

KARNATAK UNIVERSITY

**University Scientific Instrumentation Center (USIC) &
Sophisticated Analytical Instrument Facility (SAIF)**



**Synergistic Training program Utilizing the Scientific
and Technological Infrastructure (STUTI)**

organized by

**Sophisticated Analytical Instrument Facility (SAIF) and
University Scientific Instruments Center (USIC)**

In collaboration with

Shivaji University, Kolhapur, Maharashtra

Supported by

**Department of Science and Technology, Ministry of
Science and Technology, Government of India.**

Flyer



Synergistic Training program Utilizing the Scientific and Technological Infrastructure (STUTI)



organized by
Sophisticated Analytical Instrument Facility (SAIF) and University Scientific Instruments Center (USIC), Karnatak University Dharwad
KARNATAKA, INDIA



“JANUARY 23-29, 2023”

In collaboration with

Shivaji University, Kolhapur, Maharashtra

Supported by



Department of Science and Technology, Ministry of Science and Technology, Government of India.

About Organizing University/Institute:

Karnatak University Dharwad (KUD) is the oldest and most sought after University in northern Karnataka for Higher Education. The city of Dharwad is known as Vidyakashi (Benares of knowledge). There are 51 Departments in the Campus that spreads over 880 acres. Recently, KUD is re-accredited with 'A' grade with CGPA of 3.13 in the 4th cycle by NAAC. The University was awarded with the coveted 'University with Potential for Excellence' (UPE) by the UGC with a financial assistance of Rs. 50 crores for undertaking research activities and development of campus amenities. KUD has grown impressively since its inception. Excellent research performance of KUD is recognized and supported by various funding agencies viz., UGC, DST, RUSA, DBT, BRNS, State and Central Govts, etc., SAIF and USIC are multidisciplinary Research and Educational core facilities started with the initial support of DST and UGC, respectively. Multi-purpose cluster of sophisticated analytical instruments are housed at these centers which serve the community of PG students, Research Scholars and Faculty of Science Departments of KUD and other academic Institutes/Research labs/Organizations.

About STUTI:

STUTI stands for 'Synergistic Training Program Utilizing the Scientific and Technological Infrastructure' funded by the DST, Government of India. The Scheme is intended to human resource and its capacity building through open access to S & T Infrastructure across the country by organizing training program on DST supported R&D equipment targeting Scientists/Professors/PhDs and PDFs actively involved in research across various institutions in the country.

About Shivaji University:

Shivaji University, Kolhapur, established on 18th November, 1962 has 276 affiliated colleges with 40 post-graduate Departments. Recently, accredited with NAAC 'A++' grade with CGPA 3.52 in its 4th cycle of re-accreditation in 2021. Various Science Departments of Shivaji University have necessary infrastructure and well equipped with sophisticated instruments procured using grants from various funding agencies. STUTI Project worth of Rs. 2.25 crore was sanctioned by DST, New Delhi to SUK for organizing training programs on various sophisticated instruments.

Course Contents:

The main theme of this training program is to bring awareness among the participants regarding the sophisticated instruments for structure elucidation, analysis and other applications of scientific instruments viz., 400 MHz FT NMR, SEM with EDS, Powder X-ray diffractometer, CD Spectrometer, Single X-ray Crystallographic diffractometer, FT-IR Spectrometer, TGA-DTA, Spectrofluorometer, AAS etc. The training program involves both lectures and hands on training/demonstration of the sophisticated instruments by Experts/Technical Staff.

Goals of STUTI Program:

- The participants will understand and familiarize with the various sophisticated instruments supported by DST, GoI and other funding agencies available for research.

- The participants will get skill based knowledge about the handling of the sophisticated instruments and characterization techniques.
- The participants get acquainted with the sophisticated instruments and characterization tools that will help the participants to design appropriate strategies for their research work. Interactions with other participants and resource persons will help in collaborative research.

Eligibility:

- Participants should be Indian Citizens.
- Assistant/Associate Professors/Professors/Scientists/Postdoc.Fellows/Ph.D Students/B. Tech. students who are actively involved in the field of basic or allied Sciences or Engineering.
- Industry professionals who are actively involved in R&D

Registration Procedure:

- Interested candidates are required to fill the online form (link given below) on or before 13/12/2022.
- Candidates will be selected based on eligibility and available seats. The confirmation of selection will be communicated to the selected candidates by 9/1/2023 by email. Only 3 participants are allowed from one Institute or Industry.

