

<b>Name: Dr. V.T.GEETHA</b>	<b>Photo</b> 			
<b>Designation:</b>	<i>Associate professor</i>			
<b>Qualification:</b>	<i>MSc. M.Phil., Ph.D.,</i>			
<b>Area of specialization:</b>	<i>CHEMISTRY</i>			
<b>Experience:</b>	<b>Industrial Experience</b>		<b>Teaching Experience</b>	
			<b>21</b>	
<b>Number of workshops / FDP attended:</b>	<b>Number of Workshops</b>		<b>Number of FDPs</b>	
	<b>14</b>		<b>20</b>	
<b>Publications:</b>	<b>Conference</b>		<b>Journal</b>	
	<b>National</b>	<b>International</b>	<b>National</b>	<b>International</b>
	<b>4</b>	<b>10</b>	<b>1</b>	<b>15</b>
<b>Books / Book Chapters</b>	<b>2</b>			
<b>Patents:</b>	<b>National</b>		<b>International</b>	
	<b>3</b>			
<b>Professional Body Membership</b>	<b>4</b>			

**Staff Achievements**

- Received best Faculty Award from Tech Forum Research Foundation on 20.3.2024
- Completed NITTTR eight modules.
- Reviewed international journals
- Anna University Recognised Supervisor
- One of the top 100 mentors of ATL Trinkerpreneur 2023.

### 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	1998	Annai Velankanni college	Manonmaniam Sundaranar University	62.39	I
PG	M.Sc	General Chemistry	2001	Annai Velankanni college	Manonmaniam Sundaranar University	63.37	I
	M.Phil	General Chemistry	2005	-	Manonmaniam Sundaranar University	60.25	I
Ph.D.	Ph.D.	Nano Materials	2021	-	Hindustan University		

### Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri Sairam Engineering College	Associate Professor	05.08.2015	Till date	9	4	03
Sri Sairam Engineering College	Assistant Professor	01.08.2011	04.08.2015	4	0	3
Sri Sairam Engineering College	Senior Lecturer	05.08.2009	04.08.2011	1	11	30
Saveetha University	Lecturer	12.10.2006	04.08.2009	2	11	8
Bharath University	Lecturer	02.09.2003	11.10.2006	3	1	9
				<b>21</b>	<b>4</b>	<b>23</b>

Workshops/Seminars attended :15

FDP/STTP Attended : 20

Symposium Attended : 0

Conference Attended : 14

Completed / Ongoing Projects : 3

Patent	: 3
Journal Publications	: 16
Books / Book Chapters	: 2
Awards	: 4
Startup	: 0
Webinar	: 12
Resource Person	: 0
Online Courses	: 34

### **Workshops/Seminars:**

1. *Workshop on Industry-Institution Interaction Event on Environment Management in Industrial sector-Status and Needs on 24<sup>th</sup> to 25<sup>th</sup> July 2015.*
2. *National seminar on “Environmental issues and sustainable development” on 11<sup>th</sup> and 12<sup>th</sup> Nov 2013 at Sri Sairam Engineering College.*
3. *Workshop on “Art of Journal and Thesis writing” on 19<sup>th</sup> Jan 2012 at Sri Sairam Engineering College.*
4. *Workshop on “Recent trends in Analytical Instrumentation” on 12<sup>th</sup> April 2005 at S.R.M. Engineering College, Kattankulathur.*
5. *Online Workshop on Inculcating Universal Human Values in Technical Education. AICTE, 12<sup>th</sup> to 16<sup>th</sup> October 2020.*
6. *DST-FIST Sponsored Virtual Workshop on “Scanning Electron Microscopy” on 5<sup>th</sup> to 6<sup>th</sup> October 2021 at Sethu Institute of Technology.*
7. *Workshop on “Sustainable Materials Advances and Applications”, on 22<sup>nd</sup> July 2022 at SRM Institute of Science and Technology.*
8. *National seminar on “NEP 2020 Implementation using Change Management Concepts in Higher Educational Institutes”, on 21<sup>st</sup> April 2022 at Sri Sairam Engineering College*
9. *National level workshop on, An Overview of Patents & Procedure for Protection” on 20<sup>th</sup> January 2023 at Ramco Institute of Technology.*
10. *National level workshop on, Applications of Amorphous and Nanostructured Magnetic Materials for Transformer core” on 28<sup>th</sup> February 2023 at SRM TRP Engineering College.*
11. *National level workshop on, “Societal Advancement powered by Nuclear Energy” on 2<sup>nd</sup> March 2023 at SRM TRP Engineering College.*

