

VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

KNOWLEDGE ASSET 2022-2023

Name: Dr.N.Mamatha  
Designation: Assistant Professor  
Department: Humanities and Sciences  
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Experience (in years):16      Teaching: 16      Research:  
Others(if any, specify):

**1. Educational / Technical qualifications:**

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	Ph.D	2012	Organic Chemistry
2	M.Sc	2003	Chemistry
3	B.Sc	2001	Botany, Sericulture, Chemistry

**2. Teaching and Learning:**

- 2.1. Teaching Interests: Engineering Chemistry & Environmental Studies
- 2.2. Novel Teaching & Learning Techniques adopted: POGIL, Think Pair Share, Flipped Classroom, Group Discussions,
- 2.3. Involvement in curriculum updating / Design: In updating Engineering chemistry paper I syllabus as per AICTE curriculum.

**3. Co-curricular and Extra-Curricular Activities**

- 3.1. Interests and Hobbies: Interacting with children
- 3.2. CCA/ECA Organized:
- 3.3. CCA/ECA participated:
- 3.4. Counseling and Mentoring Activity:
- 3.5. Committees involved in:
  - Department level: Engineering chemistry lab-2 incharge
  - Maintaining Research Publications File
  - Institute Level: Project Arcade Coordinator

**4. Conference / Workshop / Seminar / Guest Lectures :**

- 4.1 Conducted: Organising committee member of "The International Webinar on -The

Pivotal Role of Chemistry/ Chemical Engineering in the Present Scenario,  
2020” conducted on 20.07.2020 - 22.07.2020

4.2 Attended:

- A Faculty development Program (FDP101x) on “Foundation Program in ICT for Education”, organized by IIT Bombay at VNRVJIET, 3<sup>rd</sup> Aug - 7<sup>th</sup> Sept 2017.
- A Faculty development Program (FDP201x) on “Pedagogy for Online and Blended Teaching-Learning Process”, organized by IIT Bombay at VNRVJIET, 14<sup>th</sup> September 2017 – 12<sup>th</sup> October 2017.
- A 3 day workshop on “Outcome Based teaching, learning and assessment strategies” held on 25<sup>th</sup>, 26<sup>th</sup>, 27<sup>th</sup> June 2019.
- A 2 day workshop on “Technical writing” held on 28<sup>th</sup> and 29<sup>th</sup> June 2019.
- A national webinar on “A Journey to Drug Discovery: Computational Chemistry Approach” held on 27.06.2020 by TJS Engineering College.
- Participated in National Level Online Quiz on Research Methodology held on 29 May 2020.
- Participated in three day faculty program on “Sustainable development with Green Technology: Precovid, Covid and Postcovid times.” organized by Department of Chemistry, Anurag University, Hyderabad, India from 11th June to 13 th June 2020.
- Completed a 3 day workshop on “Effective utilization of Digital platforms for teaching and learning process” held by VNRVJIET on May 15-17, 2020.
- Participated in E-International Symposium on “Synthesis and Characterization of Smart materials and their potential applications” organized by university school of basic and applied sciences, Guru Gobind Singh Indraprastha University, Delhi, during 14<sup>th</sup>-17<sup>th</sup> June 2020.
- Participate in one week FDP on “Advanced Data Science and its applications” Conducted by BVRIT, Hyderabad from 22-06-2020 to 26-06-2020.
- Participated in international workshop on “Energy Technology and Sensor System”, conducted by IIITDM, Kanchipuram from 28<sup>th</sup> – 30<sup>th</sup> Junly 2020.
- Participated in FDP on “Nano Science and Technology {Energy, Environment and Healthcare} organised by Sathyabhama Institute of Science and Technology in association with IIITDM, Kancheepuram from 29.06.2020 to 07.07.2020.
- Participated in a webinar entitled “Covid 19 Pandemic; A synthetic Chemist’s overview” organized by MNR Degree and PG College on 11-7-2020.
- Participated in 5 Day workshop on “Developing Winning Research Proposals” conducted by the Research and Consultancy Centre, VNRVJIET from 8<sup>th</sup> – 12<sup>th</sup> Aug 2022.

**5. Academic Contribution and Research & Consultancy:**

5.1. Invited Lectures: 02

Two Online Guest lectures have been delivered on Ecoystems and Natural Resources from Environmental science course on 5<sup>th</sup> and 26<sup>th</sup> Nov 2022 for the students of ECE, Geetanjali college of Engineering and Technology, Cheeryal.

