



# VINAYAKA MISSION'S RESEARCH FOUNDATION

(Deemed to be University under section 3 of the UGC Act 1956)

## **VMRF(DU) Salem and National Institute of Technology, Tiruchirappalli**

Vinayaka Mission's Research Foundation (Deemed to be University) (VMRF(DU)) in Salem, India, and National Institute of Technology, Tiruchirappalli have signed Memorandum of Understanding (MoU) held on 20<sup>th</sup> April 2022,

### **Nature of Collaboration**

- Exchange of Faculty
- Exchange of Students (UG and / or PG)
- Joint supervision of M.Tech and Ph.D students
- Exchange academic information, scholarly information, materials, and facilities as also joint publications.
- Exchange of periodicals and other publications
- Execution of joint/ collaborative research programs
- Organization of joint conference



# **MOU ACTIVITIES**



# VINAYAKA MISSION'S KIRUPANANDA VARIYAR ARTS AND SCIENCE COLLEGE

A Constituent College of Vinayaka Mission's Research Foundation  
(Deemed to be University)



## Joint Research Project:

One collaborative research project between VMKV Arts and Science College and NITT is ongoing under TARE Scheme of DST. The title of the project is “Perovskite based detectors for x-and $\gamma$ -ray detection and ToF-PET imaging”.

## Joint Research Outcome: 2 Publications

**Authors:** Karthikkumar Chinnakutti, Madappa C. Maridevaru, Reshma Kaimal, Naveena Paramasivam, Kamalan Kirubaharan, Jayaraman Theerthagiri, Aruna Kumari M.L., Sivakumar Manickam, Sambandam Anandan, Myong Yong Choi

**Article Title:** Electrochemical detection of arsenic (III) hazardous chemicals using cubic CsPbBr<sub>3</sub> single crystals: Structural insights from DFT study

**Journal Name:** Environmental Research (Indexed in Scopus)

**Publisher Name:** Elsevier

**Month & Year:** April 2023

**Authors:** Hyeyeon Lee, Jayaraman Theerthagiri, ML Aruna Kumari, Ahreum Min, CheolJoo Moon, Venkattappan Anbazhagan, Richard L Brutchey, Myong Yong Choi

**Article Title:** Leveraging phosphate group in Pd/PdO decorated nickel phosphate microflowers via pulsed laser for robust hydrogen production in hydrazine-assisted electrolyzer

**Journal Name:** International Journal of Hydrogen Energy (Indexed in Scopus)

**Impact Factor:** 7.2

**Publisher Name:** Elsevier

**Month & Year:** February 2024



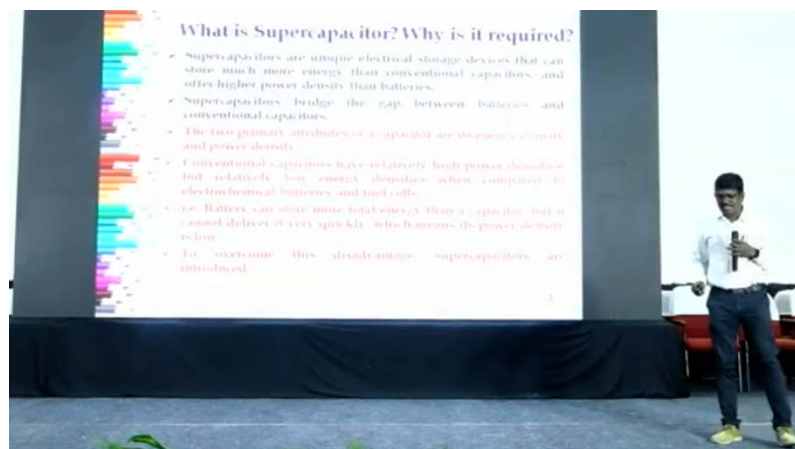
# VINAYAKA MISSION'S KIRUPANANDA VARIYAR ARTS AND SCIENCE COLLEGE

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## Participation of NITT Professor in our International Conference

Prof. Dr. S. Anandan, Department of Chemistry has delivered an invited talk on “Nanocarbons (Graphene, etc) as a promising next-generation energy storage material” in the Indo-South Korea-Thailand 3<sup>rd</sup> International Conference on Nanoscience and Nanotechnology for Energy, Environment and Biomedical Applications (iNEEBA-2023) organized by our VMRFDU during 1<sup>st</sup> & 2<sup>nd</sup> October 2023.