12. National level workshop on, “Density Functional Theory” on 6<sup>th</sup> March 2023 at SRM TRP Engineering College.
13. National level workshop on, “Women in Science and Technology” on 9<sup>th</sup> March 2023 at SRM TRP Engineering College.
14. National level workshop on, “National Level Education Policy ” on 11<sup>th</sup> March 2023 at SRM TRP Engineering College
15. National level workshop on, Synthesis of Nanomaterials using Electrochemical Methods, Characterisation and Application on 26<sup>th</sup> July 2024. at Sri Sairam Engineering College.

### **FDP/STTP:**

1. *Faculty development programme on “Characterization of Materials on 20<sup>th</sup> and 21<sup>st</sup> July 2017 at Sri Sairam Institute of Technology*
2. *Faculty development programme on “Engineering Teaching Pedagogy and Effective Learning Process”, 3<sup>rd</sup> to 7<sup>th</sup> December 2018.*
3. *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<sup>th</sup> to 29<sup>th</sup> June 2019.*
4. *Attended the MHRD sponsored MHRD FDP on “Recent innovation in Electrical, Electronics, Instrumentation, Automation and Teaching Pedagogy from 18<sup>th</sup> to 30<sup>th</sup> May 2020 at Sri Sairam Engineering College..*
5. *Attended the ATAL FDP Energy Engineering 5<sup>th</sup> to 9<sup>th</sup> October 2020, at Netaji Subhas University of Technology.*
6. *Attended the FDP on Recent Innovations in Electrical, Electronics, Instrumentation, Automation and Teaching Pedagogy 18<sup>th</sup> to 30<sup>th</sup> May 2020, at Sri Sairam Engineering College.*
7. *Attended the International FDP programme on EDUCATION 4.0 The Future Ahead, 10<sup>th</sup> to 14<sup>th</sup> August 2020. at Sri Sairam College of Engineering, Bengaluru.*
8. *Attended the Human Values, Ethics, Morals, Behavioural Science and Attitude by AICTE 10<sup>th</sup> to 15<sup>th</sup> Sep 2020, at KIIT college of Engineering Gurugram.*
9. *Online Five Days Faculty Development Program on, “:Medical Image Analysis”, on 2<sup>nd</sup> to 7<sup>th</sup> Nov 2020 at V.S.B. Engineering College.*
10. *Attended the Five Days International Faculty Development Program on “Nanomaterials”, on 23<sup>rd</sup> to 27<sup>th</sup> November 2021 at St. Mary’s College.*
11. *Attended the Face-face UHB=II FDP, organized by AICTE at Sri Sairam Engineering College, Chennai, 26<sup>th</sup> to 30<sup>th</sup> July, 2022.*
12. *Two Days Online Faculty Development Program on Condensed Matter Physics” on 24<sup>th</sup> and 25<sup>th</sup> January 2022 at Jamal Mohamed College*