5.2. Articles/Chapters published in Books: Nil

5.3. Books published as single author or as editor: Nil

5.4. Projects Guided :

a) UG : Nil

b) PG : Nil

5.5. Research Interests : Organic Synthesis and biopolymers

5.6. Ph.D students:

a) Enrolled : 01 (As Co-Guide)

b) Submitted: Nil

c) Awarded: Nil

5.7. Papers published in reviewed journals :

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	Naproxen and Ibuprofen based acyl hydrazone derivatives: Synthesis structure analysis and cytotoxic studies	<i>J. Chem. Pharm. Res., 2010, 2(6):393-409</i>	0975-7384	-----	International
2	Synthesis, Characterization and Anti-bacterial screening of piroxicam based sulfonates	<i>J. Chem. Pharm. Res., 2010, 3(2):581-588</i>	0975-7384	-----	International
3	2(6-methoxynaphthalen-2-yl)propionic acid (1,3-dimethyl-butylidene) hydrazide	Molbank , 2011, doi: 10.3390/M741	1422-8599	1.22	International
4	Synthesis of novel quinoline analogues of nimesulide: an unusual observation	Journal of Heterocyclic chemistry, Vol.48, 2011, PP.555, DOI: 10.1002/jhet.618	1943-5193	0.787	International
5	Design and synthesis of novel cytotoxic agents based on combined framework of	Journal of heterocyclic chemistry , vol.	1943-5193	0.787	International

	quinoline and nimesulide	49, 2012, pp.80- doi; 10.1002/jhet.801			
6	Biodegradable nano-hydrogels in agricultural farming- alternative source for water resources	Procedia materials science, vol.10, 2014, pp.548- 554	2211-8128	-----	International
7	Application of biodegradable nanohydrogels in the cultivation of wild guava	International journal of green and herbal chemistry, sec.a, vol.4, no.1, pp. 71-80,2015	2278-3229	1.839	International
8	Simultaneous analysis of linagliptin and metformin in pure and pharmaceuti cal solid dosage form using rp-hplc method	Global academic research journal, vol.2, issue.9, 2014, pp.18-27	2347-3592	3.73	International
9	Effect of particle size on convective heat transfer in cylindrical annulus through nano fluid	International journal of ethics in engineering & management education, vol.1, issue.8, 2014, pp-23-28	2348-4748	3.35	International
10	Effect of particle size on convective heat transfer in flat plate through nano fluid	International journal for scientific research and development, vol.2, issue.05, 2014, pp.672- 676	2321-0613	1.22	International
11	Spectroscopic features of Tb <sup>3+</sup> doped strontium zinc borate	Journal of molecular		3.814	International

	glasses for green laser applications	structure, Vol.1274, 134514			
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#### 5.8. Papers presented at National / International Journals :

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Biodegradable nano-hydrogels in agricultural farming-alternative source for water resources	NDCT-2014	International	June 23 <sup>rd</sup> -25 <sup>th</sup> , 2014
2	Application of biodegradable nanohydrogels in the cultivation of wild guava	conference on nano materials and technologies (cnt-2014)	International	Oct 17 <sup>th</sup> – 18 <sup>th</sup> , 2014
3	2(6-methoxynaphthalen-2-yl)propionic acid(1,3-dimethyl-butylidene) hydrazide	conference on recent advances in drug discovery	International	Oct 22 <sup>nd</sup> – 24 <sup>th</sup> , 2010
4	Synthesis, characterization and anti-bacterial screening of piroxicam based sulfonates	Recent trends in pharmaceutical chemistry	National seminar	Jan 30 <sup>th</sup> -31 <sup>st</sup> , 2011
5	Naproxen and ibuprofen based acyl hydrazone derivatives: synthesis, structure analysis and cytotoxicity studies	progressive journey of drug from mind to market	National seminar	Dec 18 <sup>th</sup> – 20 <sup>th</sup> , 2008
6	Synthesis of novel quinoline analogues of nimesulide: an unusual observation	Andhra pradesh akademi of sciences (apas)	National	Nov 18 <sup>th</sup> – 20 <sup>th</sup> 2010

#### 5.9. Sponsored research Projects: Nil

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed

5.10 Consultancy Projects: Nil

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

6. **Awards / Honors received:** Best poster presentation award “**Synthesis of Pyrazolones using Microwave-Assisted Neat Reaction Technology**”, National Seminar on Progressive journey of drug from Mind to Market from 18-20<sup>th</sup> Dec 2008 at PVP College, Loni, Ahmednagar, Pune.Pg.No-18

7. **Certificate Courses:**

- NPTEL Course on “**Biomaterials**” conducted by IITM, Feb – April 2020
- Coursera certificate on “**AI for Everyone**”, from Stanford University.
- Coursera certificate on “**Nanotechnology and Nanosensors**” Conducted by Israel Institute of Technology.
- IUCEE certificate on “**Intro to climate change and sustainability**” conducted by Dr. Vasudevan Raj Rajaram, Global Expert Faculty, Environmental Engineer, Chicago USA.
- IUCEE certificate on “**Climate change concept for Engineers**” Conducted by Dr.Venki, Global Expert Faculty, Lamar University, USA.

8. **Motto:** To make the students to develop their skills in the recent advancement of technical applications and make class more interactive by using Information Communicating Technologies (ICT Tools).