


<b>Name: Dr. M.VANITHA</b>	<b>Photo</b> 			
<b>Designation:</b>	Associate professor			
<b>Qualification:</b>	MSc. M.Phil., Ph.D.,			
<b>Area of specialization:</b>	CHEMISTRY			
<b>Experience:</b>	<b>Industrial Experience</b>		<b>Teaching Experience</b>	
	-		20	
<b>Number of workshops / FDP attended:</b>	<b>Number of Workshops</b>		<b>Number of FDPs</b>	
	06		22	
<b>Publications:</b>	<b>Conference</b>		<b>Journal</b>	
	<b>National</b>	<b>International</b>	<b>National</b>	<b>International</b>
	03	03	0	16
<b>Books / Book Chapters</b>	2			
<b>Patents:</b>	<b>National</b>		<b>International</b>	
	2		-	
<b>Professional Body Membership</b>	3			

**Staff Achievements**

- Certified internal auditor of ISO:9001:2008 and ISO: 9001:2015 for Quality management system and Audit training.
- NSS Programme officer.
- Department NAAC Coordinator
- Completed NITTTR eight modules.
- Reviewed international journals
- ATL Mentor Thinkerpreneur 2021..

## Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks / Grades obtained	Class obtained
UG	B.Sc	General Chemistry	2003	Kundavi Nachiyar Govt. Arts. & Science College	Bharathidasan University	82%	Ist with Distinction
PG	M.Sc	General Chemistry	2005	Raja Serfoji Govt. Arts College	Bharathidasan University	79%	I
	M.Phil	General Chemistry	2008	Bharathidasan University	Bharathidasan University	81%	Ist with Distinction
Ph.D.	Ph.D.	Nano Materials	2024	Dr. Ambedkar Govt. Arts College	University of Madras	-	-

## Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
GKM College of Engineering & Technology	Lecturer	16.08.2005	03.01.2007	1	4	18
Karpaga Vinayaka College of Engineering & Technology	Lecturer	18.01.2007	17.06.2008	1	5	-
Sri Sai Ram Engineering College	Assistant Professor	18.06.2008	31.08.2022	14	03	-
Sri Sai Ram Engineering College	Associate Professor	01.09.2022	Till date	2	03	-
				<b>19</b>	<b>03</b>	<b>18</b>

Workshops/Seminars attended	:06
FDP/STTP Attended	: 22
Symposium Attended	: 0
Conference Attended	: 06
Completed / Ongoing Projects	: -
Patent	: 2
Journal Publications	:17
Books / Book Chapters	: 1
Awards	: 3
Startup	: 0
Webinar	: 12
Resource Person	: 0
Online Courses	:19

### **Workshops/Seminars:**

Attended National level workshop on, Synthesis of Nanomaterials using Electrochemical Methods, Characterisation and Application on 26th July 2024. at Sri Sairam Engineering College

1. Participated in the international Virtual Seminar on **Advances in Chemical Sciences** on organized by PG & Research Department of Chemistry, Vivekanandha College of Arts and Sciences for Women (Autonomous), Elayampalayam, Tiruchengode on 08.03.2021.
2. Attended “Two Days National Workshop on Hands on Training on **Composite Preform Formation Techniques and their Characterization for General Engineering, Armour and Aerospace Applications**” at St.Peter’s College of Engineering and Technology, Chennai on 30 and 31<sup>st</sup> Aug 2019.
3. Attended National level workshop on “**Advancements in Chemical sciences** on 18th July 2016 at Sri Sairam Institute of Technology.
4. Attended Recent Trends in **Laser Spectroscopy and its Applications (RTILSA -13)**

on 17.10.2013 at Sri Sairam Engineering College.

5. Attended the AICTE sponsored staff development program on “**Recent Developments in Computing**” conducted by department of computer science & engineering at Sri Sai Ram Engineering College on April 2010.