General Information:

- Registration for the training programme is free.
- Registration Kit, Course material and Certificate of participation will be provided to the participants. Participants may bring their samples if any, for hands-on analysis during the program.
- Free accommodation will be provided to outstation participants at Karnatak University Guest House.
- The bus/train fare (III tier AC or equivalent) by shortest route will be reimbursed to the outstation participants on submission of original tickets.

Chief Patron:

Prof. K. B. Gudasi, Hon'ble Vice Chancellor, KUD

Patrons:

Shri. Yashpal Kshirsagar, IFS, Registrar (Admin), KUD

Prof. C. Krishnamurthy, Registrar (Evaluation), KUD

Dr. Sudesha. S, Finance Officer, KUD

STUTI Program Coordinator

Prof. R.G. Sonkawade, Coordinator, SAIF, Shivaji University, Kolhapur

Programme Committee:

Convener: Prof. J. Seetharamappa, Head, SAIF &

Director, USIC, KUD

Co-conveners:

Dr. Praveen Kumar S.K. Dept of Biochemistry, KUD

Dr. Srinath B. S. Dept of Zoology, KUD

Scientific Programme Committee

Technical Staff of SAIF & USIC

Special Talk Series with Hands-on Training/Demo on Sophisticated Instruments

Registration Link: <https://forms.gle/SkC7Cs2wjgEDD9JD9>

Last date of Registration: 13/12/2022

Contact Us: 795799950/9886190990/9448590683

Confirmation of Selection: 9/1/2023

stutiworkshopkud@gmail.com



Schedule

Dt	Time	Programme
23-1-2023, Monday	8:00-9:00 am	Registration
	9:00-9:30 am	Inauguration
	9:30-11:30 am	Prof. R. G. Sonakawade, PMU- Coordinator, Shivaji University, Kolhapur Title: Transmission Electron Microscope Instrumentation parameters and use of I-STEM
	11:30-11:45 am	Tea Break
	11:45-2:00 pm	Pratapa S Jagannatha, Product Manager & Application Scientist Title: Introduction to Single Crystal X-ray Diffraction and its applications
	2:00-2:45 pm	Lunch Break
	2:45-7:00 pm	Single Crystal X-ray Diffractometer X-ray Diffractometer (Powder)
	2:45-4:45 pm	Group A Group B
	4:45-5:00 pm	Tea Break
	5:00-7:00 pm	Group B Group A
7:30-8:30 pm	Cultural Programme	

Dt	Time	Programme
24-1-2023, Tuesday	9:00-11:15 am	Dr Maqsood R Waikar, SAIF-CFC DST Centre, Shivaji University, Kolhapur Title: XPS- Surface sensitive technique: Detailed operational parameters
	11:15-11:30 am	Tea Break
	11:30-1:45 pm	Sameer Pai, Deputy General Manager Jeol India Pvt Ltd, New Delhi Title: Instrumentation and applications of SEM with EDS
	1:45-2:30 pm	Lunch Break
	2:30-7:00 pm	SEM with EDS Powder XRD, TGA/DTA & DSC
	2:30-4:30 pm	Group A Group B
	4:30-4:45 pm	Tea Break
	4:45-7:00 pm	Group B Group A

Dt	Time	Programme
25-1-2023, Wednesday	9:00-11:15 am	Prof. S. M. Shivaprasad, Director, Karnataka State Higher Education Academy, Dharwad. Title: Semiconductor Nanostructures
	11:15-11:30 am	Tea Break
	11:30-1:45 pm	Mr. Vijay Kumar B, Sinsil International, Pvt Ltd Bangalore. Title: Instrumentation and Applications of AFM & Electrochemical Analyzer
	1:45-2:30 pm	Lunch Break
	2:30-7:00 pm	SEM with EDS & AFM Electrochemical Analyzer & Ellipsometer
	2:30-4:30 pm	Group A Group B
	4:30-4:45 pm	Tea Break
	4:45-7:00 pm	Group B Group A

