



# SEVEN DAY NATIONAL LEVEL TRAINING PROGRAMME

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

**“November 14-20, 2022”**




**Supported by**

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

**Report of the STUTI program Organized by  
DST - Promotion of University Research and Scientific Excellence (PURSE)  
Instrumentation Centre, MHRD-RUSA NMR Instrument Centre, CARRT  
AND CARER CENTRES  
MANGALORE UNIVERSITY  
KARNATAKA, INDIA.**

**In collaboration with  
Shivaji University, Kolhapur, Maharashtra.**

# Flyer

 <p><b>Synergistic Training program Utilizing the Scientific and Technological Infrastructure (STUTI)</b> organized by <b>DST-PURSE, CARRT, MHRD-RUSA NMR Instrument Centre</b> <b>MANGALORE UNIVERSITY</b> KARNATAKA, INDIA.</p> <p><b>“November 14-20, 2022”</b> In collaboration with <b>Shivaji University, Kolhapur, Maharashtra.</b> Supported by Department of Science and Technology, Ministry of Science and Technology, Government of India.</p>  	
<p><b>About Organizing University/Institute:</b></p> <p>Mangalore University (MU) was established in 1980. The main campus called as, ‘Mangalagangothri’ is located about 20 km to the south east of the port city of Mangaluru. MU aims at excellence in teaching, learning and research and to contribute towards building a socially-sensitive humane inclusive society.</p> <p>MU has grown impressively since its inception. Excellent research performance of MU is recognized by the award of PURSE grant by the Department of Science and Technology (DST) in two phases. PURSE lab houses sophisticated instruments viz., FESEM, Confocal Microscope, Single Crystal XRD, LCMS, GCMS, Amino Acid Analyzer etc.</p> <p>The Centre for Application of Radio Isotopes and Radiation Technology (CARRT) was set up at MU in association with Board of Research in Nuclear Science (BRNS) and the Board of Radiation and Isotope Technology (BRIT), Department of Atomic Energy, Ministry of Human Resource Development has identified MU for the Rashtriya Uchchatar Shiksha Abhiyan (RUSA) Grant. Under this grant, a NMR facility has been established. In addition, MU has also established several research centres viz., Microtron Centre, CARER, OASTC etc., through research grants.</p> <p><b>About STUTI:</b></p> <p>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 &amp; T Infrastructure across the country by organizing training program on DST supported R&amp;D equipment targeting Scientists/Professors/PhDs and PDFs actively involved in research across various institutions in the country.</p> <p><b>About Shivaji University:</b></p> <p>Shivaji University, 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 forth cycle of reaccreditation 2021. Various science departments of Shivaji University are well equipped with different sophisticated instruments and laboratory infrastructures procured using funds from various funding agencies. STUTI project is sanctioned by DST, New Delhi to SUK worth Rs. 2.25 crore for organizing training programs on various sophisticated instruments.</p>	<p><b>Course Contents:</b></p> <p>The main theme of this training program is to aware of the participants regarding the sophisticated instruments for characterization such as Morphological Characterization Technique (Field Emission Scanning Electron Microscope, Confocal Microscope), Compositional Characterization Techniques (EDS, GCMS-MS, and LCMS), Structural Characterization Techniques (Single Crystal XRD, Particle Size Analyzer, and TGA-DTA-DSC) etc. The training program includes theory lectures as well as demonstration/hands on training on the sophisticated instruments by experts in the field.</p> <p><b>Goal of STUTI Program:</b></p> <ul style="list-style-type: none"><li>• The participants will understand and familiarize with the various sophisticated instruments supported by DST, Govt and other funding agencies available for research.</li><li>• The participants will get skill based knowledge about the handling of the sophisticated instruments and characterization techniques.</li><li>• The participants get acquainted with the sophisticated instruments and characterization tools will help the participants to design appropriate strategies for their research work and to implement them. Interactions with other participants will help in collaborative research.</li></ul> <p><b>Eligibility:</b></p> <ul style="list-style-type: none"><li>• Participants should be Indian Citizens.</li><li>• Assistant/Associate Professors/Professors/Scientists/Post Doc. Fellows/ Ph.D. Fellow and B. Tech. students who are actively involved in the field of basic or allied sciences or engineering.</li><li>• Industry professionals who are actively involved in R&amp;D</li></ul> <p><b>Registration Procedure:</b></p> <ul style="list-style-type: none"><li>• Interested candidates will have to fill the online form (link given below) on or before <b>20/08/2022</b>.</li><li>• Candidates will be selected based on eligibility and available seats. The confirmation of selection will be communicated to the selected candidates by 20/09/2022 by email.</li></ul> <p><b>General Information:</b></p> <ul style="list-style-type: none"><li>• Registration for the training programme is <b>free</b>.</li><li>• Registration Kit, Course material and Certificate of participation will be provided to the participants.</li><li>• Free accommodation will be provided to outstation participants at MU guest house.</li><li>• The train fare (III tier AC or equivalent) by shortest route will be reimbursed to the outstation participants on submission of original tickets.</li></ul>
<p><b>Special Talk Series with Hands-on Training/Demo on Sophisticated Instruments.</b> Registration Link: &lt;<a href="https://forms.gle/wauWqP3d7V3j55VA">https://forms.gle/wauWqP3d7V3j55VA</a>&gt; Last date of Registration: 20/08/2022      Confirmation of Selection: 20/09/2022</p>	

