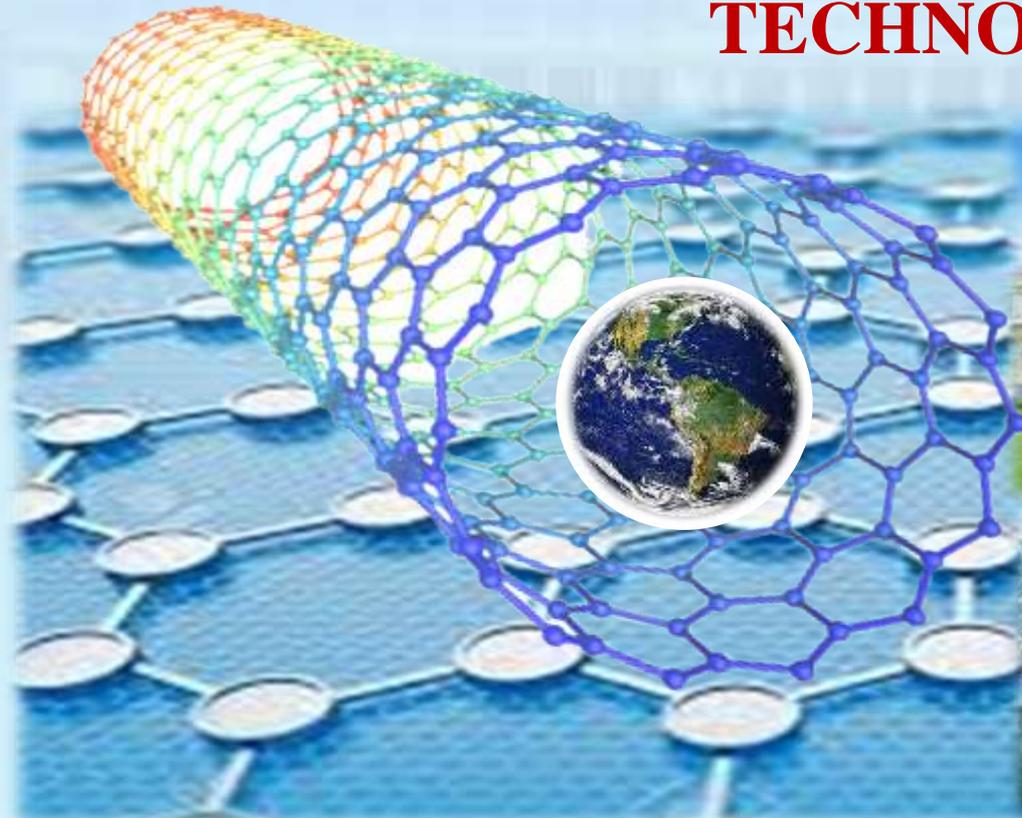




# UNIVERSITY OF MYSORE



## CENTRE FOR MATERIALS SCIENCE AND TECHNOLOGY



**World leading technology towards sustainable development**



# Overview



- ❖ **Vision & Mission Of The Department**
- ❖ **Department Profile And Curricular Aspects**
- ❖ **Programs Offered**
- ❖ **Course Structure**
- ❖ **Faculty Profile**
- ❖ **Students Enrollment and Job Placements**
- ❖ **Conferences Organized By CMST**
- ❖ **Infrastructure And Learning Resources**
- ❖ **Institutional Values And Best Practices**



# MATERIALS SCIENCE



## Vision

To develop a world class center of excellence in education, training & research in the field of **Materials Science** where teaching and research encrust detailed understanding of advanced functional materials and its applications.

## Mission

- ❖ To impart holistic understanding of **Materials Science** by “redefining materials” to students of every age so that they develop interest in Science.
- ❖ To develop teaching and research programmes that has relevance to the society and employability.
- ❖ To continuously evaluate our performance against National and International benchmarks and to develop dynamic programmes.