## Collaborative research between NIT Trichy and AVIT, VMRF (DU)

### Student Collaboration:

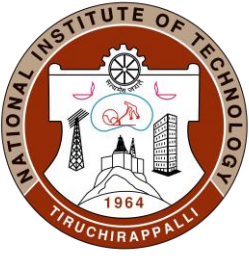
Five students from our institute were recently engaged in a one-month research collaboration internship at NIT Trichy. The collaboration involved various research topics and departments, which are specified in the table below.

S.No	Name of the Student	Department	Research Topic	Guidance
1	Mr. Avishek Anand	Civil	Hands-on Training on Water Quality Assessment	Dr. R. Gandhimathi
2	Mr. Rajeev Ranjan Kumar			
3	Vaishnavi. S	Biotechnology	Biosynthesis of nanoparticles with leaves extract	Dr. Matheswaran
4	D. kaviya			
5	Majjari.Uday Kesav		Optimization of Process Parameters for Extraction of Oxidative Phosphates from Poultry Manure.	Dr. Ruben Sudhakar D

Two students have been awarded the certificate, while the remaining three students have yet to complete the internship requirements. I have enclosed the certificate that the student has received.

### Faculty Collaboration:

Dr. R.N. Viswanath, a professor in the Department of Humanities and Science, has been engaged in collaborative research with Dr. A. Chandrabose, a professor in the Department of Physics at NIT Trichy. Their research focuses on developing electrodes for biosensor devices using electronic materials. During this study, the researchers were in the process of preparing the research article.



# NATIONAL INSTITUTE OF TECHNOLOGY

(Centrally Funded Technical Institution (CFTI), Department of Higher Education,  
Ministry of Human Resource Development, Govt. of India.)

**Tiruchirappalli - 620 015, Tamilnadu, India.**

Phone : 0431 - 2503150 (Office), 2503171 (Direct), Fax: 0431 – 2500133

E-mail: rgmathii@nitt.edu, Website: www.nitt.edu

**Dr. R. GANDHIMATHI, M.E., Ph.D.**

**Professor / Civil Engineering**

27.06.2024

## TO WHOMSOEVER IT MAY CONCERN

This is to certify **Mr. Avishek Anand (3422210502)**, II Year B. E., Department of Civil Engineering, **Aarupadai Veedu Institute of Technology, Paiyanoor, Kancheepuram, Chennai, Tamil Nadu** has done his internship at National Institute of Technology, Tiruchirappalli from 31.05.2024 to 27.06.2024 on the topic “Hands-on Training on Water Quality Assessment” under my guidance. During his internship **Mr. Avishek Anand** was actively involved in analysis of water samples. Further, he has carried out detailed literature survey on emerging technologies for wastewater treatment. He demonstrated sincerity, hardworking and self-motivation, during the course of his internship.

I wish **Mr. Avishek Anand** a very good luck in his future endeavors.

If I may be of any other further assistance in this matter, please do not hesitate to contact me by phone (0431 - 2503171) or through my E-mail: rgmathii@nitt.edu

Sincerely Yours,

**(Dr. R. Gandhimathi)**

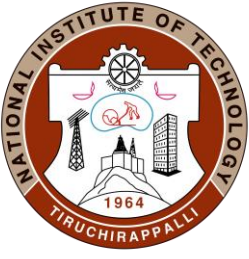
Dr. (Mrs). R. Gandhimathi, M.E., Ph.D.

Professor

Department of Civil Engineering

National Institute of Technology

Tiruchirappalli – 620 015.



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**Dr. R. GANDHIMATHI, M.E., Ph.D.**

**Professor / Civil Engineering**

27.06.2024

## TO WHOMSOEVER IT MAY CONCERN

This is to certify **Mr. Rajeev Ranjan Kumar (3422210506)**, II Year B. E., Department of Civil Engineering, **Aarupadai Veedu Institute of Technology, Paiyanoor, Kancheepuram, Chennai, Tamil Nadu** has done his internship at National Institute of Technology, Tiruchirappalli from 31.05.2024 to 27.06.2024 on the topic “Hands-on Training on Water Quality Assessment” under my guidance. During his internship **Mr. Rajeev Ranjan Kumar** was actively involved in analysis of water samples. Further, he has carried out detailed literature survey on emerging technologies for wastewater treatment. He demonstrated sincerity, hardworking and self-motivation, during the course of his internship.