**Chief Patron:**

- ❖ Prof. P. Subrahmanya Yadapadithaya, Honble Vice Chancellor, MU

**Patrons :**

- ❖ Prof. Kishore Kumar C.K., Registrar, MU
- ❖ Prof. P.L. Dharma, Registrar (Evaluation), MU
- ❖ Prof. K.S. Jayappa, Finance Officer, MU

**Programme Advisory Committee :**

- ❖ Prof. Manjunatha Pattabi, Dean - Faculty of Science & Tech, Director - IQAC and Chairman - Dept. of Materials Science, MU
- ❖ Prof. Chandra M, Chairperson, Dept. of Biosciences, MU
- ❖ Prof. A. M. Khan, Chairman, Dept. of Electronics, MU
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- ❖ Prof. K. Bhasker Shenoy, Former Coordinator, DST-PURSE, Dept. of Applied Zoology, MU
- ❖ Dr. Shamprasad Varija Raghu, DBT Ramalingaswamy Fellow, Dept. of Applied Zoology, MU

**STUII Program Coordinator:**

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

**Programme Committee:**

**Convener:**

- ❖ Prof. Vishalakshi B., Coordinator, DST-PURSE Instrumentation Centre, MU

**Co-conveners:**

- ❖ Prof. Boja Poojary, Deputy Coordinator, DST-PURSE Instrumentation Centre and NMR Lab in-charge, MU.
- ❖ Prof. Karunakara N., Coordinator, Centre for Advanced Research in Environmental Radioactivity (CARER)

**Scientific Programme Committee**

- ❖ Dr. Murari M.S., Scientific Officer - II
- ❖ Mr. Praveen P., Scientific Officer - I
- ❖ Dr. Sathisha K.R., Scientific Officer
- ❖ Dr. Mahesh K.K., Scientific Officer - II
- ❖ Ms. Vinitha D'Sa, Research Assistant
- ❖ Mr. Anil Kumar, Technical Assistant
- ❖ Dr. Sudeep Kumara, Scientific Officer, CARER
- ❖ Dr. Yashodara I, Scientific Officer, CARRT
- ❖ Dr. Rashmi Nayak, Research Consultant, CARER

**Contact Us: Program Conveners**

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Email: <mupurseevents@gmail.com>, Website: <https://mangaloreuniversity.ac.in/>