13. *Five Days International Faculty Development Program on (FDP-2.0) "Recent Research in Material Physics & Nano Devices", by IQAC, 21<sup>st</sup> to 25<sup>th</sup> November 2022 at Rajas College.*
14. *Online Five Days Faculty Development Program on, "Insights on Emerging Research in Chemical Science (IERCS-2022)", 10 to 14 October 2022 at National Institute of Technology, Andhra Pradesh*
15. *Online Five Days Faculty Development Program on, "Advanced Materials for Energy Applications", 9<sup>th</sup> to 13<sup>th</sup> October 2023 at Sathyabama Institute of Science and Technology.*
16. *Attended Five Days Faculty Development Program on Nanotechnology in Biomedical Applications", 13<sup>th</sup> to 18<sup>th</sup> March 2023 at Karpagam Academy of Higher Education.*
17. *International level FDP on, "Advanced Functional Materials:Energy Environment and Sustainable Development " on 26<sup>th</sup> February to 5<sup>th</sup> March at SRM TRP Engineering College*
18. *Online Two week Faculty Development Program on, " Frontiers in Material Research, Innovations and Entrepreneurship (FMRIE'24) Advanced Materials for Energy Applications", 25<sup>th</sup> July to 08<sup>th</sup> August 2024 at Sri Sairam Engineering College.*
19. *Attended Five Days Faculty Development Program on " Recent Advancements in Chemistry", Nanotechnology in Biomedical Applications", 26<sup>th</sup> to 29<sup>th</sup> June 2024 at Easwari Engineering College.*
20. *Attended one week Faculty Development Program on " Advanced Research Methodology for Social Science Research", , 27<sup>th</sup> May to 01<sup>th</sup> June 2024 at Sri Sairam Engineering College.*

## **Conferences:**

1. *National level Symposium on Emerging Trends in Biotechnology, Anti-bacterial Investigations of Isolated flavonoids of P.Murex on 29<sup>th</sup> and 30<sup>th</sup> Sep 2005 at Shri AndalAlagar College of Engineering.*
2. *National seminar on GENES TO GENOMICS, Wound healing Investigations on the Isolated Flavonoids of C.Pulcherrima on 22<sup>nd</sup> Sep 2005 at Bharath University.*
3. *National level seminar on "Recent Trends in Laser Spectroscopy and its Applications" on 17<sup>th</sup> Oct 2013 at Sri Sairam Engineering College.*
4. *JEUNES ESPRITS D'ÉVOCATION VERS L'ESPRIT D'ENTREPRISE on 8-10 Jan 2013 at Sri Sairam Engineering College*
5. *National level workshop on "Advancements in Chemical sciences on 18<sup>th</sup> July 2016 at Sri Sairam Institute of Technology.*
6. *International conference on "Mechanical, Materials and Manufacturing systems on 24<sup>th</sup> to 25<sup>th</sup> February 2016 at Sri Sairam Engineering College.*

7. *National conference on "Chemistry & Materials", on 22<sup>nd</sup> March 2019 at Saveetha Engineering College.*
8. *National conference on "Current trends in Energy Conversion Devices and Environment 22<sup>nd</sup> to 23<sup>rd</sup> February 2019 at Selvam Arts and Science College.*
9. *International conference on Indo-UK International Virtual Conference on "Advanced Nanomaterials for Energy and Environmental Applications" on 16<sup>th</sup> to 18<sup>th</sup> September, 2020, at Alagappa University.*
10. *International conference on "Advances in Mechanical Engineering", on 27<sup>th</sup> to 28<sup>th</sup> January 2021 at Sri Sairam Engineering College.*
11. *National Conference on "Emerging Materials and Nanotechnology" on 28<sup>th</sup> to 29<sup>th</sup> Feb 2020, at Thiruvalluvar Government Arts College, Rasipuram.*
12. *International conference on instigating Research in Materials, energy and Environment 6<sup>th</sup> to 7<sup>th</sup> Oct 2021.*
13. *International Virtual conference on "Chemical Research for Sustainable Development, on 24<sup>th</sup> to 25<sup>th</sup> Sep 2021 at SRM Institute of Science and Technology, Chennai.*
14. *National virtual conference on "Intelligent Computing and Control for Engineering and Business Systems". ICCEBS, IEEE, Nov 2023.*