Dt	Time	Programme
26-1-2023, Thursday	9:00-11:15 am	Dr. Nilkamal Mahanta, Head, Dept of Chemistry, IIT Dharwad Title- Biosynthesis of bottromycin: A potent ribosomal antibiotic natural product
	11:15-11:30 am	Tea Break
	11:30-1:45 pm	Mr. Srinivasa L. Poojary, NMR Application Specialist, Jeol India Pvt Ltd. Title: NMR Spectroscopy: An introduction, Instrumentation & Practical Aspects
	1:45-2:30 pm	Lunch Break
	2:30-7:00 pm	400MHz FT-NMR Electrochemical Analyzer, AFM & Spectrofluorometer
	2:30-4:30 pm	Group A Group B
	4:30-4:45 pm	Tea Break
	4:45-7:00 pm	Group B Group A

Dt	Time	Programme
27-1-2023, Friday	9:00-11:15 am	Prof. J.R. Tonannavar, Dept of Physics, K U Dharwad Title-On the role of experiments in the verification of molecular modelling predictions: H-bonded- Zwitterionic L-(+)-2-Chlorophenylglycine tetramer
	11:15-11:30 am	Tea Break
	11:30-1:45 pm	Mr. Srinivasa L. Poojary, NMR Application Specialist, Jeol India Pvt Ltd. Title: Advanced NMR Spectroscopy
	1:45-2:30 pm	Lunch Break
	2:30-7:00 pm	Industrial Visit

Dt	Time	Programme
28-1-2023, Saturday	9:00-11:15 am	Surya Pratap Singh, Bio-Sciences & Bio-engineering Department, IIT Dharwad Title: Optical Spectroscopic Applications in Disease Diagnosis.
	11:15-11:30 am	Tea Break
	11:30-1:45 pm	Mr. M. Sriram, Sr. Manager, Anatek Services Pvt Ltd. Chennai Title: Instrumentation and Applications of CD Spectrometer & UV- Visible Spectrophotometer
	1:45-2:30 pm	Lunch Break
	2:30-7:00 pm	CD Spectrometer & AAS UV- Visible Spectrophotometer & FTIR
	2:30-4:30 pm	Group A Group B
	4:30-4:45 pm	Tea Break
	4:45-7:00 pm	Group B Group A

Dt	Time	Programme
29-1-2023, Sunday	9:00-11:15 am	Prof. M. K. Rabinal, Dept of Physics, KU, Dharwad Title: Powering our planet
	11:15-11:30 am	Tea Break
	11:30-1:45 pm	Dr. G. Nagaraju, Dept of Chemistry, Siddaganga Institute of Technology, Tumkur Title: Fabrication of Nanostructured Electrode Materials for Lithium-ion battery
	1:45-2:30 pm	Lunch Break
	2:30-3:00 pm	Interaction and Feed back
	3:00-4:00 pm	Valedictory Function

Inauguration



KARNATAK UNIVERSITY, DHARWAD

Inaugural Function of

Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI-2023)

7 Days National Level Training Programme

23rd-29th January 2023

organized by

Sophisticated Analytical Instrument Facility (SAIF) and University Scientific Instrumentation Center (USIC), Karnatak University, Dharwad

In collaboration with

Shivaji University, Kolhapur

Supported by

Department of Science and Technology (DST)
Government of India, New Delhi

Inauguration by

Prof. N. S. Punekar

Dean, Academic Programmes
Indian Institute of Technology Dharwad

Guest of Honor

Prof. R. G. Sonkawade

PMU Coordinator
DST - STUTI Program, Shivaji University, Kolhapur

Presided by

Prof. K. B. Gudasi

Hon'ble Vice-Chancellor, Karnatak University, Dharwad

All are Cordially Invited

Date : 23-1-2023 Time : 10.00 am

Venue : Dr. S. Siddappa Hall, Department of Chemistry, K.U. Dharwad

Dr. Praveen Kumar S.K & Dr. Srinath B.S

Co-Conveners
K.U. Dharwad

Prof. J. Seetharamappa

Convener & Head, SAIF
K.U. Dharwad

President : Prof. K.B. Gudasi, Hon'ble Vice-Chancellor, Karnatak University, Dharwad