FESEM-EDS



Single Crystal XRD



GCMS



Cyto Genetic Workstation



Confocal Microscope



Amino Acid Analyzer



LCMS



Laser Particle Size Analyzer



TGA-DSC



Gamma Chamber CC 5000



NMR SYSTEM  
Model/Make: Jeol,  
JNM ECZ400SL1, Japan

# PROGRAM SCHEDULE

**Department of Science and Technology (DST),**  
 Ministry of Science and Technology, Government of India, New Delhi  
**Synergistic Training program Utilizing the Scientific and Technological Infrastructure (STUTI)**  
 November 14 - 20, 2022  
 DST-PURSE, CARRT, MHRD-RUSA NMR Instrument Centre,  
**MANGALORE UNIVERSITY**, Mangalagangothri in collaboration with **SHIVAJI UNIVERSITY**, Kolhapur  
**Programme Schedule**

Dt.	Time	Programme
14-11-2022, Monday	8:30am – 10:00am	Registration and Breakfast
	10:00am – 11:15am	Inauguration President - Prof. P. Subrahmanya Yadapadithaya, Hon'ble Vice-Chancellor, Mangalore University. Chief Guest - Prof. K.B. Gudasi, Hon'ble Vice-Chancellor, Karnatak University, Dharwad, Karnataka. Guest of Honour - Prof. R.G. Sonkawade, Principal Investigator, STUTI Scheme (DST), Shivaji University, Kolhapur.
	11:15am – 11:30am	Tea Break
	11:30am – 11:50am	About DST-STUTI Programme at Mangalore University by Prof. Vishalakshi B., Convener & Coordinator, DST-PURSE Instrumentation Centre, Mangalore University.
	11:50am – 1:30pm	Lecture - 1: "Operational Parameters of X-ray diffractometry (Powder and Thin Films)", Prof. R.G. Sonkawade, Shivaji University, Kolhapur.
	1:30pm – 2:30pm	Lunch
	2:30pm – 4:00pm	Lecture - 2: "Applications of Radiation and Radioisotopes in industry, healthcare, and agriculture" by Prof. Karunakara N., Coordinator, Centre for Advanced Research in Environmental Radioactivity (CARER), Mangalore University.
	4:00pm – 4:15pm	Tea break
	4:15pm – 6:15pm	Introductory visits to all the labs at PURSE, RUSA-NMR and CARRT centres.

Dt.	Time	Programme		
15-11-2022, Tuesday	9:15am – 11:15am	Lecture - 3: "Operational Parameters of Transmission Electron Microscopy and use of I-STEM" by Prof. R.G. Sonkawade, Shivaji University, Kolhapur.		
	11:15am – 11:30am	Tea Break		
	11:30am – 1:30pm	Lecture - 4: "Amino acid analyser - Abridged introduction" by Dr. Hari N., iNEXUS Biotech Pvt. Ltd., Chennai.		
	1:30pm – 2:30pm	Lunch		
	For Lab Sessions →	Lab1: Exploring analysis using Amino acid analyser by Dr. Hari N. and Dr. Sathisha K. R.	Lab2: Exploring analysis using NMR by Mr. Srinivas Poojary and Mrs. Vinitha D'Sa	Lab3: Exploring analysis using Confocal microscope by Dr. Shamprasad V.R. and Mr. Sunil Kumar
	2:30pm – 3:45pm	Group - $\alpha$	Group - $\beta$	Group - $\gamma$
	3:45pm – 5:00pm	Group - $\gamma$	Group - $\alpha$	Group - $\beta$
	5:00pm – 5:15pm	Tea Break		
	5:15pm – 6:30pm	Group - $\beta$	Group - $\gamma$	Group - $\alpha$
	7:00pm – 8:00pm	Cultural Programme - <i>Yakshagana</i>		
8:00pm – 8:30pm	Programme Dinner			