## **Projects Applied**

1. Project Title: Pico/Nanometre-Sized Plant and Animal Activated Charcoal for Enhanced Filter Bed Applications in Reverse Osmosis Processes for Industrial Water Treatment  
Reference Number: DST-PN-2024/001  
Institution/Organization: Department of Science and Technology in India.
2. Project Title: Pico/Nanometre-Sized Plant and Animal Activated Charcoal for Enhanced Filter Bed Applications in Reverse Osmosis Processes for Industrial Water Treatment  
Reference Number: DST-PN-2024/001  
Institution/Organization: Department of Science and Technology in India.
3. Project Title: Project Minor AI  
Reference Number: SIH1384  
Institution/Organization: IEEE, USA

## **Patent filed**

Patent Number: 202241058170. Tophic: Graphene nanocomposites having noval hybrid compositions and method thereof. Published Date:10.10.2022. Status: **Published**

Patent Number: 202341069380. Tophic: Green Chemistry Approach to Noble Metal Nanoparticle Formation with Waste Biomass. Published Date:24.11.2023. Status: **Published**

Patent Number: 202441067766. Advanced Techniques for the characterisation and Analysis of Nanoscale Material Properties. Published Date:09.09.2024. Status: **Published**

## Journals:

### International:

1. **V.T.Geetha**, G.Puthilibai, S.Induja, "A starch-assisted innovative synthesis of spinel-structured and ferromagnetic behavior of  $Fe_3O_4$  nanoparticles catalytic activity evaluated in the selective oxidation", **SN Applied Sciences**. Vol.1, No.1, pp.472, 2019.
2. **V.T.Geetha**, G.Puthilibai, S.Induja, "Synthesis, Properties and Catalytic Applications of  $Co_3O_4$  Nano Materials with Photoluminescence Emission spectra for Oxygen Vacancies", **Journal of Advanced Science Engineering and Medicine**. Vol.11, No.7, pp.600-605, 2019.
3. **V.T.Geetha**, G.Puthilibai, S.Induja, "A new Understanding of  $Mn_3O_4$  catalysts Different Fuels for Highly Selective Oxidation of Cyclohexane ", **Sensor Letters**. Vol.17, No.7, pp.530-537, 2019.
4. **V.T.Geetha**, S.Induja, G.Puthilibai, "Effects on the Crystal Structure, Magnetic and Optical Properties Nd doped  $Co_3O_4$  Nanoparticles Prepared by Microwave Synthesis", **Journal of Superconductivity and novel Magnetism**. Vol 32, No4, pp1-7, 2019.
5. **V.T.Geetha**, G.Puthilibai, "Green Synthesis and Catalytic Applications of  $Fe_3O_4$  Nano Materials", **SSEC Tech Journal**. Vol.11, pp.11-16, 2019.
6. **V.T.Geetha**, S.Induja, G.Puthilibai, "Study of the effect of Photoluminescence Structural and Magnetic Properties of Nd doped  $Nd_xNi_{1-x}O_x$  hexagonal Particles", **Physica E**, Vol.118,2020.
7. **V.T.Geetha**, S.Induja, G.Puthilibai, "Influence of structural, Thermoelectric power and Catalytic Efficiency of Nd doped  $Mn_3O_4$ ", **Asian Journal of Chemistry**, Vol.32,147-152,2020.
8. C. Selvakumar,; A. Fiaz Ahamed,; **V.T. Geetha**,. Enhanced Transparency and Antibacterial Activity of Silver Doped Cadmium Sulfide Nanoparticles, AIP Conference Proceedings, 2020, 2464, 020006
9. **V.T.Geetha**, S.Induja, "Nd-Doped  $Fe_3O_4$  Nanoparticles: Microwave Synthesis, Catalytic Properties in Selective Oxidation of Styrene". **Asian Journal of chemistry**. Vol. 33, No. 3, pp.583-590, 2021.
10. **V.T.Geetha**, S.Induja, "Structure, Morphological, Magnetic and Antibacterial Studies of Undoped and Ce/Mg-doped NiO nanoparticles semiconductors by Microwave method. **Journal of Superconductivity and novel Magnetism**. Vol 34, No4, pp. 2003-2018, 2022.



