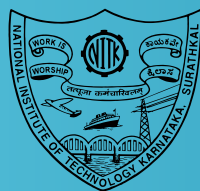
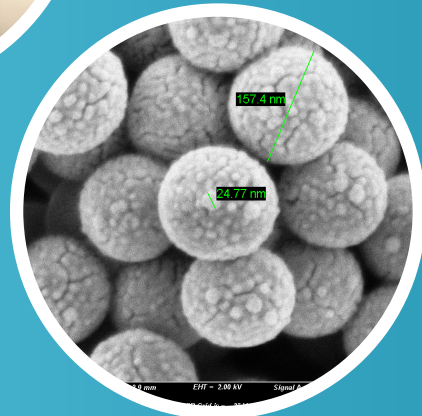
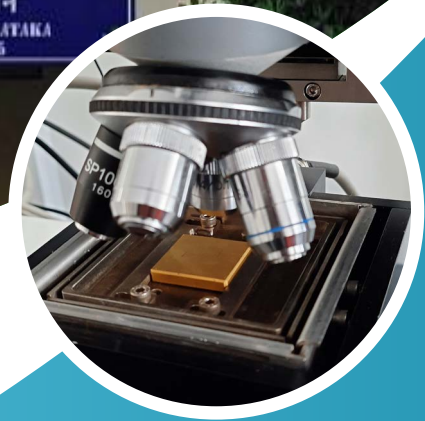
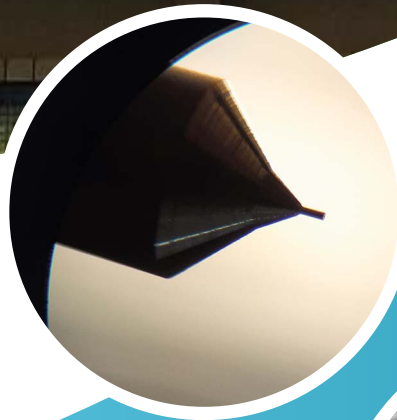




CENTRAL RESEARCH FACILITY

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SRINIVASNAGAR, MANGALURU - 575025



NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA

NH 66, SRINIVASNAGAR, SURATHKAL, MANGALORE, KARNATAKA 575025

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ABOUT CENTRAL RESEARCH FACILITY

The Central Research Facility (CRF) at the National Institute of Technology Karnataka is established with a budgetary support of Rs. 80 crore towards equipments. CRF has 100% power back-up and centralized HVAC and fiber optic connectivity. The CRF is established with an Rs. 80 crore loan from the Higher Education Financing Agency (HEFA). The total floor area being used is approximately 3,800 square metres.

A new building measuring approximately 5,500 square meters is nearing completion for the immediate expansion of CRF facilities. Another building with a floor area of approximately 5,500 square metres is being built to house various Centres of Excellence (CoEs).

The center shall be a one stop facility for:

- Centralized Production Facility with state of the art Manufacturing Equipment
- Materials Characterization Facility with state of the art Equipment for Characterization of Metals / Semiconductors / Ceramics / Elastomers / Glass Composites, etc.)
- Discussion / Meeting rooms and training halls
- Laboratories (CoEs) setup by Major Industrial houses on Cutting Edge Technologies



ABOUT ADMINISTRATION

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Prof. Karanam Umamaheshwar Rao, Director

Advisory committee

Prof. Ananthanarayana V.S.
Dy. Director

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Dean (Research & Consultancy)

Prof. K.S. Babu Narayan
Dean (Planning & Development)

Prof. Vidya Shetty
Dean (Academic)

Prof. M.S. Bhat
Dean (Faculty Welfare)

Prof. M.N. Satyanarayan
Chairman, CRF

Prof. S. Narendranath
Dean (Student Welfare)

Prof. Vijay Desai
Dean (Alumni Affairs & Instt. Relation)

Shri K. Ravindranath
Registrar

Shri Y. Rammohan
Joint Registrar

Core Committee Members

Dr. Mohammad Rizwanur Rahman
(Co-Chairman, CRF), Department of MME

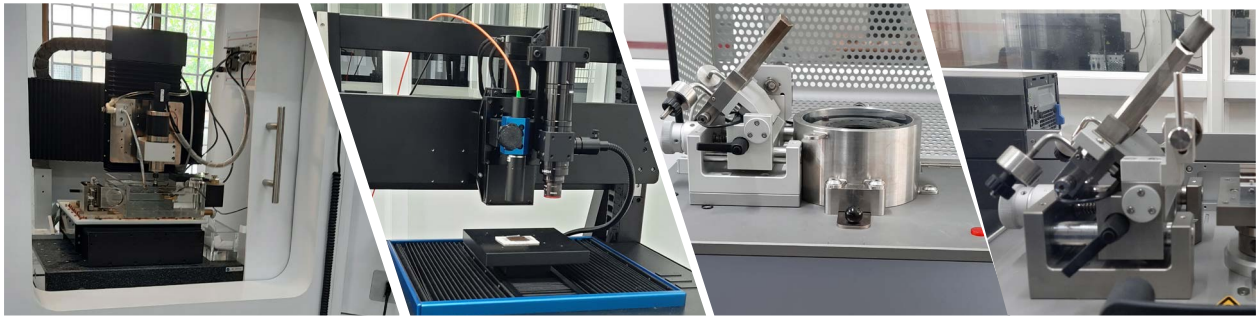
Dr. Udaya Kumar Dalimba
Department of Chemistry