Dt.	Time	Programme		
16-11-2022, Wednesday	9:15am – 11:15am	Lecture -5: "Application of Confocal Microscopy in Scientific Research" by Dr. Shamprasad V.R., DBT-Ramalingaswami Fellow, Mangalore University.		
	11:15am – 11:30am	Tea Break		
	11:30am – 1:30pm	Lecture -6: About GCMS by Mr. Dushyanth Hegde, Toshvin Analytical Pvt. Ltd., Bengaluru.		
	1:30pm – 2:30pm	Lunch		
	For Lab Sessions →	Lab4: Exploring analysis using GCMS by Mr. Dushyanth Hegde and Mr. Praveen P.	Lab5: Exploring analysis using FESEM by Dr. Murari M.S. and Mr. Sharathchandra	Lab6: CARER (HPGe - Dr Sudeep Kumara K, Radon calibration chamber-Dr Sudeep Kumara K+ Vijith AP, Pyrolysis and LSC - Dr Rashmi + Bharath)
	2:30pm – 3:45pm	Group - $\alpha$	Group - $\beta$	Group - $\gamma$
	3:45pm – 5:00pm	Group - $\gamma$	Group - $\alpha$	Group - $\beta$
	5:00pm – 5:15pm	Tea Break		
	5:15pm – 6:30pm	Group - $\beta$	Group - $\gamma$	Group - $\alpha$

Dt.	Time	Programme		
17-11-2022, Thursday	9:15am – 11:15am	Lecture -7: "Single Crystal XRD Principle, Equipment, Data Collection and Analysis", Dr. Mahesh K.K., DST-PURSE Instrumentation Centre, Mangalore University.		
	11:15am – 11:30am	Tea Break		
	11:30am – 1:30pm	Lecture -8: "Sample preparation technique for FESEM", Dr. Murari M.S., DST-PURSE Instrumentation Centre, Mangalore University.		
	1:30pm – 2:30pm	Lunch		
	2:30pm – 7:00pm	Industrial visit: Solara Active Pharma Sciences Limited, Industrial Area, Baikampady, Mangalore and Sequent Scientific Ltd., Industrial Area, Baikampady, Mangalore.		

Dt.	Time	Programme		
18-11-2022, Friday	9:15am – 11:15am	Lecture -9: "Single crystal X-ray diffraction: From symmetry and structure to Materials Research and Applications" by Dr. Venkatesha R. Hathwar, Goa University, Goa.		
	11:15am – 11:30am	Tea Break		
	11:30am – 1:30pm	Lecture -10: "NMR Spectroscopy: An Introduction, Instrumentation & Practical Aspects" by Mr. Srinivas Poojary, JEOL INDIA Pvt. Ltd., Bengaluru.		
	1:30pm – 2:30pm	Lunch		
	For Lab Sessions →	Lab7: Exploring analysis using SC-XRD by Prof. Dr. Venkatesha R. Hathwar and Dr. Mahesh K.K.	Lab8: Exploring analysis using LCMSMS by Mr. N. Manohar and Mr. Praveen P.	Lab9: CARRT ( $\gamma$ Chamber + UV spectrometry)- Dr. Yashodhara I and Dr. Swaroop K.
	2:30pm – 3:45pm	Group - $\alpha$	Group - $\beta$	Group - $\gamma$
	3:45pm – 5:00pm	Group - $\gamma$	Group - $\alpha$	Group - $\beta$
	5:00pm – 5:15pm	Tea Break		
	5:15pm – 6:30pm	Choice based Lab session		

Dt.	Time	Programme		
19-11-2022, Saturday	9:15am – 11:15am	Lecture -11: "Basic working principle of LCMSMS and Hands on Training on the usage of LCMSMS" by N. Manohar, Spinco Biotech Pvt Ltd., Bengaluru.		
	11:15am – 11:30am	Tea Break		
	11:30am – 11:45pm	Group photo session		
	11:45pm – 1:30pm	Lecture -12: "Gamma radiation assisted synthesis of hydrogel nanocomposites and its applications" by Dr. Swaroop K., GM Institute of Technology, Davangere.		
	1:30pm – 2:30pm	Lunch		
	For Lab Sessions → 2:30pm – 4:00pm	Lab7: Exploring analysis using SC-XRD by Dr. Venkatesha R. Hathwar and Dr. Mahesh K.K. (Group - β)	Lab8: Exploring analysis using LCMSMS by Mr. N. Manohar and Mr. Praveen P. (Group - γ)	Lab9: CARRT (γ Chamber + UV spectrometry)- Dr. Yashodhara I and Dr. Swaroop K. (Group - α)
	4:00pm – 4:15pm	Tea Break		
	4:15pm – 6:00pm	Choice based Lab session		

