

Curriculum Vitae



Dr.D. Gnanasangeetha,
Assistant Professor,
Department of Chemistry,
P.S.N.A .College of Engineering and Technology,
Dindigul.

Mail Id: sangithprakash@psnacet.edu.in

Mobile No: 7010865059

Personal Information

Citizenship	:	Indian
Date of Birth	:	01-12-1981
Marital Status	:	Married
Children	:	Two kids
Current Position	:	Assistant Professor, Department of Chemistry, P S N A College of Engineering and Technology, Dindigul.
Contact Address	:	451/7, Rehoboth Cottage, Near I.O.B, Seelapadi, Dindigul, Tamil Nadu.
Research Area	:	Benign Zinc Oxide Nanoparticle Entrenched on Activated Silica for Removal of Arsenic (III) ions
Research Advisor	:	Dr. D. Sarala Thambavani

Academic Background

Dec 2012 - Mar 2018	:	Ph.D in Chemistry, (Highly Commendable) Bharathiar University, Coimbatore, Tamil Nadu.
Nov 2006 - May 2007	:	M.Phil in Chemistry, (II Class) M.S.University, Abhishekkapatti, Tamil Nadu.
Jul 2003 - Nov 2006	:	M.Sc., in Chemistry, (First Class) S.F.R. College, Sivakasi, Affiliated to M.K.University, Madurai, Tamil Nadu.
Jul 2000 – April 2003	:	B.Sc., in Chemistry, (First Class) Sarah Tucker College, Palayam Kottai, Affiliated to M.S.University, Abhishekkapatti, Tamil Nadu

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Research Skills

Technical Skills:

- ❖ Well versed in analysis of morphological studies like SEM, TEM and PSA.
- ❖ Knowledgeable in applying characterization techniques like XRD, FT-IR and IR.
- ❖ Experienced in using Matlab Neuro solution 2007 Ra for Modeling.

Research Experience

- Jan 2017 – Apr 2022 : Nanotechnology for Agriculture and Water remediation.
- Jan 2015 – Dec 2016 : Modeling of Zinc Oxide Nanoparticle using Artificial Neural Network.
- Jan 2014 – Dec 2015 : Zinc Oxide Nanoparticle Entrenched in Activated Silica for Water Remediation of Arsenic (III) ions.
- Dec 2012 – Dec 2013 : Green Synthesis of Zinc Oxide Nanoparticles from Herbal Plants like *Ocimum sanctum*, *Acalypha Indica*, *Corriandrum sativum*, *Emblica officinalis* and *Azadirachta indica*. Research and Development Centre, Bharathiar University, Coimbatore.
- Title of Ph.D Thesis : Green synthesis and Water Treatment

Experience

- Sep 2010 – Till Date : Assistant Professor,
Department of Chemistry,
P.S.N.A .College of Engineering and Technology,
Dindigul.

Sl. No.	Designation & Office address	Period	Nature of duties / Responsibilities
		From to	
1	Assistant Professor of Chemistry, PSNA College of Engineering and Technology, Dindigul.	17.09.2010 to till date	1.Handling Engineering Chemistry Classes 2. Environmental Science and Engineering Classes 3.Publication of Papers of my Research 4.NBA dept Coordinator (2014-2017) 5.NAAC Criteria IV Coordinator (2021-till) 5.MHRD-Institution Innovation Council Coordinator(2019-till) 6.Excecuting Time Table for Chemistry department (2011-2020) 7.Mentoring students for science Projects, 8.Organised Few Webinars, 9.Completed 6 NPTEL Courses 10.Completed 125 online Coursera courses.