Dr. S. Gangamma
Department of Chemical Engineering

Dr. Keyur Raval
Department of Chemical Engineering

Dr. Srikanth Bontha
Department of Mechanical Engineering

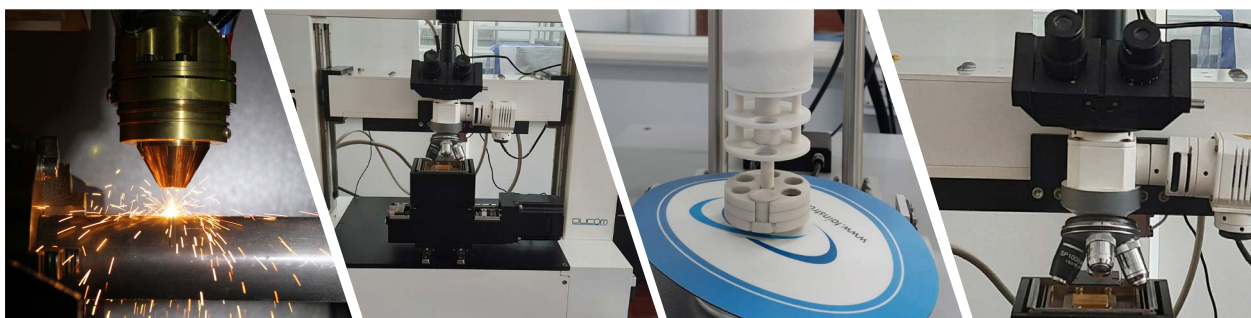




MECHANICAL TESTING FACILITIES

- 250 kN Servo-hydraulic Fatigue Testing Unit
- Friction and Wear monitor
- Instrumented Impact Tester
- Integrated Multirole Mechanical Tester
- Low force Fatigue Tester
- MTS Fatigue system
- Nanoindenter with SPM
- Scratch Tester
- Split-Hopkinson pressure bar
- Tribometer





MANUFACTURING & MATERIAL PROCESSING FACILITIES

MANUFACTURING

- 3D Metal Printer
- 5-axis CNC machining unit
- Micromachining system

MATERIALS PROCESSING

- Automatic Electrolytic Polishing
- Ball Milling Unit
- High Temperature Vacuum Furnace
- High Velocity Oxyfuel / Airfuel Coating Facility
- Precision sample cutter
- Probe Sonicator





SPECTROSCOPY FACILITIES

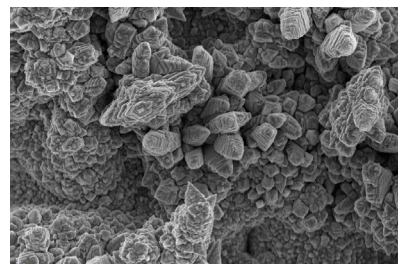
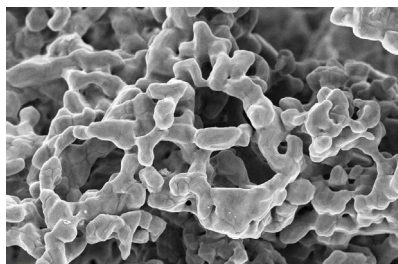
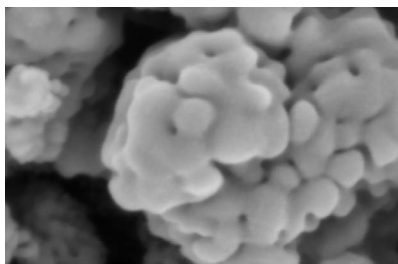
- 2D gas Chromatography-Mass Spectrometer
- Glow Discharge Optical Emission Spectrometer
- HR Liquid Chromatography-MS
- ICP Mass Spectrometer
- Ion Chromatography
- Optical Emission Spectrometer
- FT-NMR Spectrometer
- PTR Mass Spectrometer
- Raman Spectrometer
- Spectroradiometer
- TG-FTIR Spectrometer
- UV-Vis-NIR Spectrometer





STRUCTURAL CHARACTERIZATION FACILITIES

- 3D Non-contact Profilometer
- Atomic Force Microscope
- BET Surface Area Analyzer
- X-ray Diffractometer
- Gemini 300 FESEM with EDS, WDS, EBSD, STEM
- Zeta Potential Analyzer



COMPUTATIONAL FACILITIES

- ANSYS Multiphysics simulation package
- High performance workstations
- SETFOS Simulation Tool for Organic Electronic Device Design

OTHER FACILITIES

- Advanced Modular Rheometer
- Cell imaging multimode reader with multifluorescence
- Impedance Analyzer
- Laser Flash Analyzer
- Liquid Nitrogen Plant with Nitrogen Generator Assembly

HOW TO BOOK SLOTS TO USE CRF EQUIPMENTS

01

Visit CRF website and navigate to **BOOK SLOT** option.

02

Login or Sign up for a new account. Choose between Internal or External User.

03

New user enter the basic details required for registration.

04

Verify your email id with by clicking the link sent to your registered email.

05

Wow you are now verified! It's time to login and choose the desired equipment from the list.

06

Once an equipment is selected, choose an available slot date from the calendar.

07

Now, its time to be more technical. Provide the information about samples and testing parameters.

08

Once you are done with entering the test info, read the instructions provided carefully and continue.

09

Hurry!, your slot is booked. You can now check status of your slot and payment details from the Record tab.

10

Once you receive Slot Booking Form from CRF get it authorized by the reporting authority or supervisor.

11

It's your slot day. After the completion of testing, the user can now pay for the service online from the RECORD tab.

12

After the payment confirmation, user will receive the results file in their registered email id.



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