Dt.	Time	Programme		
20-11-2022, Sunday	9:15am – 11:15am	Lecture -13: "Imaging and Spectroscopy using Scanning Electron Microscopy" by Prof. Chandan Srivastava, IISc, Bangalore.		
	11:15am – 11:30am	Tea Break		
	11:30am – 1:30pm	Lecture -14: "Method development for analysis of bioactive compounds using sophisticated analytical instruments like GC and HPLC" by Dr. V. Pardhasaradhi, Eurofins Advinus Agroservices India Pvt. Ltd., Bangalore.		
	1:30pm – 2:30pm	Lunch		
	For Lab Sessions →	Lab10: Exploring analysis using LCMSMS by Dr. V. Pardhasaradhi and Mr. Praveen P.	Lab11: Exploring analysis using GCMS by Dr. V. Pardhasaradhi and Mr. Praveen P.	Lab12: Exploring analysis using FESEM by Prof. Chandan Srivastava and Dr. Murari M.S.
	2:30pm – 3:20pm	Group - α	Group - β	Group - γ
	3:20pm – 4:10pm	Group - γ	Group - α	Group - β
	4:10pm – 5:00pm	Group - β	Group - γ	Group - α
	5:00pm – 5:15pm	Tea & Distribution of Certificates at the registration desk		
	5:15pm – 6:15pm	Valedictory Function President – Prof. Manjunatha Pattabi, Dean - Faculty of Science & Tech, Director - IQAC and Chairman - Dept. of Materials Science, Mangalore University. Chief Guest – Dr. V. Pardhasaradhi, Vice President & Business Unit Head, Eurofins Advinus Agroservices India Pvt. Ltd., Bangalore.		

Dt.12-11-2022

## INAUGURATION:

**President:** Prof P S Yadapadithaya, Hon'ble Vice Chancellor, Mangalore University

**Chief Guest:** Prof K B Gudasi, Hon'ble Vice Chancellor, Karnataka University, Dharwad

**Guest of Honor:** Prof. R. G. Sonakawade, STUTI Program Coordinator, SAIF, Shivaji University, Kolhapur



# VALEDICTORY:

President: Prof Manjunatha Pattabi, Dean Faculty of Science and Technology, Mangalore University

Chief Guest: Dr. V. Pardhasaradhi, Vice President and Business Unit Head, Eurofins Advinus Agrosiences Service India Pvt Ltd, Bengaluru







# TECHNICAL TALKS



Continued



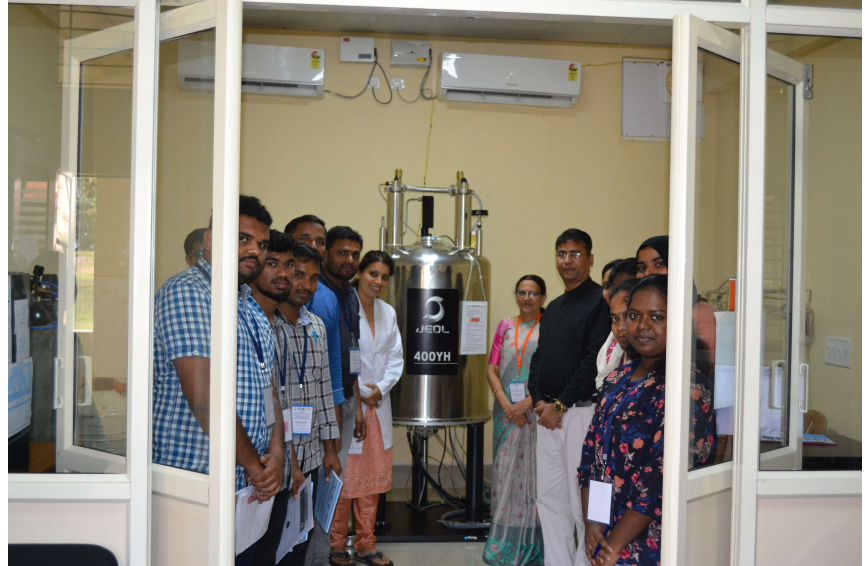
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## HANDS-ON TRAINING

