and go for experimental works. The Scheme 'Synergistic Training program Utilizing the Scientific and Technological Infrastructure' (STUTI) is intended to build human resources and its knowledge capacity through open access to S&T Infrastructure across the country. As a complement to the various schemes of DST funding for expansion of R&D Infrastructure at academic institutions, the STUTI scheme envisions a hands-on training program and sensitization of the state-of-the-art equipment as well as towards sharing while ensuring transparent access to S&T facilities.

ABOUT THE WORKSHOP

This workshop focus on hands-on training on phytochemical (a) extraction methods; (b) purification from the extracts based on their charge, hydrophobicity and size; and (c) characterization of purified molecules using UV-Visible spectrophotometric, Thin Layer Chromatography (TLC) and High-Performance Liquid Chromatographic (HPLC) procedures.

In addition, the workshop provides training in (a) mammalian cell culture methods (freezing-, thawing-, and propagation of cell lines, cell viability determination by MTT etc); (b) extraction of total RNA, quality assessment, cDNA synthesis and quantitative realtime-polymerase chain reaction (qRT-PCR); and (c) isolation and quantification of proteins from cultured cells, followed by detection of a specific protein by SDS-PAGE and western blotting. Furthermore, senior professors and industry leaders will deliver expert talks covering the frontier areas of drug discovery from natural sources. Sessions pertaining to preclinical evaluation of phytomolecules will also be covered during this workshop.

In summary, this DST-STUTI sponsored 7-days workshop is a well-designed package to train the participants in the areas of phytomedicines isolation, purification and characterization as well as in the basic concepts of cell culture, drug screening and molecular methods of analyzing the mode of action of drugs.

KEY OBJECTIVES

- Provide knowledge and experimental skills to the researchers working in the areas of phytopharmacy and pharmacology
- Introduce the methods of cell culture, drug screening protocols, familiarize the participants to tools such as RT-PCR and western blotting, which are widely used in determining the mechanism of action of drugs
- Extend the net-working opportunities to the participants by introducing leaders in the areas of phytomedicine research

WHO CAN ATTEND

The workshop is open to Faculty/ research scholars/ postgraduate students working in the field of Biochemistry, molecular biology and biotechnology from all institutes, colleges, and universities.

REGISTRATION PROCEDURE

Participants can register for this workshop by filling up the given google form.

They should upload the resume, recent passport size photo along with a write-up (minimum 100 words) describing their interest in participation. The number of participants to this event is limited to 30 and the selection will be based on competence of the participants to the theme of the workshop. Postgraduate students and research scholars who wish to apply for the workshop should submit a letter of recommendation from their respective higher authority.

There will be no registration fees. Food and accommodation will be provided by the organizers as permissible under the DST STUTI grant rules.



DST STUTI PMU Coordinator

Dr. Prashant Vishwanath, MBBS., MD., PhD

Director (Research) & IQAC Coordinator JSS AHER, Mysore.

Resource persons:

- Dr. Dinesh A. Nagegowda, AcSIR and Senior Principal Scientist, CSIR-CIMAP Research Center, Bengaluru
- Dr. Vadlapudi Kumar, Professor, Depart. of Biochemistry, Davangere University
- Dr. Gajanana C. Joshi, Associate Professor, Dept. of Biochemistry, Mangalore University
- Dr. Sharangouda, Assistant Controller of Patents & Designs, The Patent office, Government of India, Chennai
- Dr. Mahantesha B. N. Naika, Assistant Professor, Dept. of Biotechnology & Crop Improvement, University of Horticultural Sciences, Bagalkot

Dept. of Biochemistry, Kuvempu University, Shivmogga

- Dr. Niranjana Pathappa, Associate Prof. and Chairman
- Dr. S.E.Neelagund, Professor
- Dr. G.J.Sathisha, Professor
- Guest Faculty and Research Scholars

Dept. of Biotechnology, Sahyadri Science College, Shivmogga

- Dr. B.T. Prabhakar, Associate Professor
- Dr. C.K. Ramesh, Professor
- Dr. Pradeepa K., Assistant Professor
- Guest Faculty and Research Scholars

JSS Academy of Higher Education & Research, Mysore

Dr. M.V.S.S.T. SubbaRao, Professor
 CEMR, Depart. of Biochemistry, JSS Medical College

Conveners:

- Dr. Kiran Kumar M N, Assistant Professor
 Dept. of Biotechnology & Bioinformatics, JSS AHER, Mysore
- Dr. Dhanya B E, Project Coordinator DST-STUTI Program, JSS AHER, Mysore











Department of Science & Technology

DST-STUTI

Department of PG Studies & Research in Biochemistry Jnana Sahyadri,

Department of Biotechnology, Sahyadri Science College, Kuvempu University, Shivamogga.

JSS Academy of Higher Education & Research, Mysore

Cordially invite you to the Inauguration of
Training Program

PHYTOMEDICINES:

EXTRACTION, PURIFICATION, IN VITRO & IN VIVO STUDIES

Date: 24-07-2022 to 30-07-2022

Time: 9.00am to 6.00pm

Venue: S. P. HIREMATH HALL, Jnana Sahyadri, Kuvempu University

Presided by

Prof. B.P. Veerabadrappa

Vice Chancellor Kuvempu University

Chief Guest

Mrs. Anuradha G K.A.S.

Registrar, Kuvempu University

Prof. Rajeshwari N

Principal, Sahyadri Science College

Dr. Prashanth Vishwanath

Director(Research), JSS AHER, Mysore.

Guest of Honour

Dr. Dinesh Nagegowda

Senior Principal Scientist, CSIR-CIAMP, Bangalore



THE PROGRAMS

9.00 AM Invocation

9.05 AM Welcome Address

9.10AM Inauguration and Opening Remarks

Brief about the workshop by 9.20 AM Dr. Prashanth Vishwanath

9.30 AM Release of Workshop Manual and Address

by Prof. B.P. Veerabadrappa

9.40 AM Address by Mrs. Anuradha G KAS.

9.50 AM Address by Prof. Rajeshwari N

9.55 AM Vote of Thanks

10.00 AM Beginning of the Scientific Sessions

Organizing Secretaries

Dr. B T Prabhakar

Associate Professor Department of Biotechnology, Sahyadri Science College, Shivamogga.

Dr. P Niranjana

Assoc. Professor & Chairman Department of Biochemistry, **Kuvempu University**

Dr. Subba Rao V. Madhunapantula

Professor of Cellular and Molecular Biology, JSS AHER, Mysore

All are cordially welcome



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