









National Level Training Program

on

CHROMATOGRAPHY, SPECTROSCOPY AND MICROSCOPY

28th November to 4th December, 2022 Venue : Sophisticated Analytical Instrument Facility (DST-SAIF) Centre, Kottayam

Organised by

Sophisticated Analytical Instrument Facility (DST-SAIF) Centre Mahatma Gandhi University, Kottayam

And Department of Botany and Department of Chemistry St. Dominic's College, Kanjirapally

In association with JSS Academy of Higher Education and Research, Mysuru

Sponsored by Department of Science and Technology (DST) STUTI Scheme,

Government of India

Mahatma Gandhi University, Kottayam

Mahatma Gandhi University, one of the major Universities in Kerala, is a premier education institution that strives to fulfil the higher educational needs of the people from Central part of Kerala. The University was established on 2nd October 1983 and has a jurisdiction over the revenue districts of Kottayam, Ernakulam and parts of Pathanamthitta and Alappuzha. It offers a large number of programs through its 17 University departments, 18 Centres, around 300 affiliated Colleges and 199 recognised Research Centres. It imparts education in the interdisciplinary as well as conventional disciplines of Science, Social Science and Humanities. The University is a member of the AlU (Association of Indian Universities) and the ACU (Association of Commonwealth Universities). Mahatma Gandhi University holds 30th position among University category and 51st position in overall category of NIRF 2022. Also, M.G.U. holds 702nd position in Times Higher Education World University Ranking.



Sophisticated Analytical Instrument Facility (SAIF), Mahatma Gandhi University, Kottayam

Sophisticated analytical instruments are vital for pursuing research in many areas of modern Science and Technology. Many institutions in the country do not have such instruments. These instruments are expensive and cannot be provided through individual project mechanism. The Department of Science & Technology has set up Sophisticated Analytical Instrument Facilities (SAIFs) in different parts of the country to provide the facilities of sophisticated analytical instruments to the research workers in general and especially to the institutions which do not have access to such instruments. DST-SAIF centre at Mahatma Gandhi University is operational since 2013. Confocal Raman Microscope with AFM, Fluorescence Spectrometer with Lifetime Detector, LC-MS/MS and FESEM are the available instruments in the SAIF centre.



St. Dominic's College, Kanjirapally

St. Dominic's College was started in 1965 includes in its purview the academic aspirations of all communities of the area and is committed in imparting education to all who seek higher learning. The College, affiliated to the Mahatma Gandhi University, was upgraded into a degree college in 1976 and into a post graduate college in 1981. Accredited with 'A' grade by the National Assessment and Accreditation Council (NAAC) and supported by FIST-0 level Grant of the Department of Science and Technology (DST), the college is on its course of academic diversification and growth in accordance with its goals and objectives, in tune with the changes in the field of higher education.

The Department of Chemistry started functioning with the very inception of the college in the year 1965 and was elevated into to the status of a post graduate department in 2001. The main emphasis of the department is to enable the students with deep knowledge and awareness of advanced developments in the field of chemistry. The focus area of research includes Polymer composites, rubber nanocomposites, 2D materials, graphene-based composites, Plastic Recycling, Electrochemical Sensors etc. The Department of Botany was established in the year 1999 with Model II Horticulture and Nursery Management and was uplifted to M.Sc Botany with specialization Biotechnology in 2014 with the vision of teaching and innovative research in the field of biology. A well-equipped research laboratory was set up to carry out the cutting-edge research activities in all important areas in chemistry and Botany for sharing technical expertise with the surrounding community and the state.



JSS Academy of Higher Education and Research (JSS AHER), Mysuru

JSS Academy of Higher Education & Research (JSS 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 were 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 and Technology (DST), Government of India

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 program

The focus of the training program is to train the participants on basics of LC-MS/MS, ICP-MS, LC-QTOF, HPLC, FESEM, UV-Visible Spectrophotometer, Fluorescence Spectrometer with life time detector and Confocal Raman Microscope with Atomic Force Microscope (AFM), Fourier-Transform Infrared Spectroscopy (FTIR), Atomic Absorption Spectroscopy (AAS), Universal Testing Machine (UTM). During the training program the participants will get the opportunity to visit DST-SAIF Centre and field visit to get glimpse of state -of -the- art instrumentation. They will also get a very good opportunity to interact with eminent researchers from different technical fields along with their lecture sessions.

Who can attend

Ph.D students, postdoctoral fellows, Early career research fellows and Assistant Professors from any science fields.

Registration Procedure

Interested participants should register for this workshop through a Google form given in the link. Your resume, along with a recent photo, should be uploaded with a write-up (minimum 100 words) of this workshop's relevance to your research and/or career development. The number of participants to this event is limited to 30 and the participants will be selected based on the submitted details in the google form. Faculty, Researchers, and post doc fellows in the relevant field will be given preference. A registration confirmation will be received on submission of the form. The registration fees will be waived for selected participants. A workshop kit with manual, refreshments and working lunch will be provided. Travel support will be available for a few deserving participants (limited to 3 tier AC fare or bus fare by shortest distance). The accommodation and food for outstation participants will be arranged by the guest house of Mahatma Gandhi University as per the DST STUTI grant rules.

Application Deadline : 5:00 pm, 31st October, 2022

Patrons

Prof. C.T. Aravindakumar Pro-Vice Chancellor & Coordinator SAIF Centre, M.G.University Dr. Seemon Thomas Principal, St.Dominic's College Dr. B. Manjunatha Registrar, JSS AHER

DST STUTI PMU Coordinators

Dr. Prashant Vishwanath, MBBS., MD., Ph.D Director (Research) & IQAC Coordinator, JSS AHER Dr. Madhu B. MBBS., MD., DNB, Ph.D Deputy Director (Research) JSS AHER

Organising Secretaries

Ms. Shiny Thomas, Scientific Assistant, DST-SAIF, M.G.University

Dr. Rani Alphonsa Jose, Assistant Professor, Department of Chemistry, St. Dominic's College

Convener

Dr. Dhanya B.E., Project Co-Ordinator, DST-STUTI Program, JSS AHER



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