Continued



# CULTURAL PROGRAM



# INDUSTRIAL VISIT



# CERTIFICATE DISTRIBUTION





# STUTI IN MEDIA

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## ವಿವಿಧ ರಾಷ್ಟ್ರೀಯ ಮಟ್ಟದ ತರಬೇತಿ ಕೌಶಲ್ಯ ಅಭಿವೃದ್ಧಿಯತ್ತ ಗಮನ ಪ್ರಗತಿಗೆ ಪೂರಕ: ಪ್ರೊ. ಕೆ.ಬಿ. ಗುಡಸಿ

ಮುನ್ನಡೆ ಕ್ರಮ ಕೈಗೊಂಡು ಕೇವಲ ಸರ್ಕಾರದಿಂದ ಮಾತ್ರವಲ್ಲದೆ ಉಪನಿರ್ದೇಶನದ ಅಡಿಯಲ್ಲಿ ಅತ್ಯಧಿಕ ಉಪಕರಣಗಳ ಪಾತ್ರ ಅತ್ಯಂತ ಮಹತ್ವವನ್ನು ಪಡೆದುಕೊಂಡು ಈ ನಿಟ್ಟಿನಲ್ಲಿ ಕೌಶಲ್ಯ ಅಭಿವೃದ್ಧಿಯತ್ತ ಗಮನಹರಿಸುವುದು ಪ್ರಗತಿಗೆ ಪೂರಕವಾಗಿದೆ ಎಂದು ಧಾರವಾಡದ ಕರ್ನಾಟಕ ವಿವಿಯ ಕುಲಪತಿ ಪ್ರೊ. ಕೆ. ಬಿ. ಗುಡಸಿ ಹೇಳಿದರು.

ಕೇಂದ್ರ ಸರ್ಕಾರದ ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಇಲಾಖೆಯ ಪ್ರಾಯೋಜಕತ್ವದಲ್ಲಿ ಮಂಗಳೂರು ವಿವಿ ಮತ್ತು ಕೊಲ್ಲಾಪುರದ ಶಿವಾಜಿ ವಿವಿಗಳ ಸಹಭಾಗಿತ್ವದಲ್ಲಿ ರಾಷ್ಟ್ರೀಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಅಭಿಯಾನದ ಎನ್‌ಎಂಆರ್‌ಐ ಉಪಕರಣ ಕೇಂದ್ರದ ಆರಂಭದ ಏಳು ದಿನಗಳ ರಾಷ್ಟ್ರೀಯ ಮಟ್ಟದ ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮ ಉದ್ಘಾಟಿಸಿ ಅವರು ಮಾತನಾಡಿದರು.

