



2nd International Conference on

**“Materials Science and Mathematics for Advanced
Technology (MSMAT 2022)”**

**(Under the Aegis of ICETE 2022 – A multi conference
platform)**

December 22nd – 23rd, 2022

Organized by

Basic Sciences Department



(An Autonomous Institution affiliated to VTU, Belagavi)
NITTE - 574 110, Karkala Taluk, Udupi District, Karnataka, India
ISO 9001:2015 Certified, Accredited by NAAC with 'A' Grade

Phone: 08258-281264; Fax: 08258-281265

Website: <http://www.icete-nitte.in/>

<http://msmat2022.in/>

About NITTE (Deemed to be University)

Nitte (Deemed to be University) has its roots in a group of Institutions established by the Nitte Education Trust. The Trust was established in 1979 by one of India's respected statesmen, Late Justice K. S. Hegde, Supreme Court Judge and Speaker of Lok Sabha, with the mission of empowering rural youth through quality education and health care. The Trust has established 36 Institutions spread in 3 campuses at Nitte, Mangaluru and Bengaluru. It offers education in diverse areas of learning including Health professions education, Engineering, Management, Humanities, General Education, Vocational Training and School/Pre-University Education.

The University offers a total of 98 Programs in the disciplines of Engineering, Medicine, Allied Health Sciences, Dentistry, Pharmacy, Nursing, Physiotherapy, Speech and Audiology, Biological Sciences, Media & Communication, Commerce, Science, Management and Architecture. It has 10000+ students, over 875 faculty members and over 2475 support staff on roll. The University campuses are spread over 52 acres in Deralakatte-Paneer areas of Mangaluru and 110 acres in Nitte.

The University received A+ Grading in NAAC Accreditation in 2021. It has been consistently placed in the top 70-80 Rank band in NIRF. The University is also placed in the 401-450 Rank band in the QS Rankings for Asia region. It has received Diamond Rating in the QSI- Guage India Ratings. The constituent colleges of the University have good standing in their disciplines in the NIRF Rankings. In 2021, the Dental College was ranked 6th and the Medical College and Pharmacy Colleges were ranked 45th in NIRF. All the Undergraduate Programs of NMAMIT are Accredited by NBA. Further, the B. Pharm program of the University is accredited by NBA. The teaching hospital is accredited by both NABH and NABL.

About NMAM Institute of Technology

Nitte Mahalinga Adyanthaya Memorial Institute of Technology (NMAMIT), affiliated to VTU, Belagavi, is an autonomous Institution offering UG, PG and Doctoral programmes. It is a unit of Nitte Education Trust, Mangalore. It currently offers 10 UG programmes in engineering, 06 M.Tech programmes, MBA and MCA programmes. The institute is ranked 138 in the NIRF ranking (Engineering Institutes) -2021, Govt. of India. Atal incubation center supported by NITI AAYOG, Government of India is situated in the

campus. The institute is an ISO 9001-2015 certified for quality education by NVT Quality Certifications (ANAB accredited), also, accredited with 'A' grade by National Assessment and Accreditation Council (UGC NAAC). The college has signed MoU with reputed industries, research organizations, and International universities to promote close interaction in areas of recent technologies, Research & Development, and skill development programs.

About the Basic Sciences Department

The Basic Sciences Department includes the Department of Physics, Department of Chemistry and Department of Mathematics. All the three Departments have been playing a profound role in providing a strong foundation for engineering students. The Departments are recognized as Research Centres under VTU. The Department of Physics is actively involved in research areas such as Condensed Matter Physics, Laser and Photonics, Quantum Field Theory, Ion trapping and Atomic Physics and has more than 70 research articles in national and international journals. Department received external research funds from VTU and VGST. With more than 40 research articles published in reputed journals, the Department of Mathematics has 5 research scholars pursuing their PhD. The research is mainly focused on Graph Theory, Lattice Theory, Group Theory, Algebra, Fluid Dynamics, and Tribology. The Department of Chemistry is actively involved in research in the areas like Synthetic Organic Chemistry, Green Chemistry, Nanocoatings, Corrosion Science and Polymer Composites. Till date, more than 90 research articles have been published by the Department in journals of national and international repute. Presently, 7 students are pursuing their Ph.D. in the Research Centre.

About the Conference

NMAM Institute of Technology, Nitte is hosting the Multiconference ICETE-2022 during 22 – 23rd December 2022. ICETE-2022 will have seven International Conferences under its umbrella which have been organized with specific themes pertaining to different Departments. The Department of Mathematics, Physics and Chemistry, under the Basic Science stream, are jointly organizing International Conference on Material Science and Mathematics for Advanced Technology (MSMAT-2022). The main scope of MSMAT-2022 is to offer diverse sessions on the on-going developments and applications of

material science and mathematics in designing modern technology. The conference, empowered by eminent speakers and researchers across the globe, will provide an opportunity for knowledge sharing and discussions on budding technological concepts with frontrunners in the respective fields. The deliberations include keynote addresses and invited talks by scientists around the world, oral and poster presentations by researchers and faculty. The conference establishes multidisciplinary summit that integrate research and education in the vital field of material science and advances in Mathematics and that transcends institutional, industrial, research organization and global barriers.