# Department Profile And Curricular Aspects



## Department

- Centre for Materials Science and technology ( estd **since 2012**)
- University With Potential for Excellence (UPE)
- Center with Potential for Excellence in a Particular Area (CPEPA) UGC

## Faculty

- Elected Fellows of number of Scientific Academies and Scientific Bodies
- Committee members Academy Boards/Committees of several Institutions
- Individual Extra –mural Grants
- Good Publications

## Students

### Placements

- Research institutions
- In R&D companies
- At college/university level

- ✓ The University of Mysore has started job oriented course- M.Tech in Materials Science with funding and support from University Grants Commission, New Delhi under the banner “University with Potential for Excellence (UPE)” in 2012.
- ✓ The UGC Expert Committee has recommended to the University of Mysore, to nurture this subject for the future generations and promote this field among the stakeholders and contribute to the generation of specialists in this field.
- ✓ The course content is formulated keeping in mind the demands from Industry and R&D Institutions from India and abroad.
- ✓ UGC’s dedicated database Shodh Ganga has indicated that the University of Mysore, is a leading institution in the country in the area of Materials Science



# Curricular Aspects



- The admission to M.Tech. Course is through an entrance examination and is open to Undergraduate Degree holders from diversified background such as Basic Science Subjects, Engineering, Medical, Agricultural Science, Pharmaceutical Science, and Dental Science.
- M.Tech in Materials Science Program is of two years for medical, Pharmaceutical Science Dental Science, Engineering Students, and M.Sc Degree holders. However, the course is of three Years for students from B.Sc., background. B.Sc., Students can have a lateral exit after first semesters (TWO Years)with M.Sc., Degree Materials Science.
- The course is offered under Flexible Choice Based Credit System with continuous evolution accordingly, Hard Core (11 Papers) and Soft Core (17 Papers) subjects such as Materials Processing, Materials Characterization, Nanochemistry, Nanophysics, Materials for Energy Storage, Aerospace Materials, Chemical Engineering, Materials and Environment, Carbon Nanotubes, Materials for Renewable Energy and Storage, Nanobiomechanical Engineering, Ceramics Engineering, Composites, Nanobiotechnology in Health Care, Thermo-chemical Modeling, etc are offered to students from diversified background.



# Curricular Aspects



- The students are free to select any soft core papers of their liking. The details of the credits and subjects are available from the University website: [WWW.uni-mysore.ac.in](http://WWW.uni-mysore.ac.in). Faculty of PG Departments and experts from National Laboratories are actively involved in teaching and training the M.Tech. Students with the state of the art facilities listed overleaf.
- The participating faculty members have proven strength through high-quality publications, trainings and sponsored research projects with national and international collaborations and consultancy services offered at various levels.
- The M.Tech students are encouraged to work on a chosen Minor and Major projects from 3<sup>rd</sup> semester onwards.



# Programs Offered



- ❖ **M.Tech in MATERIALS SCIENCE**
- ❖ **M.Sc. in MATERIALS SCIENCE**
- ❖ **Ph.D. in MATERIALS SCIENCE**

## **Terms and conditions:**

Total number of seats: **30**

- Admission is purely based on all India basis and the marks obtained in the entrance exam. Other admission regulations are as per the CBCS regulations of University of Mysore 2010.
- Project internship can be pursued in and reputed lab or industry or institution in India or abroad.
- Odd semester will be during August/September to December/Jan. Even semester will be during Feb/March to June/July.

Course details at: <http://uni-mysore.ac.in/english-version/UPE/>



# Course Structure :



Admission Eligibility Qualification	Degree after The Program	Hard Core credits (incl. project)	Soft core credits	Total Credits	No. of Years
B.Sc (Physics, Chemistry, Geology, Polymer, Biochemistry, Botany, Zoology, Environmental science, Sericulture, Computer science, Food science, Mathematics, statistic, Forensic science	M.Tech.	60	46-50	110	3 years
B.Sc (Physics, Chemistry, Geology, Polymer, Biochemistry, Botany, Zoology, Environmental science, Sericulture, Computer science, Food science, Mathematics, statistics, Forensic science)	M.Sc (optional exit)	50	22-26	76	2 years
B.E/MBBS/B.Tech/B.Pharma/BDS/BSc(Ag) (any branch)	M.Tech.	52	12	64	2 years
B.Sc (Physics, Chemistry, Geology, Polymer, Biochemistry, Botany, Zoology, Environmental science, Sericulture, Computer science, Food science, Mathematics, statistic, Forensic science	M.Tech.	52	12	64	2 years