ಸಂಪನ್ಮೂಲ ವ್ಯಕ್ತಿಯಾಗಿ ಶಿವಾಜಿ ವಿವಿಯ ಪ್ರೊ. ರಾಜೇಂದ್ರ ಜಿ. ಸೊಂಕವಡೆ

ಮಾತನಾಡಿ, ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನದ ಅಭಿವೃದ್ಧಿಗಾಗಿ ಭಾರತ ಸರ್ಕಾರ ಅನೇಕ ಯೋಜನೆಗಳನ್ನು ಹಮ್ಮಿಕೊಂಡಿದ್ದು ಆತ್ಮನಿರರ್ಥಕ ಭಾರತದ ಆಶಯಕ್ಕೆ ಡಿಎಸ್‌ಸಿ ಸ್ತುತಿ ಕಾರ್ಯಯೋಜನೆಯು ಪೂರಕವಾಗಿದೆ ಎಂದರು. ಮಂಗಳೂರು ವಿವಿಯ ಕುಲಪತಿ ಪ್ರೊ. ಪಿ.ಎಸ್. ಯಡವಳ್ಳಿ ಪಡುತ್ತಾಯಿ ಕಾರ್ಯಕ್ರಮದ ಅಧ್ಯಕ್ಷತೆ ವಹಿಸಿ ಮಾತನಾಡಿ, ಮಂಗಳೂರು ವಿಶ್ವವಿದ್ಯಾಲಯದ ವಿವಿಧ ಸಂಶೋಧನಾ ಕೇಂದ್ರಗಳು ಅಂತಹ ರಾಷ್ಟ್ರೀಯ ಸಂಸ್ಥೆಗಳೊಂದಿಗೆ ಕೈಜೋಡಿಸಿ ಕೊಂಡು ವಿಶ್ವಮಟ್ಟದ ಸಾಧನೆಯನ್ನು ಮಾಡುತ್ತಿವೆ ಎಂದರು.

ನಿಯುಕ್ತಿಗೊಂಡ ತರಬೇತುದಾರರು ಉಪಸ್ಥಿತರಿದ್ದರು. ಕಾರ್ಯಕ್ರಮ ಸಂಘಟಕ ಪ್ರೊ. ಬಿ. ವಿಶಾಲಾಕ್ಷಿ ಸ್ವಾಗತಿಸಿದರು. ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮದ ವಂದಿಸಿದರು. ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮದ ಸಹ-ಸಂಘಟಕ ಪ್ರೊ. ಎನ್. ಕರುಣಾಕರ ಉಪಸ್ಥಿತರಿದ್ದರು. ಸಂಶೋಧನಾ ವಿದ್ಯಾರ್ಥಿನಿ ಲವಿನಾ ಗೌಡಿಸ್ ಸಂಪೂರ್ಣ ಕಾರ್ಯಕ್ರಮ ನಿರೂಪಿಸಿದರು. ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮ ಮಂಗಳೂರು ವಿವಿಯ ಮಂಗಳಗಂಗೋತ್ರಿ ಆವರಣದಲ್ಲಿ ನ. 14ರಿಂದ ಆರಂಭಗೊಂಡಿದ್ದು 20ರವರೆಗೆ ನಡೆಯಲಿದೆ.



ಸಂಯುಕ್ತ ಕರ್ನಾಟಕ

## ಜ್ಞಾನ ಗಳಿಸಿಕೊಳ್ಳುವ ಅಗತ್ಯ | ಗುಣಮಟ್ಟದ ಸಂಶೋಧನೆ | ರಾಷ್ಟ್ರೀಯ ಮಟ್ಟದ ತರಬೇತಿ ಆಧುನಿಕ ಉಪಕರಣಗಳ ಪಾತ್ರ ಮಹತ್ತರ

ಸಂ. ಕ. ಸಮಾಚಾರ, ಮಂಗಳೂರು ಸಂಶೋಧನೆಯಲ್ಲಿ ಆಧುನಿಕ ಉಪಕರಣಗಳ ಪಾತ್ರವು ಬಹಳ ಮಹತ್ವವನ್ನು ಪಡೆದಿದೆ. ಅವುಗಳ ಸಮರ್ಪಕ ಬಳಕೆಯಿಂದ ಗುಣಮಟ್ಟದ ಸಂಶೋಧನೆ ಸಾಧ್ಯ. ಉಪಕರಣಗಳ ಬಳಕೆಗೆ ಸಂಶೋಧಕರನ್ನು ತರಬೇತಿಗೊಳಿಸುವಲ್ಲಿ ಕಾರ್ಯಾಗಾರಗಳು ಬಹಳ ಪರಿಣಾಮ ಬೀರುತ್ತವೆ ಎಂದು ಯುರೋಫಿನ್ ಅಡ್ವೈಸ್ ಅಗೋಸ್ಟಿನಸ್ ಸರ್ವಿಸ್ ಇಂಡಿಯಾ ಪ್ರೈವೇಟ್ ಲಿಮಿಟೆಡ್ ಅಧ್ಯಕ್ಷ, ಬ್ಯುಸಿನೆಸ್ ಯೂನಿಟ್ ಮುಖ್ಯಸ್ಥ ಡಾ. ಪಿ. ಪಾರ್ಥಸಾರಥಿ ಅಭಿಪ್ರಾಯ ವ್ಯಕ್ತಿಸಿದರು.