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List of Publications

	Title	Author	Journal/Volume, Issue ,Year& Page .no	Indexing	Impact Factor
1.	Photocatalytic and antimicrobial properties of microwave synthesized mixed metal oxide nanocomposite	D.Gnanasangeetha	Elsevier Inorganic Chemistry Communications , 125 (2021) 108429.	SCI , SCOPUS WEB OF SCIENCE&UGC	2.495
2.	Y 3 + and Sm 3 + co-doped mixed metal oxide nanocomposite: Structural, electrochemical, photocatalytic, and antibacterial properties	D.Gnanasangeetha	Elsevier Applied Science Advances, 4 (2021) 100085.	SCI , SCOPUS WEB OF SCIENCE&UGC	6.707
3.	Two-Dimensional Based Hybrid Materials for Photocatalytic Conversion of Carbon Dioxide into Hydrocarbon Fuels: a Mini Review	D.Gnanasangeetha	Physics and Chemistry of Solid State, 22,1 (2021) 132-140.	SCOPUS& WEB OF SCIENCE	1.08
4.	Facile fabrication of novel ceria-based nanocomposite (CYO-CSO) via co-precipitation: Electrochemical, photocatalytic and antibacterial performances	D.Gnanasangeetha	Elsevier Journal of Molecular Structure, 1256, (2022) 132519.	SCI , SCOPUS WEB OF SCIENCE&UGC	3.57
5.	Application of Nanoparticles in Agriculture	D.Gnanasangeetha	Journal of Seybold Report, 15(9) (2020) 441-447.	SCOPUS	-
6.	Modeling of Adsorbent (ZnO-NPs-AS-Os) with Artificial Neural Network	D.Gnanasangeetha	Indian Journal of Natural Science, 10, (2020)27690-27695.	WEB OF SCIENCE	0.695
7.	A Review on Green Synthesis of Metal and Metal Oxide Nanoparticles	D.Gnanasangeetha	Nature Environment and Pollution Technology, 19 (05) (2020)1789-1800	SCOPUS& UGC	0.42
8.	Zinc Oxide Nanoparticles for Water Remediation in Agriculture	D.Gnanasangeetha	International Journal of Mechanical Engineering and Technology, 10 (01), (2019) 1547-1554.	SCOPUS	0.83
9.	Green Synthesis of Zinc Oxide Nanoparticles for Water Remediation	D.Gnanasangeetha	International Journal of Chem Tech Research 10(15),(2017)101-107 .	SCOPUS	0.819

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10.	Construe of Five Green Adsorbent for Water Remediation with One Chemical Adsorbent	D.Gnanasangeetha	Discovery 52(252),(2016) 2433-2441.		-
11.	Modelling of As ³⁺ adsorption from aqueous solution using <i>Azadirachta indica</i> by artificial neural network	D.Gnanasangeetha	Desalination and Water Treatment 56,(2015)1839-1854.	SCI, SCOPUS & WEB OF SCIENCE 13	1.254
12.	Green Synthesis of Benevolent ZnO Nanorods Using <i>Emblica Officinalis</i>	D.Gnanasangeetha	Asian Journal of Chemistry 27 (8), (2015) 3054-3056.	SCOPUS& UGC	0.535
13.	Removal of As(III) from Aqueous Solution using Zinc Oxide Nanoparticle Embedded on Activated Silica and ANN Modeling	D.Gnanasangeetha	Journal of Advanced Chemical Sciences 1(2),(2015) 41–44.		--
14.	Modeling and Biosorption Competence of Zinc Oxide Nanoparticle	D.Gnanasangeetha	Nature Environment and Pollution Technology 14(2),(2015) 445-449.	SCOPUS& UGC	0.42
15.	Green Synthesis and Modeling	D.Gnanasangeetha	International Journal of Science, Technology & Management 4(1), (2015) 82-88.		--
16.	Green Zinc Oxide Nanoparticle Ingrained on Activated Silica for the Removal of As(III) from aqueous solution using <i>Ocimum sanctum</i> and <i>Azadirachta indica</i>	D.Gnanasangeetha	International Journal of Chem Tech Research 8(8),(2015) 44-52.	SCOPUS	0.819
17.	Facile and Eco-Friendly Method for the Synthesis of Zinc Oxide Nanoparticles Using <i>Azadirachta and Emblica</i>	D.Gnanasangeetha	International Journal of Pharmaceutical sciences and Research 5(07),(2014) 1-8.	WEB OF SCIENCE & UGC	0.65
18.	Benign ZnO Nanoparticle as a Practical Adsorbent for Removal of As ³⁺ Embedded on Activated Silica using <i>Ocimum Sanctum</i>	D.Gnanasangeetha	Discovery Publication 16(46),(2014) 33-41.		--
19.	Neural Network Modeling and Sorption of As III with Zinc Oxide Nanoparticle	D.Gnanasangeetha	International Journal of Engineering	UGC	--