# Hard Core Course under FCBCS scheme



Code	Paper title	Core	Credits			
			Lecture	Tutorial	Practical	Total
MSH-1	Introduction to Materials	Hard	3	1	0	4
MSH-2	Thermodynamics and Statistical Mechanics	Hard	3	1	0	4
MSH-3	Materials Preparation Techniques	Hard	3	1	0	4
MSH-4	Methods of Materials Characterization	Hard	3	1	0	4
MSH-5	Physics and Chemistry of Materials	Hard	3	1	0	4
MSH-6	Materials and Environmental Effects	Hard	3	1	0	4
MSH-7	Characterization lab-1	Hard	0	1	3	4
MSH-8	Characterisation lab-2	Hard	0	1	3	4
MSH-9	Characterisation lab-3	Hard	0	1	3	4
MSH-10	Characterisation lab-4	Hard	0	1	3	4
MSH-11	Characterisation lab-5	Hard	0	1	3	4
MSH-12	Minor Project	Hard	0	1	5	6
MSH-13	Major Project ( Only for M.Tech. exit)	Hard	0	2	8	10

Syllabus details at : <http://uni-mysore.ac.in/english-version/UPE/revised%20syllabus%202020-21.pdf>



# Soft Core Course

## under FCBCS scheme



Code	Paper title	Core	Credits			
			Lecture	Tutorial	Practical	Total
MSS-1	Structure, Property and Functions of Materials	Soft	3	1	0	4
MSS-2	Basics of Chemistry	Soft	3	1	0	4
MSS-3	Spectroscopic Techniques for Materials	Soft	3	1	0	4
MSS-4	Nanoscale Devices	Soft	3	1	0	4
MSS-5	Nanochemistry	Soft	3	1	0	4
MSS-6	Carbon Nanotubes	Soft	3	1	0	4
MSS-7	Materials for Aerospace Applications	Soft	3	1	0	4
MSS-8	Composite Materials	Soft	3	1	0	4
MSS-9	Polymer Science and Cell Biology	Soft	3	1	0	4
MSS-10	Metals and Alloys	Soft	3	1	0	4
MSS-11	Nano-biotechnology in Health Care	Soft	3	1	0	4
MSS-12	Nano-photonics	Soft	3	1	0	4
MSS-13	Thermodynamic Modelling of Systems	Soft	3	1	0	4
MSS-14	Basics of Engineering Drawing and Graphics	Soft	2	2	0	4
MSS-15	Ceramics Science and Technology	Soft	3	1	0	4
MSS-16	Materials for Renewable Energy and Storage	Soft	3	1	0	4
MSS-17	Basics of Nanotechnology	Soft	3	1	0	4
MSS-18	Enterprise Architecture	Soft	3	1	0	4
MSS-19	Chemical Engineering	Soft	3	1	0	4
MSS-20	Advanced X-ray Diffraction Studies	Soft	3	1	0	4
MSS-21	Analytical and Inorganic Chemistry	Soft	3	1	0	4
MSS-22	Semiconductor Optoelectronics	Soft	3	1	0	4
MSS-23	Analytical and Inorganic Chemistry	Soft	3	1	0	4
		<b>Total soft credits available to choose</b>				<b>66</b>



# Structure Of Ph.D Course Work



## Paper 1 : Research Methodology and Advanced Materials Science

100 marks

- Unit-I: Research Methodology
- Unit-II : Advanced Materials Science
- Unit-III: Materials characterization Techniques

50 marks

Written test

50 marks

Seminar: 30 marks

Assessment: 20 marks

## Paper 2: Review of Literature in the Area of Research

100 marks

In Paper – II, a student has to present two seminars (I & II )

50 marks

Seminar Presentation

Seminar Report – I

50 marks

Seminar Presentation

Seminar Report – II



# Faculty Profile



## **The Faculty and visiting faculty :**

Prof. K. Mantellingu, Co-Ordinator, Center for Materials Science & Technology.

Prof. M.Y. Sreenivasa, Visiting Professor, Department of Studies in Microbiology.

Prof. S. Srikantaswamy, Visiting Professor, Center for Materials Science & Technology.

Prof. K.M. Lokanatha Rai, Visiting Professor, Center for Materials Science & Technology.

Prof. B. Basavalingu, Visiting Professor, Center for Materials Science & Technology.