ಭಾರತ ಸರ್ಕಾರದ ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಇಲಾಖೆ (ಡಿಎಸ್‌ಸಿ)ಯ ಪ್ರಾಯೋಜಕತ್ವದಲ್ಲಿ ಮಂಗಳೂರು ವಿಶ್ವವಿದ್ಯಾಲಯ (ವಿವಿ) ಮತ್ತು ಕೋಲಾಪುರದ ಶಿವಾಜಿ ವಿವಿಗಳ ಸಹಭಾಗಿತ್ವದಲ್ಲಿ ಮಂಗಳೂರು ವಿವಿಯ ಡಿಎಸ್‌ಸಿ-ಪಾರ್ಸಿ ಮತ್ತು ರಾಷ್ಟ್ರೀಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಅಭಿಯಾನದ ಎನ್‌ಎಂಆರ್‌ಐ ಉಪಕರಣ ಕೇಂದ್ರಗಳ ಜಂಟಿ ಸಹಯೋಗದಲ್ಲಿ ನಡೆದ ಏಳು ದಿನಗಳ ರಾಷ್ಟ್ರೀಯ ಸಮಾರಂಭದಲ್ಲಿ ಅವರು ಮುಖ್ಯ ಅಧ್ಯಕ್ಷತೆ ವಹಿಸಿದ್ದ ವಿಜ್ಞಾನ ನಿಕಾಯದ ಡೀನ್ ಪ್ರೊ. ಮಂಜುನಾಥಪಟ್ಟಾಭಿ ಅವರು ಮಾತನಾಡಿ, ಸಂಶೋಧಕರು ವೈಜ್ಞಾನಿಕ ಮೂಲತತ್ವಗಳು ಮತ್ತು ಸಂಶೋಧನಾ ಕ್ಷೇತ್ರದ ಪ್ರಗತಿಯ ಬಗ್ಗೆ ಜ್ಞಾನ ಗಳಿಸಿಕೊಳ್ಳುವ ಅಗತ್ಯತೆಯನ್ನು ಒತ್ತಿ ಹೇಳಿದರು.

ದೇಶದ ವಿವಿಧ ರಾಜ್ಯಗಳಿಂದ ಆಗಮಿಸಿದ ಅಯು 38 ಸಂಶೋಧಕರು ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಭಾಗವಹಿಸಿದ್ದರು. ಕಾರ್ಯಕ್ರಮದ ಸಹ-ಸಂಘಟಕ ಪ್ರೊ. ಬೋಜಪ್ಪಾಚಾರಿಯವರು ಅತಿಥಿಗಳನ್ನು ಸ್ವಾಗತಿಸಿದರು. ವೈಜ್ಞಾನಿಕ ಅಧಿಕಾರಿ ಡಾ. ಮುಜೇರ್ ಕೆ. ಕೆ ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮದ ವರದಿ ವಾಚಿಸಿದರು. ಕಾರ್ಯಕ್ರಮದ ಸಂಘಟಕರಾದ ಪ್ರೊ. ಬಿ. ವಿಶಾಲಾಕ್ಷಿ ವಂದಿಸಿದರು. ರಾಜಾಯನ ಶಾಸ್ತ್ರಿ ವಿಭಾಗದ ಸಂಶೋಧನಾ ವಿದ್ಯಾರ್ಥಿನಿ, ಕುಮಾರಿ ಲಲಿತಾ ಗೌಡಿಸ್ ಸಂಪೂರ್ಣ ಕಾರ್ಯಕ್ರಮ ನಿರೂಪಿಸಿದರು.



ರಾಷ್ಟ್ರೀಯ ಮಟ್ಟದ ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಡಾ. ಪಾರ್ಥಸಾರಥಿ ಮಾತನಾಡಿದರು.