### **FDP/STTP:**

1. Attended **International FDP on Nanomaterials** at **St.Mary’s College**(Autonomous) Thoothukudi from 23.11.2021 to 27.11.2021.
2. Attended FDP on “Innovation,Incubation,startsup and Research challenges in India” at **SRM Institute of Science and technology** 28.06.2021 to 02.07.2021
3. Attended FDP on “Recent Developments in materials,manufacturing and thermal Applications” at **Karpagam Academy of higher education**,Coimbatore from 07.06.2021 to 12.06.2021.
4. Attended Five days FDP on Inculcating Universal human values in Technical Education online program from 19.04.2021 to 23.04.2021.
5. Attended STTP “Strategies in Teaching learning” at **Sri Sairam Institute of Technology** from 25.02.2021to 03.03.2021.
6. Attended Five days FDP on “Manufacturing, Machining and Testing of Composites” at **Sri Sairam Institute of technology**, Chennai from 15.05.2020 to 19.06.2020.
7. Attended **AICTE Training & Learning (ATAL) Academy** FDP on “**Robotics**” from 25.05.2020-29.05.2020 at Maulana Azad National Institute of Technology Bhopal MP.
8. Attended ISTE sponsored Five days Short Term Training Programme on “**Intelligent Robotics & Machine Vision Technology IN Current Scenario**” at **Sri Sairam Institute of Technology, Chennai** from 13.05.2020 - 18.05.2020.
9. Attended Five days FDP on “Novel Materials and Industrial Applications” at **Karpagam College of Engineering, Coimbatore** from 25.05.2020 - 29.05.2020.
10. Attended the AICTE Recognized Faculty training programme on “**Nanomaterials and Devices**” at **NITTR, Chandigarh** from 27.4.2020 to 01.05.2020.
11. Attended Five days FDP on “Materials for Thermal and Renewable Energy Research” **Sri Sairam Institute of technology**, Chennai from 20<sup>th</sup> may & 24<sup>th</sup> May 2020.
12. Attended Two days FDP on “**AFM AND FTIR BASED MATERIAL TESTING FOR RESEARCH**” at **Aarupadai Veedu Institute of technology**, Chennai from 17<sup>th</sup> July & 18<sup>th</sup> Dec 2019.
13. Attended Three days Sponsored FDP on “**Teaching Techniques with Gamification**” Conducted by ICT Academy on 11.12.2019 to 13.12.2019 at Dhaanish Ahmed College of Engineering.
14. Attended the ISTE sponsored FDP on “**RENEWABLE ENERGY SYSTEMS**” at Sri Sairam Engineering college, Chennai from 22<sup>nd</sup> July to 26<sup>rd</sup> July 2019.

15. Attended the AICTE sponsored short term training programme on **“Natural Fiber Composites –Recent technology for Sustainability and Eco-friendly Environment”** at Sri Sai Ram Engineering College from 24.6.19 to 29.6.19.
16. Participated in Two days Faculty development programme on **“Recent developments in Engineering Materials & Nanotechnology”** held on 10<sup>th</sup> & 11<sup>th</sup> December 2018 at Tagore Engineering College, Department of Mechanical Engineering, Rathinamangalam, Chennai-127.
17. Attended FDP on **“CHARACTERIZATION OF MATERIALS”** at Sri Sairam Institute of Technology, Chennai on 20<sup>th</sup> & 21<sup>st</sup> July 2017.
18. Attended the Anna university Sponsored faculty development program on **“CY2161-Engineering Chemistry – II”** at Madras institute of technology Chennai on 26<sup>th</sup> Dec to 2<sup>nd</sup> Jan 2012.

### **Conferences:**

1. Presented paper on **“International conference on solar & Biomass energy”** “Conducted by department of mechanical engineering at GKM College of engineering & technology, Chennai on 7<sup>th</sup> & 8<sup>th</sup> Jan 2014. Title of the paper: **“Management of High level radioactive wastes at Nuclear power plants”**
2. Participated National Conference on **“Recent Development of Chemistry in Engineering Applications”** conducted by department of Chemistry at SRM Valliammai Engineering College, Kattankulathur on 09<sup>th</sup> Feb 2019.
3. Participated National Conference on **“Current Trends in Energy Conversion Devices & Environment”** conducted by department of Chemistry at Selvam Arts & Science College, Namakkal on 22<sup>nd</sup> & 23<sup>rd</sup> Feb 2019.
4. Participated International Conference on **Advanced Materials on Energy and Environmental Applications(ICAMEEA 2020)** Department of chemistry, School of Science and Humanities, BIST, BIHER, sponsored by TNSCST & in association with INHA University, South Korea & RSC South Indian Chapter 03.12.2020 - 04.12.2020
5. Participated International conference on **Nanoscience and Nano technology** at **Bharath institute of Science and technology** .05.02.2021 & 06.02.2021
6. Participated in the National Conference on Recent Innovations in Mechanical Engineering and presented paper on **Investigation of Ni<sup>2+</sup> ions on structural, morphological and magnetic properties of NixCo1-xFe2O4 nanoparticles** organized by Jai Shriram Engineering College on 18.11.2021 at Tirupur-638660.

### **Projects Applied**

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### **Patent filed**

1 **Patent Published** on **6.01.2023**, Brain computer interfaced (bci) system for non-touch remote controlling of the household electrical devices providing home automation.

2. **Patent Published** on **6.01.2023**, Brain computer interfaced (bci) system for non-touch remote controlling of the navigational device to assist the physically challenged users

## **Journals:**

### **International:**

1. **M. Vanitha**, Robert Čep, Ranjan Kr Ghadai. Investigation of mechanical properties of silver-doped diamond-like carbon coating by varying deposition temperature. *Frontiers in Mechanical Engineering*, Vol:10, Feb 2024.