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	Bounded on Activated Silica using <i>Ocimum Sanctum</i>		Sciences & Research Technology 3(5) (2014)206-213.		
20.	An Assortment of Herbal Plants in the Fabrication of Zinc Oxide Nanoparticles	D.Gnanasangeetha	International Journal of Green and Herbal Chemistry 3(2) (2014) 1-12.	UGC	--
21.	Neural Network Modeling of Placid ZNO Nanoparticle as a Sensible Adsorbent for Removal of As(III) ions Ingrained on Activated Silica Using <i>Acalypha Indica</i> (ZNO-NPS-AS-AI)	D.Gnanasangeetha	International Journal of Chem Tech Research 6,(7), (2014) 3546-3557.	SCOPUS	0.819
22.	ANN Approach for Modeling of Zinc Oxide nanoparticle using Sensitivity Analysis	D.Gnanasangeetha	International Journal of Advanced Research in ScienceEngineering and Technology 1(4), (2014)216-221.		--
23.	One Pot Synthesis of Zinc Oxide Nanoparticles via Chemical and Green Method	D.Gnanasangeetha	Research Journal of Material Sciences 1(7), (2013) 1-8.		--
24.	Green synthesis and characterisation of biocompatible zinc oxide nanoflowers using <i>Azadirachta indica</i>	D.Gnanasangeetha	Elixir International Journal of Nanotechnology 62,(2013) 17594-17598.		0.454
25.	Biogenic Production of Zinc Oxide Nanoparticles Using <i>Acalypha indica</i>	D.Gnanasangeetha	Journal of Chemical, Biological and Physical Sciences 4(1), (2013) 238-246.		0.614
26.	ZnO Nanoparticle Entrenched on Activated silica as a Proficient Adsorbent for Removal of As ³⁺	D.Gnanasangeetha	International Journal of Research in Pharmaceutical and Biomedical Sciences 4(4), (2013) 1295-1304.		0.60
27.	Green and Chemical Method of Activated Silica as Adsorbent for Arsenic Removal by Zinc Oxide Nanoparticle Modification	D.Gnanasangeetha	International Journal of Chemical and Pharmaceutical Sciences 4(4),(2013) 88-96.		0.678
28.	Novel Synthesis and Characterization of ZnO Nanoparticles by <i>Ocimum sanctum</i>	D.Gnanasangeetha	Asian Academic Research Journal of Multidisciplinary 1(12), (2013) 164-180.		0.675

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29.	Phytochemical studies on selected medicinal plant <i>Gymnema sylvestre</i>	D.Gnanasangeetha	Journal of Research in Plant Sciences 1, (2012)77-82.	---
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Reviewer of Journals

- Particulate Science and Technology 2018 (SCI, SCOPUS & WEB OF SCIENCE)
- Chemical Methodologies (ESCI & WEB OF SCIENCE)
- International Water Resource Conference 2017
- Asian Journal of Nanoscience and Materials (PUBLONS)
- Journal of Pharmaceutical Research International (ESCI & WEB OF SCIENCE)
- Oriental Journal of Chemistry (WEB OF SCIENCE)
- Plant Cell Biotechnology and Molecular Biology (SCOPUS)
- Uttarpradesh Journal of Zoology (WEB OF SCIENCE)
- Asian Plant Research Journal (PUBLONS & MENDELEY)
- International Journal of Plant and Soil Science (PUBLONS & MENDELEY)

Editorial Board Member

- Ambassador of Bentham Science Publishers.
- International Journal of Advanced Scientific Research and Engineering Trends
- Acta Scientific Biotechnology

Honours Received

- Recipient of Sir C.V.Raman Life Time Achievement National Award 2021 for Research and Publication by IRDP Journals
- Recipient of Award of Excellence in Research by Novel Research Academy
- Received Certificate of Excellence Award for peer reviewing during May 2021 from Journal of Plant Cell Biotechnology and Molecular Biology
- Received Certificate of Excellence Award for peer reviewing on 14.10.2021 for Uttarpradesh Journal of Zoology. (WoS Indexed)

Mentoring Students

IEEE IDEATHON NATIONAL –Guided and mentored, four 2nd year ECE students (**V.Sarulatha, E.Harini, M.Bagya Sri and A.Narmatha**), who participated with the team name as “Sky Hawk in the competition conducted by IEEE Delhi section sight conducted **IEEE IDEATHON NATIONAL Competition** on “Find solutions for environmental issues” and secured **SECOND prize**.