# Faculty Profile



## Guest faculty :

Dr. Suresh. R. N, Guest Faculty, Center for Materials Science & Technology

Mr. Deepu. H. R, Guest Faculty, Center for Materials Science & Technology

Dr. Nayan. M. B , Guest Faculty, Center for Materials Science & Technology

## Non-Teaching Staff:

Ms. Shwetha. M, S.D.C

Mr. Vikram. L. Rai, Lab Assistance

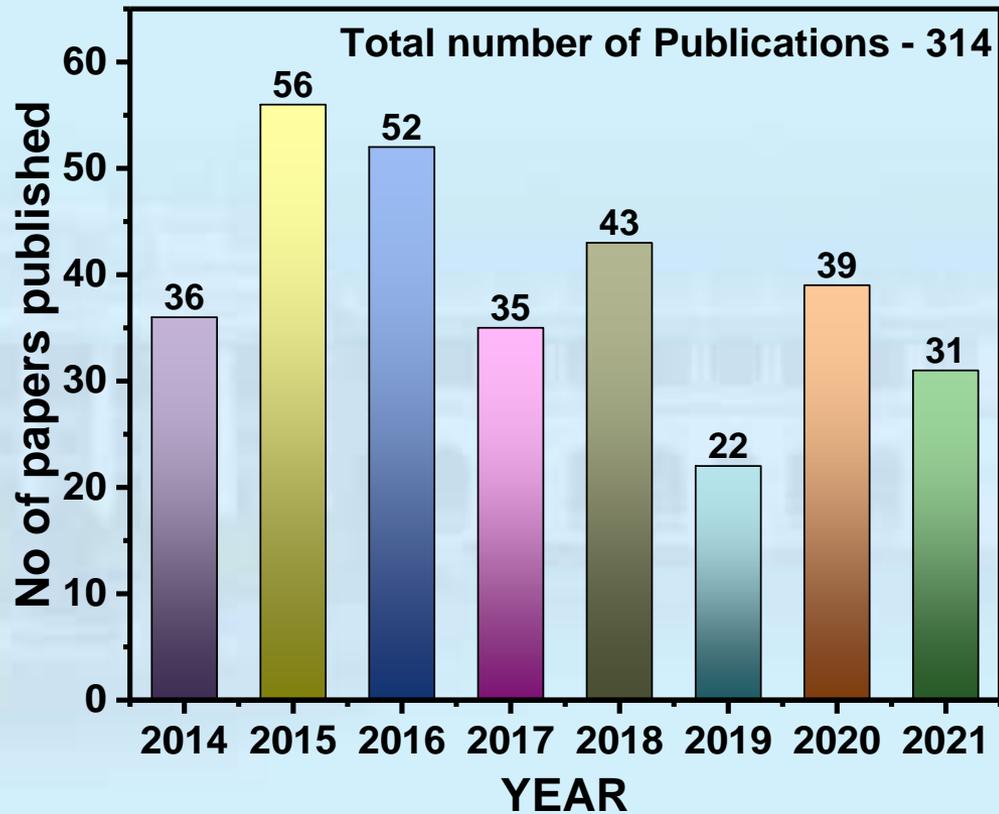
Mr. H. B. Basavaraju, Attender



# Publications details



During the Year	Total
2014	36
2015	56
2016	52
2017	35
2018	43
2019	22
2020	39
2021	31
2023	06
2024	02



**Publications chart**

**h-index of Faculty ranges from 6 – 38**

**Impact factor ranges from 3 - 16**



# Details of Research Projects



Sl. No	Names of the Principal Investigator and other Investigators	Sponsoring Agency	Total amount of the project	Title of the Project
1	Prof. S. Srikantaswamy	EMPRI, (Govt. of Karnataka)	Rs.9,08,500=00 (2014-2016)	Water Sample analysis and Biodiversity studies in the water bodies of proposed Mysore-Nanjangud Local Planning Area.
2	Prof. S. Srikantaswamy Prof. Sunil Nautiyal	DST, New Delhi	Rs.22 Lakhs	Climate Smart Livelihood and Socio-ecological Development of Biodiversity Hotspots of India
3	Prof. S. Srikantaswamy Prof. K. Byrappa Prof. B.Basavalingu Prof. Lokanath Rai	University With Potential for Excellence (UPE), UGC	Rs.50,00,00,000	Processing, Characterization & Applications of Advanced Functional Materials
4	Prof. S. Srikantaswamy Prof. K. Byrappa Prof. B.Basavalingu Prof. Lokanath Rai	Center with Potential for Excellence in a Particular Area (CPEPA),UGC	Rs.4,30,00,000	Processing Characterization and Applications of Advanced Functional Nanomaterial's