2. **M. Vanitha**, G Shanmugasundar, K Logesh, Lenka Cepova Effect of deposition temperature on the tribo-mechanical properties of nitrogen doped DLC thin film. *Frontiers in Mechanical Engineering*, Vol:10, Feb 2024.

3. **M. Vanitha**, G Shanmugasundar ,Brain-computer interface of robot control with home automation for disabled , *AIP Conference Proceedings*, vol: 2742, May 2023

4. **M. Vanitha, G Sai Krishnan G Sai Krishnan** Investigation on mechanical properties of metallic fiber reinforced concrete. , *AIP Conference Proceedings*, vol: 2742, May 2023

5. **M. Vanitha**, G Ramachandran Green Synthesis and Characterization Studies of Calcium Doped Nickel Ferrite Nanoparticles by Microwave Combustion Method. *International journal of Food and Nutritional Sciences*, vol: 11, Dec 2022.

6. **M. Vanitha**, G Shanmugasundar, G Sai Krishnan, S Srinivasan .Investigation on the mechanical properties of newly modified polymeric fiber for structural applications Vol:46, 2021.

**7. M. Vanitha**, G Sai Krishnan, G Shanmugasundar, Raghuram Pradhan, SP Sundar Singh Sivam .Performance analysis on mechanical/morphological properties of ramie-kenaf hybrid polymer composites. AIP Conference Proceedings. Vol:2417,2021.

**8. M. Vanitha**, Raghuram Pradhan, G Shanmugasundar, G Sai Krishnan, SP Sundar Singh Sivam A critical investigation on the performance of bael biodiesel in CI engine . AIP Conference Proceedings .Vol:2417,2021.

**9. M. Vanitha**, G Shanmugasundar, Robert Čep, Vikas Kumar, Kanak Kalita, M Ramachandran .A Comparative Study of Linear, Random Forest and AdaBoost Regressions for Modeling Non-Traditional Machining.Vol:9.2021

**10. M. Vanitha**, G Ramachandran, A Manikandan, Y Slimani, MA Almessiere, A Baykal, Chandra Sekhar Dash Effect of Sr<sup>2+</sup> Ion-Substituted Nickel Ferrite Nanoparticles Prepared by a Simple Microwave Combustion Method / Journal of Superconductivity and Novel Magnetism Volume 34.2021.

**11. M. Vanitha**, G Sai Krishnan, J Pravin Kumar, G Shanmugasundar, N Sivashanmugam Investigation on the alkali treatment of Demostachya Bipinnata fibers for automobile applications-A green Composite, Materials Today: Proceedings.Vol: 2214-7853 ,June - 2020

**12. M. Vanitha**, G Sai Krishnan, G Shanmugasundar, S Srinivasan, G Suresh Investigation on the Mechanical & Morphological Properties of Red banana/Ramie Fiber vinyl ester Composites, Material Science and Engineering. Vol:961, Nov 2020.

**13. M. Vanitha**, G Shanmugasundar, L Ganesh Babu, P Suresh, P Mathiyalagan, G Sai Krishnan, Fabrication & analysis of Mechanical Properties of PVC/Glass fiber /graphene nano composite pipes, Materials Research Express. Volume 7, Number 11, November 2020.

**14. M. Vanitha**, G Sai Krishnan, G Shanmugasundar, N Sivashanmugam Mechanical Properties of Chemically Treated banana & Ramie Fibre Reinforced Polyproylene Composites / IOP Publications, Material Science and Engineering. Vol:961, Nov 2020

**15. M. Vanitha** and G.Saikrishna, S.Aravinth Investigation of Al<sub>2</sub>O<sub>3</sub>/Oryza Sativa Oil Biodiesel on Performance and Tribological Characteristics. Test Engineering and Management. Volume 83 ISSN: 0193-4120 Page No. 942 – 946 May-June 2020

**16. M. Vanitha** and G. Ramachandran Effects of Ni<sup>2+</sup> ions on structural, morphological and magnetic properties of Ni<sub>x</sub>Co<sub>1-x</sub>Fe<sub>2</sub>O<sub>4</sub> (X=0.0, 0.3 and 0.5) nanoparticles. **International journal** of Green and Herbal Chemistry. Vol.8, No.2, pp 539-548 on May



2019.