11. C.Ragupathi, **V.T.Geetha**, S.Narayanan, P.Thamizhthurai, G.Ramalingam, "Study of Ce-doping Effects on optical, morphological, magnetic, structural and anti-bacterial properties of NiCr<sub>2</sub>O<sub>4</sub> ceramics". **Materials Science & Engineering B**. Vol 291, pp. 116358 -2023.
12. **V.T.Geetha**, C.Selvakumar, T.Amirthavarshini and C.Govindaraju "Investigations on Structural, Magnetic and Electrical Properties of Fe<sub>3</sub>O<sub>4</sub> Nanoparticles". **Intelligent Computing and Control for Engineering and Business Systems**. ICCEBS, IEEE, 2023.
13. C.Selvakumar, **V.T.Geetha**, C.Govindaraju and T.Amirthavarshini, "Optical And Antioxidant Applications of Zinc Sulfide Doped Nano Biomateria"l, **Intelligent Computing and Control for Engineering and Business Systems**. ICCEBS, IEEE, 2023.
14. **V.T.Geetha**, C.Selvakumar, S.Shravan Kumar, S.Gopinath, C.Ragupathi and A.Rajendiran "Effect of morphological and particle size on the physical properties of Sr doped cobalt chromite for catalysis application", **Chemistry of Inorganic Materials**. 2024, 100058.
15. C.Selvakumar, **V.T.Geetha**, S.Sathiyamoorthi, R.Sharan, "Third order NLO study of Manganese doped copper Sulfide Nanoparticles for Optical Evolution", *Journal of Nonlinear Optical Physics & Materials*, 2024
16. C.Selvakumar, V.T.Geetha, "Synthesis, Characterization and Catalytic Applications of Spinal Neodymium Doping in Co<sub>3</sub>O<sub>4</sub> Nanocatalyst for conversion of styrene to benzaldehyde", *Journal of Reaction Kinetics, Mechanisms and Catalysis*. 2024.

## Book Chapter

1. **Dr. V.T. Geetha**, Dr. C. Selvakumar and T. Amirthavarshini, Green Synthesis, Properties And Catalytic Applications Of Fe<sub>3</sub>O<sub>4</sub> Nano Materials For Sustainable Development, Emerging Trends in Business and Technology for sustainable Development, Wisdom Publication, ISBN- 978-81-956844-1-0, pp. 151-158, 2022
2. C.Selvakumar and **V.T.Geetha**, Synthesis, Characterization and Application of Bimetallic Sulfide Nanocomposites for need of Sustainable Development, Emerging Trends in Business and Technology for sustainable Development, Wisdom Publication, ISBN- 978-81-956844-1-0, pp. 35-50, 2022.

## Awards:

- Received best Faculty Award from Tech Forum Research Foundation on 20.3.2024.
- Ideathon Appreciation Award.
- Top 100 Mentos of Atal Tinkerpreneur 2023.
- Anna University Recognized Supervisor in Chemistry.
- Editorial Board member in Nanoscience and Nanometrology

## Webinar:

1. *Webinar Series on "Research ", VISTAS, 22<sup>nd</sup> June to 24<sup>th</sup> June 2020.*
2. *Online Webinar on "Recent trend in Covid-19, Diagnosis and Management", VISTAS, 3<sup>rd</sup> June 2020.*
3. *National level webinar on " Watershed Prioritization", VMRF, on 30th May 2020*
4. *International level webinar on "Influence of Electromagnetic Theory in 5G Applications", Sri Sairam Engineering College, 31<sup>st</sup> October, 2020.*
5. *International Webinar on "Natural Products and Drug Development", at Crescent Institute of Science and Technology, Chennai on 4<sup>th</sup> to 6<sup>th</sup> October 2021*
6. *Webinar on "Magnetic Nanocarriers for Enhanced Enzyme Activity", at Prathyusha College of Engineering, Chennai, on 30<sup>th</sup> May 2020*
7. *National level webinar on "Environment and Cancer", at Arasu Engineering College, Kumbakonam, 3<sup>rd</sup> Feb 2021.*
8. *Webinar on "Intellectual Property Rights with Focus on Patent in Mathematics", Sri Sairam Engineering College, 3<sup>rd</sup> Feb 2021*
9. *International Webinar on "Surface Chemistry and Catalysis", on 16<sup>th</sup> December 2021.*
10. *Webinar on "Raman Spectroscopy and its Applications in Materials Science", on 28<sup>th</sup> January 2022*
11. *National Webinar on," Two Dimensional Materials: Graphene and Beyond", at Sathyabama Institute of Science and Technology, on 28<sup>th</sup> March 2022.*
12. *Webinar on "Nanomaterials and their Applications", at Bharath University on 30<sup>th</sup> November 2022.*