# Details of Visit to foreign countries by the faculty for academic purpose



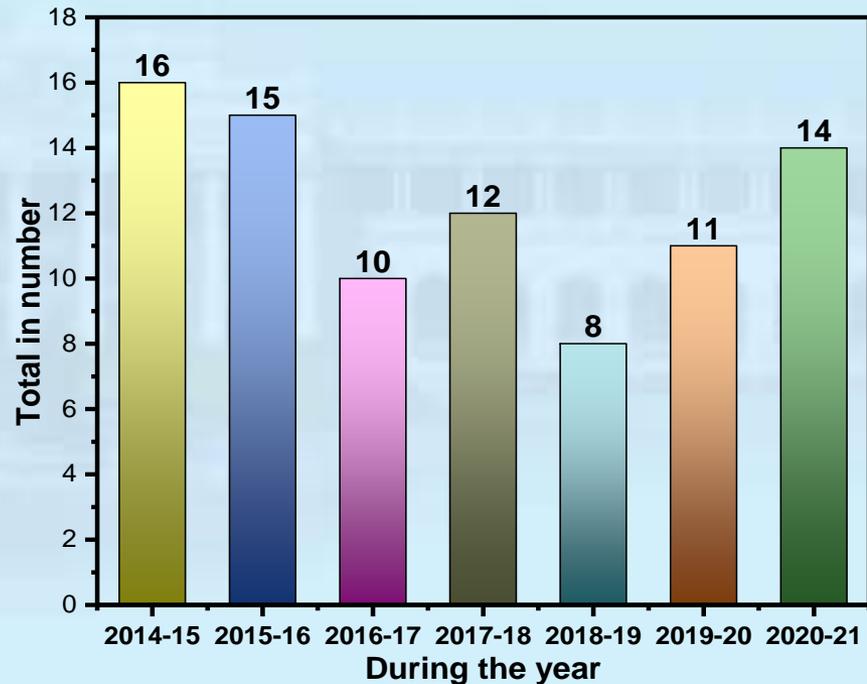
S.No	Name of the Faculty	Purpose of Visit	Place of Visit	Date of Visit
1	<b>Prof. S. Srikantaswamy Visiting Professor</b>	International Conference for the paper presentation on the topic- Photo-catalytic dye degradation and biological activities of Iron/Cuprous nanocomposites	Nelson Mandela bay stadium, Port Elizabeth, South Africa.	7th -9th November,2018
2		International Conference for the paper presentation on the topic- Photo-catalytic dye degradation and biological activities of Iron/Cuprous nanocomposites.	Nelson Mandela bay stadium, Port Elizabeth, South Africa.	7th -9th November,2018
3		International Conference for the paper presentation on the topic- Controllable Hydrothermal growth of Iron oxide nanoparticle: Reaction parameters and its water treatment studies with graphene oxide composite.	Symposium, A-8, 15TH IUMRS-ICAM, 2017, Yashida Campus, Kyoto University, Kyoto, Japan.	27th August – 1st September, 2017
4		Outreach programme	Dubai	
5		Outreach programme	Srilanka	
6		10th International Conference on. Materials for Advanced Technologies (ICMAT-2019) Singapore	Nanyang Technological University of Singapore	23 -29, June 2019



# Students Enrollment



During the Year	Total
2014-15	16
2015-16	15
2016-17	10
2017-18	12
2018-19	08
2019-20	11
<b>2020-21</b>	<b>14</b>
<b>2021-2022</b>	<b>14</b>
<b>2022-2023</b>	<b>09</b>



Students Enrollment Chart



## Ph.D awardee:

Sl.No	Name of the Ph.D awardee list	Name of the guide	Year of award
1	Dr. Kashinath	Prof. K. Byrappa	10-10-2018
2	Dr. Abdo Hezam Abdullah Mohsen	Prof. K. Byrappa	01-09-2020
3	Dr. Mina Zare	Prof. K. Byrappa	13-10-2020
4	Mr. Dhananjay	Prof. S. Srikantaswamy	06-08-2019
5	Mrs. Akshata	Prof. S. Srikantaswamy	24-04-2018

## Research Scholars:

Sl.No	Name of the research scholar	Name of the guide	Date of Joining
2	Mr. Chandrakantha. K. S	Prof. S. Srikantaswamy	12-02-2021