- **Guest of Honor:** In womens day celebrations at Jos Alukkas, Dindigul on 08.03.2021.

Faculty Development Programmes

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1. FDP Programme on “Effective Communication on 23rd to 26th November at PSNA College of Engineering and Technology, Dindigul.
2. FDP Programme by NPTEL-AICTE on Biomedical Nanotechnology on October 2017.
3. FDP Programme by NPTEL-AICTE on Nanotechnology in Agriculture on October 2018.
4. FDP Programme by NPTEL-AICTE on Great Experiments in Psychology on March 2018.
5. FDP Programme by NPTEL-AICTE on Bio Inorganic Chemistry 2019.
6. FDP Programme by NPTEL-AICTE on Sustainable Development for Nanotechnology in Agriculture 2020.
7. TEQIP-III Sponsored One Week Online Faculty Development Program on “Quality Control and Safety in Polymer & Allied Industries” from 27th to 31st July 2020, Organized by the Department of Polymer Science and Technology, SJCE, Mysuru.
8. One day Faculty Development Programme on “Online Teaching via Google app” organized by Department of Mathematics, PSGR Krishnammal College for Women, Coimbatore, TamilNadu on 04/08/2020.
9. Faculty Development Program On Emerging Technologies Andchanging Scenario On Material Research Organized by Department Of Basic Sciences, Santhiram Engineering College, Nandyal, From 27th July To 01st August 2020.
10. Successfully completed Innovation Ambassador Training conducted by MoE's Innovation Cell & AICTE, New Delhi.
11. 14-days Online Faculty Development Programme on “Materials Science & Nanotechnology (FDP-MSNT-2020)” organized by Department of Chemistry, B.S. Abdur Rahman Crescent Institute of Science and Technology, Vandalur, Chennai-48, during the period 03rd August to 17th August 2020.
12. “Faculty Awareness Program on NAAC Accreditation” Organized by RD's ShriChhatrapati Shivajiraje College of Engineering, Dhangawadi, Pune-412206 conducted online during the period of 10/05/2020 to 15/05/2020.
13. one day International Faculty Development Programme entitled “Recent Innovations In Herbal Cosmetics” organized by Post Graduate Department of Chemistry, Nallamuthu Gounder Mahalingam College, Pollachi, Tamil Nadu on 12.05.2020.
14. Online FDP on “Futuristic Perspectives of Nano Chemistry in Biomedical Applications and Electrochemical Energy Storage Devices” held on 11th and 12th May 2020.
15. Online Faculty Development Program on “Role of Chemistry in COVID-19” organized by Department of Chemistry, School of Basic Sciences, Vels Institute of Science, Technology and Advanced Studies (VISTAS) on 13th May 2020

One day Faculty Development Programme on “Online Teaching via Google app” organized by Department of Mathematics, PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu on 04/08/2020

Programs Organized

1. 5-Days National Level E-Certification Course 2020 with Google Meet and GCR Platform “Novel Exploration In Research Writing” from 12.10.2020 to 16.10.2020 in PSNA College of Engineering and Technology, Dindigul.

<https://www.facebook.com/psnacetofficial/photos/a.357454124616597/1232774140417920/>

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2. International Webinar on Nano Structured Metal Oxide and Its Hybrids for Environmental and Biological Applications on 04.06.2021 in PSNA College of Engineering and Technology, Dindigul.

<https://www.facebook.com/psnacetofficial/photos/a.315085355520141/1125255194503149/?type=3&theater>

3. International Webinar on Role of Carbondioxide in Global Warming and Climate Change on 25.02.2021 in PSNA College of Engineering and Technology, Dindigul.