## ON - LINE COURSES

1. *Completed one online course (NPTEL-**Manufacturing of composites**)" Eight weeks, Successfully completed with "**Elite**" category, along with FDP 2018.*
2. *Udemy : Complete General Chemistry, 10<sup>th</sup> July 2020-08-14*
3. *Simpli Learn: Introduction to IOT, 05<sup>th</sup> April 2020*
4. *Simpli Learn: Introduction to Cybersecurity, 07<sup>th</sup> April 2020*
5. *Coursera: Introduction to Psychology, 19<sup>th</sup> May 2020*
6. *Coursera: Gmail.The foundation to Accessing Google Apps, 19<sup>th</sup> May 2020*
7. *Coursera: Spreadsheet for Beginners using Google Sheet, 19<sup>th</sup> May 2020*
8. *Coursera: Create Informative Presentation with Google Slides, 19<sup>th</sup> May 2020*

9. *Coursera: The Sustainable Development Goals-A global, transdisciplinary vision for the future, 19<sup>th</sup> June2020.*
10. *Coursera : Grow to Greatness: Smart Growth for private Business Part I, 19<sup>th</sup> June2020*
11. *Coursera : Grow to Greatness: Smart Growth for private Business Part II, 19<sup>th</sup> June2020*
12. *Coursera :The Holocaust- An Introduction(1): Nazi Germany: Ideology, The Jews and the world, 19<sup>th</sup> June2020*
13. *Coursera : Ecology: from cells to Gaia, 19<sup>th</sup> June2020*
14. *Coursera : Beyond the Sustainable Development Goals: Addressing Sustainability and Development, 18<sup>th</sup> June2020*
15. *Coursera: Social Psychology, 09<sup>th</sup> June 2020.*
16. *International Virtual Seminar on, "Advances in Chemical Science", at Vivekananda College of Arts and Sciences for Women on 8<sup>th</sup> March 2021*
17. *Attended Training Program on National Intellectual Property Awareness Mission at Intellectual Property Office on 18<sup>th</sup> April 2022.*
18. *Completed on, "Scientific Writing and Health Research", National Institute of Epidemiology, on 20<sup>th</sup> May 2022.*
19. *Completed one online course (NPTEL- Introduction to Environmental Engineering and Science -Fundamental and Sustainability concepts) of twelve weeks with the elite category along with FDP.*
20. *Scouts: A Journey to Growth 20<sup>th</sup> June 2024.*
21. *Scouts: Blended Learning 28<sup>th</sup> June 2024.*
22. *Scouts: Growing Together (Understanding the growth context) 28thJune 2024*
23. *Scouts: How healthy is my screen time? 28<sup>th</sup> June 2024*
24. *Completed one online course (NPTEL-Technologies for clean and Renewable Energy Production)" Eight weeks, Successfully completed with "Elite with Silver" category, along with FDP 2024.*
25. *Completed one online course (NPTEL-Physics of Renewable Energy Systems" Twelve weeks, Successfully completed with "Elite" category, along with FDP 2024.*
26. *Completed one online course (NPTEL-Basic Environmental Engineering and Pollution Abatement)" Twelve weeks, Successfully completed with "Elite with Silver" category, along with FDP 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.
- Life Member, Asian Chemical Society
- International Association of Academic plus Corporate Society - [IAAC]