# Job Placement



Sl.No	Names of the Student	Year	Currently working
1	Avinash. N	2014-15	Research Scholar, Mangalore University, Mangalore.
2	Daniel Edward	2014-15	CEO, ICD Tuning, Chennai.
3	Nivetha	2014-15	Project Fellow, Central Electro Chemical Research Institute (CECRI), Tamilnadu, Karaikudi.
4	Rakesh. P.V	2014-15	Working at Accenture solution Pvt. Ltd Bangalore as Trial Specialist Designation : (Medical Services Associate)
5	Supriya. K. S	2014-15	Working in Rangson-Schuster Technologies Pvt. Ltd, Mandya.
6	Pabitra Das	2014-15	Project Assistant at the Council of Scientific & Industrial Research.
7	Vinod Raj	2014-15	Accenture, Bangalore.



# Job Placement



Sl.No	Names of the Student	Year	Currently working
8	Reeshma Rameshan	2014-15	Birla Institute of Technology and Science ( <i>BITS</i> ) Pilani, Hyderabad campus as JRF in the Department of Chemistry.
9	Narasimha Jayanth Baradwaj	2015-16	Working in Hydro Electric cell at National Physics Laboratory, New Delhi.
10	Mahesh.B.L	2015-16	Raman Research Institute, Bangalore.
11	Sharadhi.N.Raj	2015-16	R & D Assistant at Centre for Nano and Soft matter Science, Bangalore.
12	Prutha. N. Raj	2015-16	PhD in Electronics and Computer Engineering, Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong
13	Manohara. M	2015-16	Raman Research Institute, Bangalore.
14	Nandeeshwara	2015-16	Working in Backward classes Department, Mangalore.
15	Sudhin Sukumaran	2015-16	Doctoral student at National Institute of Technology( NIT ) Rourkela, Odisha.



# Job Placement



Sl.No	Names of the Student	Year	Currently working
16	Mahesha. C. B	2015-16	Lecture, Shanthinikethana College, Ramanagara.
17	Mohith Kumar Sharma	2015-16	Lab chemist, Polymer Papers Ltd., 12/6, Mathura Road, Faridabad-121003.
18	Anuj Mehta	2015-16	Working at Oriental Carbon & Chemicals Limited in the Corporate Office as a Technical Sales Executive.
19	Sundram Pandey	2015-16	Chemtech Process Services, Inc as Technical Sales Engineer, New Delhi,
20	Mohan. N. A	2016-17	Self – Employed.
21	Harisha. H. G	2016-17	TVS Motor Pvt. Ltd.
22	Roohan Farooq Lala	2016-17	Research Scholar, Indian Institute of Science (IISc), Bangalore.
23	Shilpa. U	2016-17	Project assistant level 2, Council of Scientific and Industrial Research CSIR, Chennai.
24	Prajna. B	2016-17	Learning and development specialist, Think and Learn pvt ltd. (Byju's), Bengaluru, Karnataka



# Job Placement



Sl.No	Names of the Student	Year	Currently working
25	Archana. C. S	2016-17	Purchase Executive, Bal-Pharma Ltd, Bangalore.
26	Ashish Raghavan	2016-17	Project Associate-1, CIPET: School for Advanced Research in Polymers (Sarp), Bhubaneswar, Orissa
27	Mahendra. D. M	2017-18	Senior Engineer , Tech Mahindra India LTD, Bangalore.560100
28	Naveen. G. S	2017-18	Working in Bharat Earth Movers <i>Limited (BEML), Mysuru.</i>
29	Jagadeeshanayaka. N	2017-18	Working as Junior Researcher Fellow (JRF) National Institute of Technology Karnataka, Surathkal.
30	Sumit Kumar Parida	2017-19	Teacher, Delhi Public School, Bhugathgalli Village, Bannur road, Mysore.
31	Shwetha.G	2017-19	Documentation Officer, Swami Vivekananda Youth Movement (SVYM), Mysore.
32	Dhananjay	2017-19	Research Scholar, Centre for Materials Science and Technology, Vijnana Bhavan, Manasagangothri, Mysore
33	Govindaraju. B. R	2017-19	Civil Engineering Consultant, Real Estate freelance, Bangalore.
34	Punith Kumar	2017-19	Production Manager, Hi-tech Services Private Limited, Bangalore.