<https://www.facebook.com/psnacetofficial/photos/a.357454124616597/1339774009717932/>

4. International Webinar on New Education Policy (NEP-2020): “Multidisciplinary and Holistic Education” 02.08.2021 in PSNA College of Engineering and Technology, Dindigul.

<https://www.facebook.com/psnacetofficial/photos/a.357454124616597/1445241995837799/?type=3&theater>

5. International Webinar on “Self-Efficacy in Improving Innovation Ecosystem” on 01.03.2022 in PSNA College of Engineering and Technology, Dindigul.

<https://www.facebook.com/psnacetofficial/photos/a.357454124616597/1591225117906152/>

6. Poster /Collage competition in view of “World Environment Day” on 10.06.2022 in the theme “ Be a part of Solution not Pollution

<https://www.facebook.com/psnacetofficial/photos/a.357454124616597/1664576623904334/>

Computer Literacy

- Matlab, Networking Internet and Communications.
- Microsoft Word, Excel, PowerPoint and Origin.
- Artificial neural network

Presentations in International Conferences/ Seminars

1. Tamil Nadu State Council for Science and Technology (TNSCST) National level Workshop on 4th November 2019.
2. Tamil Nadu State Council for Science and Technology (TNSCST) state level seminar on 18th October 2019.
3. DST FIST Sponsored International Conference Rameer 2018 on 28th and 29th June 2018 at VHNS College Siva Kasi.
4. National Seminar on Miracle Microbes 2018(NSMM- 2018) ,25th September 2018, VHNS College Siva Kasi.

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5. International Conference on Pollution and Global warming (Invited speaker), October 2017, Atlanta, USA.
6. International Seminar on 28th February 2017 at G.T.N .Arts College ,Dindigul .
7. International Conference on Water (ICW 2015) from pollution to purification on 23-26 January, 2015 at School of Environmental Sciences, Mahatma Gandhi University, Kottayam, Kerala, India.
8. International Conference on Recent Innovations in Science, Engineering and Management (ICRISEM -2015) on 30th May 2015 at YMCA, Connaught Place, New Delhi.
9. International Workshop on 26th December 2016 at PSNA College of Engineering and Technology, Dindigul.
10. National conference on Indian Herbal Drugs (NACOHERB 14) on 14th and 15th of March 2014 at Tamil University, Tanjore.
11. DST, UGC Sponsored National Seminar on Emerging Trends in Chemistry (ETC – 05, 2014) on 18th and 19th of September 2014 at Cardamom Planter’s Association College, Bodinayakanur.
12. International Science Congress Association (ISC-2013) on 8th and 9th December 2013 at Karunya University, Coimbatore, Tamil Nadu.
13. CSIR sponsored two days’ Workshop on 25th and 26th September 2013 at VSA Educational and Charitable Trusts Group of Institutions ,Salem.
14. CSIR sponsored National Seminar on Modern Trends in Chemistry (MTC 2012) on 23rd and 24th February 2012 at PSNA College of Engineering and Technology, Dindigul.
15. National Conference (NESD -2012) on 25th and 26th April 2012 at PSNA College of Engineering and Technology, Dindigul.

Participation in International and National Workshop/Conference/Webinar

1. Online workshop on “Fluorescence Spectroscopy & Current research in fluorescent Nanomaterials” organized by the PG Department of Chemistry, V.S.S. Government Arts College, Pulankurichi - 630 405, Sivagangai District, Tamilnadu, India on 24/07/2020, Friday.
2. National Level Webinar on Crafting Quality Research for Academic Excellence on 27th July 2020, organized by Department of CSE-Mahatma Gandhi Institute of Technology, Hyderabad
3. National Webinar on “Scholarly Publishing And Research Metrics” organized by College of Food and Dairy Technology held on 30th of July 2020.
4. State Level Webinar Series, DAY 3 on the topic “Application of IR Spectroscopy to Metallic carbonyls” delivered by Dr. S. R. Bheeter, on 24th July 2020 in Anna Adarsh College for Women
5. Webinar on online assessment tools held on 01.08.2020 organised by Department of Computer Science, Velammal College of Engineering and Technology, Madurai
6. Enlightening session on "Writing a Research Paper" organized by the Department of English (SF), Holy Cross College (Autonomous), Nagercoil held on 08 August, 2020.
7. International Webinar on "Selected Topics in Chemistry" organised by Research & PG Department of Chemistry, Saraswathi Narayanan College, Madurai, Tamil Nadu, India on 29 & 30 July 2020.
8. National Webinar on National Education Policy, Autonomous Status: Challenges & Opportunities held on 8th August 2020

