

Name : Madhavi. K
Designation: Assistant Professor

Department: Humanities & Sciences

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Experience (in years): Teaching: 22 Years Research: Others (If any, Specify):

1. Educational / Technical qualifications:

| S.No | Level (UG / PG / Ph.D) | Year of passing | Specialization |
|------|------------------------|-----------------|----------------------|
| 1 | Ph.D | 2014 | Analytical Chemistry |
| 2 | M.Phil | 2010 | Analytical Chemistry |
| 3 | M.Sc | 2001 | Analytical Chemistry |
| 4 | B.Sc | 1998 | M.P.C |

2. Teaching and Learning:

2.1. Teaching Interests:

- Engineering Chemistry
- Inorganic Chemistry
- Analytical Chemistry,
- Physical and General Chemistry

2.2. Novel Teaching & Learning Techniques adopted:

- Concept Maps
- Mind Maps
- Think-Pair-Share
- Crossword,
- Word Search
- Cheat Sheet
- Match the following,
- Word Scramble
- POGIL
- Completed NPTEL course on Processing of Polymers and polymer composites.
- Completed certificate courses on
Introduction to artificial intelligence
AI for every one
Design thinking fundamentals
Design Thinking for the Greater Good: Innovation in the Social Sector
Design Thinking for innovation
Foundations of Mindfulness

Covid-19 contact tracing

2.3. Involvement in curriculum updating / Design: Member BOS Chemistry

3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies:

- Reading Books
- Counseling students
- Giving value based education

3.2. CCA/ECA Organized: NIL

3.3. CCA/ECA participated:

Annual day Refreshment committee Member

Dramatix club Coordinator

3.4. Counseling and Mentoring Activity:

3.5. Committees involved in:

Department level: Academic Audit Cell member

Institute Level:

- Faculty in-charge for Drinking water analysis
- WIT & WIL Repository Administrator

4. Conference / Workshop / Seminar / Guest Lectures:

4.1 Conducted:

- Nano Technology – The Present and Future aspects 5th April 2010.
- Organized a Two day workshop on Faculty orientation Programme in Engineering Chemistry at vnrvjiet 2010.
- Organized a lecture on engineering applications of Nano technology on 22nd Feb 2011.
- Organized a lecture on carbon nanotubes and its applications in Nov 2012.
- Engineering the Education Scenario towards Learner Centric Environment in Aug 2014.

4.2 Attended:

- Three day National Workshop on Soft Skills Development Strategies corporate and Academic perspectives, on 23-24 July 2009 at VNRVJIET, Hyderabad
- Attended a Two day workshop on Polymer waste management at JNTUH, Dec 18th and 19th, 2009.
- Attended a Two day National workshop on Energy, Environment and Sustainable development in May 2011 organized by civil dept at VNRVJIET.

- Attended a guest lecture on Material science organized by EEE dept at VNRVJIET in 2011.
- Attended a guest lecture on laboratory techniques organized by civil dept at VNRVJIET in 2011.
- Attended a one day workshop on POGIL by Dr.Cliff and Technology for education by Dr.Kinshuk on 23 July 2012 at VNRVJIET
- Attended a lecture on teaching based learning outcomes by Dr P.G. Shastry on August 11th 2012.
- Attended a two day workshop on pedagogy of technical writing organized by humanities and sciences on 6th and 7th September 2012.
- Attended foundation day lecture by Dr.D.N.Reddy on 21st September .
- Attended a lecture on Excellence in engineering education by Dr P.Raghavendra Rao on September 28th 2012.
- Attended Engineer's day lecture about "Our Inputs for Greener Environment" on September 15th 2012.
- Under career vision development programme attended **"Classroom Management Strategies for Effective Instructions"** on October 5th 2012.
- Attended a Three day workshop on Art of Teaching Feb 11-13th 2013 by IIIT-Hyderabad.
- Attended a lecture on Teaching methodologies and classroom Management by Prof Rao Unnava at VNRVJIET on 19th March 2013.
- Attended a EMS lecture on Teaching and learning process a Paradigm shift Dr.Kiranmai at VNRVJIET.
- Attended a EMS lecture on Demystifying Intellectual property Rights by Ramesh Chandra at VNRVJIET
- Attended a EMS lecture on Intellectual property Rights by Dr A.S.Rao at VNRVJIET.
- Attended a one day workshop on "INTRO TO POGIL" organized by Dr. Sandhya Kode and Dr.C.Jyotsna. on February 16th 2013.
- Attended all the POGIL follow up sessions organized by Dr.Sandhya.kode and Dr.C.Jyotsna conducted on March 1st and 13th, April 2013.
- Attended training class on ASSET management by Col. Ratnakumar on 27th April 2013.
- Attended a seminar on "A Birds view of Nano science and technology in Indian research" by Dr. Brahmaji Rao on July 25, 2013.
- A two day national level symposium on "Role of Chemistry in advanced engineering materials" at Vasavi College of engineering on 26-27th July 2013.
- A two day workshop on Advanced Materials and their applications on 2-3rd September 2013 at VNRVJIET.
- One day workshop on Engineering Materials at Vasavi College of engineering on 25th Jan 2014.
- Three day International conference on New Dimensions in Chemistry and Chemical Technologies and applications in Pharma industry at JNTUH on 23rd -25th June 2014.
- Engineering the Education Scenario towards A Learner Centric Environment- August 2014.
- Training Programme on WIT & WIL at VNRVJIET
- A seminar on Outcome based education on 16th Feb. 2015.
- A seminar on Curriculum design and development on 2nd April 2015.
- Attended a 2 day workshop on "3D printing" conducted by the department of Mechanical Engineering at VNRVJIET during 19th -20th March 2015.