Keynote Speakers

Eminent researchers, academicians and industrialists will be delivering online keynote address on topics pertaining to the major themes of the conference. The list of keynote speakers and related details will be updated on the website.

Conference location

The Institute is located on the Padubidri-Karkala State Highway (SH01) which is 10 km away from Karkala, well connected with Mangalore (60 KM) and Udupi/Manipal (45 KM) through NH66 & NH169. The participants can alight at Mangalore or Udupi Railway Stations/Bus Terminals or Mangalore Airport to reach the Institute.

Theme of the Conference and Thrust Areas

MSMAT-2022 will attract researchers and academicians in the field of basic sciences and engineering with a basic theme of co-relating applied research with technology. The conference will have the following thrust areas:

Surface, Interfaces and Thin Films	Ultrafast Optics and Non Linear Optics
Electrical and Magnetic Materials	Crystal Growth
Optoelectronics and Photonics	Polymer Science and Technology
Catalytic materials and Green Chemistry	Biomaterials
Advanced Energy Materials	Applied Mathematics
Computational Materials Science	Probability Theory/Statistics
Advances in Nanomaterials Science	Algebra and Matrix Analysis
Metallurgy and Corrosion	Mathematical Modeling and Graph Theory

Call for papers

The technical committee warmly invites abstract of original research papers describing their latest findings & research work to the conference from academic/industry professionals, R&D organizations & departments and researcher scholars across the globe. The manuscript should contribute original research ideas, analysis & findings which is related to the conference theme. The manuscript should not have been published/under review in any journals or conference proceedings or magazines.

Full-length manuscripts which clearly present the work, methods, originality, significance and applications of the research work should be submitted through Easy Chair Conference Management System. The accepted manuscripts, after peer review process, will be considered for e-proceedings and conference presentation.

Authors interested in journal publication of their research article should submit the full-length manuscript as per prescribed format. Visit conference website for manuscript template and paper submission links (<http://msmat2022.in/>)

Important dates

Submission of Full-length manuscript – Open	: 01/04/2022
Last date to Submit Full-length manuscript	: 01/08/2022
Notification of acceptance	: 20/10/2022
Registration Open	: 05/11/2022
Submission of camera-ready Manuscript	: 20/11/2022
Registration Close	: 20/11/2022
Conference Date	: Dec 22-23, 2022

Paper submission

Queries related to the conference may be sent to msmat.nmamit@nitte.edu.in

1. The research paper submitted should be an original work and should not have been submitted in any another conference or journal. The journal format should be followed for preparing the manuscript of the paper.
2. Manuscript needs to be prepared by keeping **plagiarism below 15%**. Manuscripts in electronic **format (DOC, DOCX only)** need to be submitted. The template for manuscript submissions can be found [here](#).
3. Upload manuscript in the easychair link given here: <https://easychair.org/conferences/?conf=msmat2022>
4. Accepted papers presented in the conference need to be resubmitted by the author(s) to the **Materials Today Proceeding** portal, which will be activated after the conference. Necessary instruction regarding the same will be given to the author(s) at the appropriate time.
5. There is no extra charge for publication.

Registration Fee

The registration fee can be paid through NEFT as per the details given below.

Registration fee for	Indian Delegates (INR)	Foreign Delegates (USD \$)
Research scholars/PG/UG students/ Academicians	4000	75

NEFT/RTGS details

A/c Holder Name : Nitte Deemed to be University

Bank Name : Canara Bank

Branch : Nitte

Account Type : S/B

Account No. : 110047322915

IFSC/RTGS code : CNRB0010115

MICR Code : 576015041

The proof of NEFT payment (with UTR No., date & time, Paper Id) along with registration form needs to be communicated through email to msmat.nmamit@nitte.edu.in

Committees

Patron:

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President, Nitte Education Trust, Mangaluru

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REGISTRATION FORM

Name [In Capitals] : Dr. /Mr./Ms.

Designation :

Institution/Organization :

Address for Correspondence:

City: State: Country:

Mobile No: Email:

Title of the Paper:

Paper ID: Theme:

Name & Designation of corresponding Author: (If it is different from above)

Mode of Payment: NEFT

Details of Payment: _____

UPI transaction number and date:

Gender: Male/Female

Signature of Delegate:

Conference Registration Fee Refer website http://msmat2022.in/	LAST DATE FOR REGISTRATION 20 November 2022 The payment of registration fee should be made by NEFT.	NEFT Details A/c Holder Name: Nitte Deemed to be University Account Type : S/B Account No. : 110047322915 IFSC/RTGS code: CNRB0010115 MICR Code : 576015041
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