Chief guest : Prof. N. S. Punekar, Dean, Academic Programmes, IIT Dharwad

Guest of Honor: Prof. R. G. Sonakawade, PMU- Coordinator, DST-STUTI Program, Shivaji University, Kolhapur





Lecture











Hands-on Training







Cultural Program



Industrial Tour



Valedictory



KARNATAK UNIVERSITY, DHARWAD

Valedictory Function of

Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI-2023)

7 Days National Level Training Programme

23rd-29th January 2023

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Chief Guest

Shri. Yashpal Kshirsagar, IFS

Registrar, Karnatak University, Dharwad

Guest of Honor

Prof. J. R. Tonannavar

Former Director, USIC
Karnatak University, Dharwad

Presided by

Prof. J. Seetharamappa

Convener & Head, SAIF, Karnatak University, Dharwad

••••• *All are Cordially Invited* •••••

Date : 29-1-2023 Time : 3.00 pm

Venue : Dr. S. Siddappa Hall, Department of Chemistry, K.U. Dharwad

Staff

SAIF & USIC
K.U. Dharwad

Co-Conveners

Dr. Praveen Kumar S.K & Dr. Srinath B.S
K.U. Dharwad

President : Prof. J. Seetharamappa, Convener & Head, SAIF, Karnatak University, Dharwad

Chief guest : Shri. Yashpal Kshirsagar, IFS Registrar, Karnatak University, Dharwad

Guest of Honor : Prof. J. R. Tonannavar, Dept of Physics and Former Director, USIC, KU, Dharwad



ಧಾರವಾಡ ವಿಶೇಷ

ಕವಿವಿಯಲ್ಲಿ ರಾಷ್ಟ್ರೀಯ ಕಾರ್ಯಾಗಾರ

January 29, 2023



ವೈಜ್ಞಾನಿಕ ಉಪಕರಣ ಕೇಂದ್ರ (ಯು.ಸಿ.ಕ್) ಹಾಗೂ ಡಿ.ಎಸ್.ಟಿ-ಸೈಪ್ ಕೇಂದ್ರ, ಕರ್ನಾಟಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಧಾರವಾಡ ಜಂಟಿಯಾಗಿ ೦೭ ದಿನಗಳ DST-Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (DST-STUTI) ಕುರಿತು ರಾಷ್ಟ್ರೀಯ ಮಟ್ಟದ ಕಾರ್ಯಾಗಾರವನ್ನು ಶಿವಾಜಿ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಕೊಲ್ಲಾಪುರ ಇವರ ಸಹಯೋಗ ಹಾಗೂ ಡಿ.ಎಸ್.ಟಿ ನವದೆಹಲಿ ಇವರ ಬೆಂಬಲದೊಂದಿಗೆ ಯುಸಿಕ್ ಹಾಗೂ ಸೈಪ್ ಕೇಂದ್ರ, ಕರ್ನಾಟಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಧಾರವಾಡದಲ್ಲಿ ದಿನಾಂಕ:೨೩-೧-೨೦೨೩ ರಿಂದ ೨೯-೧-೨೦೨೩ ರವರೆಗೆ ಹಮ್ಮಿಕೊಳ್ಳಲಾಗಿತ್ತು.

ಈ ಕಾರ್ಯಾಗಾರದಲ್ಲಿ ದೇಶದ ಬೇರೆ ಬೇರೆ ರಾಜ್ಯಗಳಿಂದ ೫೦ ಶಿಬಿರಾಧಿಗಳು ಪಾಲ್ಗೊಂಡು ಉನ್ನತ ಮಟ್ಟದ ಸಂಶೋಧನಾ ಉಪಕರಣಗಳ ಬಗ್ಗೆ ಉಪನ್ಯಾಸ ಮತ್ತು ಪ್ರಾಯೋಗಿಕ ತರಬೇತಿಯನ್ನು ಪಡೆದರು.

ಉದ್ಘಾಟನಾ ಕಾರ್ಯಕ್ರಮವನ್ನು ದಿನಾಂಕ:೨೩-೦೧-೨೦೨೩ ರಂದು ಪ್ರೊ. ಎನ್.ಎಸ್. ಪುಣೇಕರ್, ಶೈಕ್ಷಣಿಕ ನಿಖಾಯದ ಮುಖ್ಯಸ್ಥರು, ಐ.ಐ.ಟಿ, ಧಾರವಾಡ ಇವರು ನೆರವೇರಿಸಿದರು.