I wish **Mr. Rajeev Ranjan Kumar** a very good luck in his future endeavors.

If I may be of any other further assistance in this matter, please do not hesitate to contact me by phone (0431 - 2503171) or through my E-mail: rgmathii@nitt.edu

Sincerely Yours,

**(Dr. R. Gandhimathi)**

Dr. (Mrs). R. Gandhimathi, M.E., Ph.D.

Professor

Department of Civil Engineering

National Institute of Technology

Tiruchirappalli – 620 015.



# VINAYAKA MISSION'S KIRUPANANDA VARIYAR ARTS AND SCIENCE COLLEGE

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## NITT Professor visited our VMKV Arts and Science College

Prof. Dr. S. Manivannan, Department of Physics has visited our Centre for Research and Development, VMKV Arts and Science College and had preliminary discussion for research collaboration with NITT on the project entitled “Interface-Driven Barrier Scattering for Enhanced Thermoelectric Performance in Heterostructure Nanocomposites” held on 05.07.2024. He has accepted to utilize the facilities available in his research laboratory.





**Vinayaka Mission's Kirupananda Variyar Engineering College**  
**A Constituent College of Vinayaka Mission's Research Foundation (Deemed to be University)**

**National Institute of Technology, Tiruchirappalli Internship Details 2024**

<b>S.No.</b>	<b>Name of the Student</b>	<b>Institute Name</b>	<b>Guide Name</b>	<b>Internship Project Title</b>
1	Venkatesh S. , IV Year B.E BME	Department of Intrumentation and Control Engineering, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Periyasamy R. Assistant Professor	APP based audiometer
2	Keerthana S. , IV Year B.E BME	Department of Intrumentation and Control Engineering, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Periyasamy R. Assistant Professor	APP based audiometer
3	Vishal D. , IV Year B.E BME	Department of Production Engineering, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Vinodh S. Professor	Application, Manufacturing Methods & Product Design In Biomedical Engineering

4	Neelambari S. , III Year B.E BME	Department of Production Engineering, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Vasu M. Assistant Professor	Optimizing Production processes for Biomedical Equipment Manufacturing:"A study on efficiency enhancement and Quality control"
5	Preethi jeniya A. , III Year B.E BME	Department of Production Engineering, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Vasu M. Assistant Professor	Optimizing Production processes for Biomedical Equipment Manufacturing:"A study on efficiency enhancement and Quality control"
6	Sanjay Prasanth M. , III Year B.E BME	Department of Electronics and Intrumentation Engineering, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Karthick P.A. Assistant Professor	BIOMEDICAL SIGNAL PROCESSING (EEG)

7	Hariharan T. , IV Year B.E BME	Department of Electronics and Intrumentation Engineering, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Karthick P.A. Assistant Professor	BIOMEDICAL SIGNAL PROCESSING (EEG)
8	Deepa Shree A. , IV Year B.E BME	Department of Production Engineering, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Vinodh S. Professor	Role of Industry 4.0 Technologies with Reference to Biomedical Application Products
9	Shanmuga Priya C. , IV Year B.E CSE	Department of Computer Applications, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Saroja S. Assistant Professor	Prediction and classification of potable water through deep learning

10	Ilakkia A., IV Year B.E CSE	Department of Computer Applications, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Saroja S. Assistant Professor	Prediction and classification of potable water through deep learning
11	Kavinraj V. , IV Year B.E AI & DS	Department of Computer Science and Engineering, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Brindha M. Associate Profesor	Diabetic Retinopathy Detection
12	Nandhini G. , IV Year B.E AI & DS	Department of Computer Science and Engineering, National Institute of Technology, Tanjore Main Road, NH67, Near BHEL,Tiruchirappalli - 620015	Dr Brindha M. Associate Profesor	Diabetic Retinopathy Detection