35	Anagha Sojen	2021-2022	Snam Arasives Pvt. Ltd., Hosur, Tamilnadu.
36	Suhel. K. A	2021-2022	Senior Engineer at Siderforge Rosindia, Mysuru.
38	Premkumar. N	2021-2022	Aggregation Industry, Bangalore.
39	Girish. V	2021-2022	Electrical Engineer at Lakshmi Electrical Enterprises. Mysuru.
40	Prashanth. K. S	2020-2021	Tester, Log Scientific Materials Pvt. Ltd, Bangalore.



# Conferences Organized by CMST



Year	Name of the workshop/seminar	Dated
2015-16	Seminar: "Benefits of Nuclear and Materials Science in day to day life(BNMS-2015") organised by Centre for Materials Science and Technology. <b>Convenor: Dr. S. Srikanataswamy</b>	21 <sup>st</sup> to 22 <sup>nd</sup> August 2015
2019-20	Advanced Functional Materials for Energy, Environmental and Health Care (AFMEEHC)-2019 International Conference organised by Center for Materials Science Technology under UPE Project <b>Convenor: Dr. S. Srikanataswamy</b>	18 <sup>th</sup> to 20 <sup>th</sup> March 2019
2019-20	National Conference on Science Technology: Rural Development (NCSTRD 2019) organized by Center for Materials Science Technology and Institute of Excellence (IOE) in association with Indian Science Congress Association <b>Convenor: Dr. S. Srikanataswamy</b>	17 <sup>th</sup> to 18 <sup>th</sup> October 2019



# List of distinguished personalities who visited to the Department



Sl. No	Name & Address of the Visitors	Dated	Purpose of visit	Topic of the Lecture
01	<b>Prof. Masahiro Yoshimura</b> Distinguished Chair Professor, Dept of Mater., Sci. and eng., National Cheng Kung University, Tainan, Taiwan.	18/03/2019 to 20/03/2019	An International Conference Organized By Centre for Materials Science & Technology	Why Soft Processing (=Low-Energy Production) of Advanced Materials is Difficult but Necessary for Sustainable Society
02	<b>Prof. B. V. R. Chowdari</b> Senior Executive Director, President's Office & Professor, School of Materials Science & Engineering Nanyang Technological University, Singapore.	18/03/2019 to 20/03/2019	"An International Conference Organized By Centre for Materials Science & Technology	"Advanced Materials for Sustainable Development"
03	<b>Prof. Sanjay Mathur</b> Chair, Inorganic and Materials Chemistry University of Cologne, Greinstrasse, Germany	18/03/2019 to 20/03/2019	An International Conference Organized By Centre for Materials Science & Technology	Chemically Engineered Metal Oxides for Energy and Health Applications
04	<b>Prof. Ajayan Vinu</b> Global Innovative Center for Advanced Nanomaterials, University of Newcastle, Australia.	18/03/2019 to 20/03/2019	An International Conference Organized By Centre for Materials Science & Technology	Functionalized Nanoporous Materials for CO <sub>2</sub> Capture
05	<b>Prof. Cyril Aymonier</b>		An International Conference	Supercritical Solvothermal



# List of distinguished personalities who visited to the Department



Sl. No	Name & Address of the Visitors	Dated	Purpose of visit	Topic of the Lecture
06	<b>Dr. R. Jayavel</b> Distinguished chair professor, Dept of mater., Sci and Eng., National Cheng Kung University, Tainan, Taiwan	18/03/2019 to 20/03/2019	An International Conference Organized By Centre for Materials Science & Technology	Graphene-Metal Oxide Based Nanocomposites for Energy and Environmental Applications
07	<b>Dr. Lalit Mohan Manocha</b> Visiting Associate, Inter University Accelerator Centre, New Delhi.	18/03/2019 to 20/03/2019	An International Conference Organized By Centre for Materials Science & Technology	Key Note Speaker
08	<b>Prof. B. Neppolian</b> Energy & Environmental Lab., SRM Research Institute Chennai	18/03/2019 to 20/03/2019	An International Conference Organized By Centre for Materials Science & Technology	Ultrasound Assisted Synthesis of Nano-Materials for Energy and Environmental Remediation
09	<b>D. Velmurugan</b> Centre of Advanced study in Crystallography and Biophysics, University of Madras, Guindy Campus, Chennai.	18/03/2019 to 20/03/2019	An International Conference Organized By Centre for Materials Science & Technology	Graphene- Metal Oxide Based Nanocomposites for energy and Environmental Applications