## Book

Introduction to nanomaterials

## Awards:

- Ideathon Appreciation Award.
- Atal Tinkerpreneur 2021.
- Editorial Board member in

## Webinar:

1. Participated in three days virtual International webinar on **natural products and Drug development(NPDD2021)** organised by Department of Chemistry, B.S.Abdur Rahman Crescent Institute of Science and technology,Vandalur,Chennai during 4.10.21-06.10.21.
2. Participated in the international Virtual Seminar on **Advances in Chemical Sciences** on organized by PG & Research Department of Chemistry, Vivekanandha College of Arts and Sciences for Women (Autonomous), Elayampalayam, Tiruchengode on 08.03.2021.
3. Attended online International webinar on **“Potential Role of Probiotics & Prebiotics” at Seethalakshmi Ramaswami College** on 23.06.2020
4. Attended Leadership talk by MHRD’ Innovation cell (Government of India) on 18.06.2020.
5. Attended online webinar on **“Biodiversity Its Time for Nature” at Sri Sairam Institute of Technology**, Chennai on 05.06.2020
6. Attended online webinar on **“Opportunities for Research with DRDO” at A.V.C. College of Engineering**, Mayiladuthurai on 29.05.2020
7. Attended online webinar on **“Intelligent Systems” at Mohamed Sathak Engineering College**, Ramanathapuram on 28.05.2020
8. Attended online webinar on **“Introduction to Industry 5.0” at St. Joseph’s College of Engineering**, Chennai on 28.05.2020
9. Attended online international webinar on **“Covid -19 Awarness Program” at Thiagarajar College of Engineering**, Madurai on 04.04.2020

10. Attended online webinar on “**IPR & Patent Practices in India-Innovation & Research into Patents**” at Sri Sairam Institute of Technology, Chennai on 11.05.2020
11. Attended online webinar on “**3D Printing Applications in Fighting with Covid-19**” at Sri Sairam Institute of Technology, Chennai on 09.05.2020
12. Attended online webinar on “**How to get Published in Scientific Journal From Research to Publication**” at Sri Sairam Institute of Technology, Chennai on 27.04.2020
13. Attended online international webinar on “**Metal Free Photocatalysts for Environment Enhancing**” at Thiagarajar College of Engineering, Madurai on 27.05.2020

## **ON - LINE COURSES**

1. Successfully completed NPTEL course with Elite on the topic **introduction to research**.
2. Successfully completed NPTEL course with Elite on the topic **Infra Red Spectroscopy for Pollution Monitoring**.
3. Successfully completed NPTEL course with Elite with Silver on the topic **plastic waste management**.
4. Successfully completed NPTEL course with Elite on the topic **Dairy and food process and products Technology**.
5. Successfully completed **Artificial Intelligence & Drug Discovery** Course on 22.04.2020.
6. Successfully completed **General Chemistry** online Udemy Course on 09.04.2020
7. Successfully completed online training Program **Introduction to IOT** on 20.04.2020
8. Successfully completed **Quantum Mechanics** Coursera online Course on 18.5.2020
9. Successfully completed **Introduction to Google Docs** Coursera online Course on 10.6.2020
10. Successfully completed **Air Pollution – A Global Threat to our Health** Coursera online Course on 10.6.2020
11. Successfully completed **Natural Gas** Coursera online Course on 10.6.2020
12. Successfully completed **Spreadsheets for Beginners using Google Sheets** Coursera online Course on 09.5.2020
13. Scouts: A Journey to Growth 20<sup>th</sup> June 2024.

14. Scouts: Blended Learning 28<sup>th</sup> June 2024.
- 15 Scouts: Growing Together (Understanding the growth context) 28<sup>th</sup> June 2024
16. Completed one online course (NPTEL-Wastewater Treatment and Recycling)”  
Twelve weeks, Successfully completed with “*Elite with Silver*” category, along with FDP 2024.
- 17 Completed one online course (NPTEL-Air Pollution and Control) Twelve weeks,  
Successfully completed with “*Elite with silver*” category, along with FDP 2024.
- 18 .Completed one online course (NPTEL-Sustainable Engineering Concepts and Life Cycle Analysis )” Eight weeks, Successfully completed with “*Elite*” category, along with FDP 2024.
19. Completed one online course (NPTEL- Environmental Science)” Twelve weeks,  
Successfully completed with “*Elite*” category, 2024.

### **NITTTR Courses:**

1. Module: 1 - Orientation towards Technical Education and Curriculum Aspects, February 2023.
2. Module: 2 - Professional Ethics & Sustainability, February 2023.
3. Module: 3 - Communication Skills, Modes and Knowledge Dissemination, September 2021.
4. Module: 4 - Instructional Planning and Delivery, February 2023.
5. Module: 5 - Technology Enabled Learning & Life Long Self Learning, July 2022.
6. Module: 6 - Student Assessment and Evaluation, February 2023.
7. Module: 7 - Creative Problem Solving, Innovation and Meaningful R&D, February 2023.
8. Module: 8 - Institutional Management & Administrative Procedures, February 2023.

## **Professional Membership**

- Life Member, Indian Society for Technical Education
- Member, IEEE from 2020.
- International Association of Academic plus Corporate Society - [IAAC]