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9. Webinar on “Magnetic Resonance Spectroscopy (MRS)” organized by Department of Chemistry, Dr. Zakir Husain College, Ilayangudi- 630 702, Sivagangai District, Tamilnadu, India on 25/07/2020,
10. International Webinar on “Barriers for Women Empowerment: Strategies to Overcome” organized by the Centre for Women Empowerment and Women Studies on 28.07.2020 by Manonmaniam Sundaranar University-Centre for Women Empowerment and Women Studies
11. State Level Webinar Series, DAY 8 on the topic “Pericyclic Reactions” delivered by Prof.S.Swarnalakshmi, on 8th August, 2020 by Anna Adarsh College For Women, Anna Nagar, Chennai
12. Webinar on “Liquid Crystals and Nanomaterials for Display Technology” conducted on 08-08-2020, organised by Department of Basic Sciences & Humanities, Vignan's Institute of Management & Technology for Women, Hyderabad.
13. National Webinar on Current Research in Materials Science organised by Department of Physics, University P.G. College, Mahabubnagar, Telangana State on 25.07.2020.
14. Webinar on Future and Conspiracy of Basic Science Research organized by the Department of Sciences and Humanities, Kengeri Campus, Bangalore on 3rd August, 2020
15. National Level Online Webinar on “Creativity with Passion Leads to Success” organized by NSS Committee & IQAC of St. Mary’s Centenary Degree College, Secunderabad on 6th August, 2020
16. National Level Webinar on ‘Good Publication Practices: What & Where to Publish’ organized by the School of Social Sciences, S.R.T.M. University, Sub-Centre, Latur (MS) on 04th August, 2020.
17. FDP Programme on “Recent Research Issues in Bio Informatics and Bio-Sensors”, Kalasalingam University, Krishnankovil. (17-19 March 2017)
18. Two days CSIR workshop on “Application of Remote Sensing and GIS for Water Management VSA Educational and Charitable Trust’s Group of Institutions, Salem (25-26 Aug 2013)
16. IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28th April to 22nd May 2020 during COVID-19 nationwide lockdown.
17. Leadership Talk With Dr. Nilesh N Oak, Expert (Indian Civilization & History) held on 30th May by MHRD's Innovation Cell
18. AICTE Sponsored STTP-I on “Industrial Pollution & Control Strategies” organized by Department of Chemical Engineering, Anurag Group of Institutions, Ghatkesar (M), Medchal (D), Telangana held during 24th -29th August 2020
19. One Week Workshop on “Materials Technology Advancement In Current Scenario - MTACS2020”organised by the Department of Physics, Sathyabama Institute of Science and Technology, Chennai through Zoom Video Communications from 4th to 10th July 2020.
20. Two Day National Level Online Workshop on Insightful Rudiments of Originating Google Forms & Generating Certificates- A Horde of Approaches Adaptable for Online Academic Motives on 25 & 26 September, 2020 organized by Department of Humanities & Sciences, Balaji Institute of Technology & Science, Narsampet, Warangal Rural, Telangana, India.
21. **Online Courses** : 125 courses (List Enclosed)

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Academic Reference

- Dr. D. Sarala Thambavani,
Former Regional Joint Director of Collegiate Education,
Tirunelveli Region,
Tirunelveli.
Mail id: sarala_dr@yahoo.in
- Dr. K. Vijaya,
Head Department of Chemistry,
PSNA College of Engineering and Technology,
Dindigul, Tamilnadu, India
Mail id: hodchemistry@psnacet.edu.in

Declaration

I hereby affirm that all the details furnished above are true to the best of knowledge and belief.

Date : 04.05.2022

Place : Dindigul



(Dr.D. Gnanasangeetha)