# List of distinguished personalities who visited to the Department



Sl. No	Name & Address of the Visitors	Dated	Purpose of visit
10	<b>Prof. Amit Roy</b> Director, Inter University Accelerator, Centre Aruna Asaf Marg, New Delhi	23-03-2016	Advisory Committee Meeting
11	<b>Prof. L.M.Monocha</b> Department of Materials Sceicne, Sardar Patel University, Vallabh Vidyanagar	23-03-2016	Advisory Committee Meeting
12	<b>Dr. Rajbir Singh,</b> Director Consortium for Educational Communication, IUAC(NSC), New Delhi.	23-03-2016	Advisory Committee Meeting
13	<b>Dr. K.P.Singh,</b> Joint Secretary UGC, Camus, New Dehli.	23-03-2016	Advisory Committee Meeting
14	<b>Dr. Nisar Ahamad Mir,</b> Joint Secretary, UGC, New Delhi.	10-06-2017	Advisory Committee Meeting



# Infrastructure & Learning Resources



Sl.No.	Infrastructure	Department of CMST
1	Library	About 200 Books
2	Internet facilities for staff and students	15 computers, Wi-Fi enabled
3	Total number of class rooms	2, all ICT equipped, Smart boards.
4	Class rooms with Computers and ICT facility	Yes
5	CMST Laboratories	1, all ICT equipped, Smart boards
6	Research Laboratories	1, Well equipped.



# Instrumentation Facility



1. X-ray Powder Diffractometer (Japan)
2. Scanning Electron Microscope (Japan)
3. Atomic Force Microscope (Italy)
4. BET Surface area analyser (Japan)
5. Raman Spectroscopy
6. TG/ DTA/DSC System (Switzerland)
7. Particles Size Analyzer (USA)
8. Photoluminescence (PL Spectroscopy)
9. Atomic Absorption Spectroscopy
10. Contact Angle Analyzer FTA 200 (USA)
11. UV-Vis spectrophotometer
12. Magnetic susceptibility
13. Microwave Hydrothermal Reactors (USA)
14. Chemical vapour deposition (CVD)
15. Electrochemical work station (USA)
16. Polarizing Microscope with CCD Camera (Japan)
17. Non-Linear Optics Laboratory set up with Fempto Second Laser (USA)
20. Flow Reactor for SCF technology (USA)
21. Viscometer (USA)
22. Metricon Prism Coupler (USA)



# Laboratory

## Equipments:

- Rotary evaporator
- Refrigerator
- Incubator shaker
- Centrifuges
- Thermistor
- Laminar Flow
- Microscopes
- Microwave oven
- Double distillation unit
- Ultrasonicator
- Hot plate Magnetic stirrer
- UV- Chambers
- Desiccators





# Class Rooms



- **Class rooms equipped with Smart Boards & ICT facilities and also with Wi-Fi enabled**



# Institutional Values and Best Practices



- Good governance :
  - Democratic and participatory academic and administrative functions through Committees
  - Transparency

- Creation of research culture among students :
  - High amount of Extramural Research grants
  - Publications in high impact peer reviewed journals
  - High h-index
  - Technology/skill development-leading to better placement



# Way Forward



- To develop teaching and research programs, which are novel, integrative that attracts best brain of the country
- To inculcate entrepreneurship in students
- Students involvement in various committees to encourage participative functioning
- Online Library cataloging/management



# SWOC Analysis



## Strengths

- ❖ Diversity of faculty expertise in teaching and research
- ❖ Diverse model systems used for research and teaching
- ❖ Support system
- ❖ Interaction with students
- ❖ Interaction with Eminent scientists
- ❖ Extramural Funding

## Weakness

- ❖ Need to develop integrative intradepartmental research program
- ❖ Good feedback mechanism

## Opportunities

- ❖ Collaborative research opportunity
- ❖ Extension of applied and translational research for societal outreach activities

## Challenges

- ❖ Teacher student ratio not in place due to many vacant positions
- ❖ To inculcate entrepreneurship in students
- ❖ To develop teaching and research programs, which are novel, integrative that attracts best brain of the country
- ❖ Still need a better infrastructure and better resource



# Photo Gallery





**UNIVERSITY OF MYSORE**

**CENTRE FOR MATERIALS SCIENCE AND  
TECHNOLOGY**



*Thank you*