ಪ್ರೊ. ಆರ್.ಜಿ.ಸೊಂಕವಾಡೆ, ಶಿವಾಜಿ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಕೊಲ್ಲಾಪುರ ಇವರು ವಿಷೇಶ ಆಹ್ವಾನಿತರಾಗಿದ್ದು, ಪ್ರೊ. ಕೆ. ಬಿ. ಗುಡಸಿ, ಕುಲಪತಿಗಳು, ಕರ್ನಾಟಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಧಾರವಾಡ ಇವರು ಸಮಾರಂಭದ ಅಧ್ಯಕ್ಷತೆ ವಹಿಸಿದ್ದರು.

DST-STUTI ಕಾರ್ಯಕ್ರಮಕ್ಕೆ ಸಂಪನ್ಮೂಲ ವ್ಯಕ್ತಿಗಳಾಗಿ ಐ.ಐ.ಟಿ, ಧಾರವಾಡ, ಕರ್ನಾಟಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಧಾರವಾಡ, ಕರ್ನಾಟಕ ರಾಜ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಆಕಾಡೆಮಿ, ಧಾರವಾಡಗಳಿಂದ ವಿವಿಧ ಆತ್ಮಾದುನಿಕ ವೈಜ್ಞಾನಿಕ ಉಪಕರಣಗಳ ಉಪಯೋಗ ಹಾಗೂ ತಾಂತ್ರಿಕತೆ ಬಗ್ಗೆ, ಹಾಗೂ ವಿಜ್ಞಾನದ ವಿವಿಧ ಕ್ಷೇತ್ರಗಳ ಆಧುನಿಕ ವಿದ್ಯಮಾನಗಳ ಬಗ್ಗೆ ವಿಶೇಷ ಉಪನ್ಯಾಸ ನೀಡಿದರು. ಬಹುರಾಷ್ಟ್ರೀಯ ಕಂಪನಿಗಳ ವೈಜ್ಞಾನಿಕ ಉಪಕರಣಗಳ ತಜ್ಞರು ವಸ್ತು ಸ್ಥಿತಿ ತರಬೇತಿಯನ್ನು ಶಿಬಿರಾಧಿಗಳಿಗೆ ನೀಡಿದರು.

ದಿನಾಂಕ:೨೯-೦೧-೨೦೨೩ ರಂದು ಮದ್ಯಾಹ್ನ ೩.೦೦ ಗಂಟೆಗೆ ಜರುಗಿದ ಸಮಾರೋಪ ಸಮಾರಂಭಕ್ಕೆ ಮುಖ್ಯ ಅತಿಥಿಗಳಾಗಿ ಶ್ರೀ. ಯಶಪಾಲ್ ಕ್ಷೀರಸಾಗರ, ಕುಲಸಚಿವರು, ಕೆ.ವಿ.ವಿ, ಧಾರವಾಡ ಇವರು ಆಗಮಿಸಿದ್ದರು.ಪ್ರೊ. ಜಿ.ಆರ್.ಟೋಣನ್ವವರ, ಮಾಜಿ ನಿರ್ದೇಶಕರು, ಯುಸಿಕ್ ಇವರು ಗೌರವ ಅತಿಥಿಗಳಾಗಿ ಪಾಲ್ಗೊಂಡು ಸನ್ಮಾನ ಸ್ವೀಕರಿಸಿದರು.

ಸಮಾರೋಪ ಸಮಾರಂಭದ ಅಧ್ಯಕ್ಷತೆಯನ್ನು ಕಾರ್ಯಕ್ರಮದ ಮುಖ್ಯ ಸಂಯೋಜಕರಾದ ಪ್ರೊ.ಜಿ.ಸೀತಾರಾಮಪ್ಪ ವಹಿಸಿದ್ದರು. ಸಹ ಸಂಯೋಜಕರಾದ ಡಾ. ಪ್ರವೀಣಕುಮಾರ ಇವರು ಸ್ವಾಗತಿಸಿದರು ಹಾಗೂ ಡಾ. ಬಿ.ಎಸ್.ಶ್ರೀನಾಥ ಇವರು ವಂದಿಸಿದರು.