- A seminar on "Nanoscience and Technology for sustainable infrastructure" by Dr.Sesha.S Srinivas from Florida Polytechnic University USA, conducted by Centre for Nanoscience and Technology on 6 th July 2016.
- Attended a 10 week FDP programme on Use of ICT in Education for Online and Blended Learning from April 2016 to June 2016 and successfully completed the course and got Top Performer award.
- Attended one day workshop on how to write a good project on 23rd February.
- Attended a guest lecture on Role of materials in Mechanical engineering for I B.Tech mechanical students by K. Radha Krishna Sastry Manager, HAL Hyderabad on 27th February.
- Attended A Hands On Workshop on ' Effective and Efficient Online Teaching in the Age of Corona, on 24 May 2020 conducted by IIT Bombay.
- Attended a FDP on Blended Learning on 20-23rd May 2020 conducted by TASK.
- Attend a National level webinar " Environmental Sustainability: Combating Air. Water and Noise pollution" organized by Department of Civil Engineering. Ashok rao Mane Group of Institutions held on Friday 5th June 2020.
- Participated and completed successfully an FDP program on " Sustainable Development with Green Technology , Precovid, covid and Post covid times" from 11th June to 13th June, organized by Dept of chemistry, Anurag University.
- Participated an FDP program on "MOODLE Learning management System" organized by JNTUCES from 10th June to 15th June and completed successfully.
- Attended a One Week Faculty Development Program on 'Advancements in science and its applications in Engineering" from 22nd to 26th June 2020 organized by HITAM.
- Attended a 9day FDP on "Nanoscience and Technology (Energy, Environment and health care" from 29th June to 7th July 2020 Organized by Satyabhama University.
- Attended a National level webinar on Art of Teaching on 7th July 2020.
- Attended a International FDP on "Advancements in applied chemistry " organized by St. Joseph's college of Engineering, Chennai from 6th -8th July 2020.
- Attended a international FDP on "Latest trends in Engineering , Science and Technology: Nanomaterials " organized by Department of chemistry , Lendi Institute of Engineering & Technology, Vizianagaram from 10-15th August 2020

5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures:

5.2. Articles / Chapters published in Books:

5.3. Books published as single author or as editor:

5.4. Projects Guided:

a) UG:

b) PG:

5.5. Research Interests:

5.6. Ph.D students:

a) Enrolled:

b) Submitted:

c) Awarded:

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 | Spectrophotometric determination of cobalt in water and agricultural samples. | Journal of applicable Chemistry Vol 1(4), 2012, 500-504 | 2278-1862 | 1.290 | International |
| 2 | Spectrophotometric method for the determination of manganese (II) in soil samples and plant materials using morpholine dithiocarbamate, | International Journal of Engineering research and technology. Vol 2, issue 2- 2013 | 2278-0181 | 1.72 | International |
| 3 | Spectrophotometric method for the detection of Tin(II) in synthetic mixtures using Morpholine Dithiocarbamate . | International Journal of Emerging Engineering Research & Technology | 2349-4935 | 1.222 | International |
| 4 | Estimation of Selenium(IV) in Human Hair, Nails, Blood samples and Wheat and Jaggery samples using Morpholine Dithiocarbamate . | Chemical Science Reviews and Letters | 2278-6783 | 4.014 | International |
| 5 | Novel Pedagogical methods for Effective Learning of Chemistry | Journal of Applicable Chemistry | ISSN: 2278-1862 | SJIF 3.49 | International |

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|---|--|---|--------------------|---------|---------------|
| | in Engineering Education | 8 (4): 1603-1610 August ,, 2019 | | | |
| 6 | Detection of Tellurium (IV) in High purity metal & Synthetic mixtures using Morpholine dithiocarbamate & U.V Spectrophotometer | International Journal of Scientific Research & Review/ Vol 9 Issue 4 Apr-20 | 2279-543X | SJI 6.1 | International |
| 7 | P. Padmavathi* and K. Madhavi Impact of Air pollution from a coal fired thermal power station on Brinjal and Tomato Crops. | Chemical Science Reviews and Letters | 2020,9(36),902-908 | 4.014 | International |

5.8. Papers presented at National / International Conferences:

| S.No | Title of the Paper | Names of the Conference/ Seminars | National/ International | Period |
|------|--|---|----------------------------|--|
| 1 | Spectrophotometric study of Mercury(II) as MDTC complex. | International Conference on New Dimensions in Chemistry and | International | June 23 rd to 25 th 2014 |

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|---|--|--|---------------|------------------------------------|
| | | Chemical Technologies | | |
| 2 | Implementation of Process Oriented Inquiry Learning in an engineering chemistry course in Hyderabad | American Chemical Society | International | |
| 3 | Learning and Reflection of Technology Based Collaborative MOOC Design and Its Evaluation, Validation and Results | 2018 IEEE Tenth International Conference on Technology for Education (T4E) | International | December 13-18 th 2018. |

5.9. Sponsored research Projects:

| S.No | Title | Agency | Period | Grant amount | Ongoing / Completed |
|------|-------|--------|--------|--------------|---------------------|
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5.10 Consultancy Projects:

| S.No | Title | Agency | Period | Sanctioned Amount | Ongoing / Completed |
|------|-------|--------|--------|-------------------|---------------------|
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6. Awards / Honors received:

7. Motto: Sincerity and hard work never go unrewarded.