

Curriculum Vitae

Dr. D Annapurna Padmavathi

Professor

Physical Chemistry



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Commercial Tax colony, Kothapeta, Hyderabad-35

EDUCATION

Ph.D., in Physical Chemistry, *Indian Institute of Technology, Bombay, India*

Dissertation Supervisor: **Professor Manoj Kumar Mishra**

Title of Dissertation *“Investigation of the Role of Potential Structure in the field of Nonadiabatic Collisions”*

Date of obtaining PhD: **15th December, 1994**

M.Sc Chemistry, June 1989- Distinction 71.3%, Nizam College,
Osmania University, Hyderabad, Andhra Pradesh, India

B.Sc Chemistry, June 1987 - Distinction 81.1%, R. B. V. R. R. Women’s College,
Osmania University, Hyderabad, Andhra Pradesh, India

Research Fellowship

Senior Research Fellowship award from the Council of Scientific and Industrial Research, Government of India (**August 1993 - December 1994**).

Junior and Senior Research GATE Fellowships of the Indian Institute of Technology, Bombay, India. (**June 1990 - July 1993**).

Post Doc

Emory University, Atlanta, Georgia, U.S.A with Professor Joel M. Bowman (January 1995 - December 1995). Worked On: Quantum Dynamics of Chemical Reactions.

Institute for Molecular Science, Myodaiji, Okazaki 444, Japan with Professor Hiroki Nakamura (January 1996 - May 1996). Worked On: Development of Semi Classical Theories to Understand the Dynamics of Molecular Collisions.

July 1996 - Nov 1996 as a VISITING SCIENTIST with Prof. M. K. Mishra, Worked on: ‘Investigation & Control of nonadiabatic transitions’

Dec 1996 - Mar 1997 as Research Associate with Prof. Y.K. Agrawal at Gujarat University, Ahmedabad.

TEACHING EXPERIENCE

23rd Mar 1997 - Oct 1997 as Lecturer, Chemistry. Gujarat University, Ahmedabad.

1999-2001: On Teaching assignment at O. U. College for Women Koti, OU, Hyderabad.

2001-2003: On Teaching assignment at O.U. College of Engineering, OU, Hyderabad.

2003-2004: On Teaching assignment at O. U. College for Women Koti, OU, Hyderabad.

2004- 2007: On Teaching assignment at ICFAI Institute of Science and Technology, Hyderabad.

(* above years are academic years)

On Teaching assignment at **Chemistry Department @ Osmania University:**

May 2007 – July 2009: Osmania University College for Women, Koti, Hyderabad

Aug 2009 – July 2016: University College of Science, Saifabad, OU, Hyderabad

Aug 2016 – till date: University College of Science, OU, Hyderabad

PROJECTS

1. **Sponsoring Agency UGC**, Title of the project Design, Synthesis and Photochromic studies of 1,2-bis(3-thienyl) perfluorocyclopentene derivatives, 5-(3-coumarinyl)-4-(3-thienyl)oxazole derivatives. (3.3 Lakhs) **surrendered due to transfer from UCS Saifabad OU to UCS-OU**
2. **DST -PURSE program** Project titled " Theoretical and Experimental Study of Natural Pigments as Sensitizers in Dye Sensitized Cells."
3. **UGC-UPE-FAR Project** titled "Investigation of H-atom in elimination reactions".

Ph.D. Scholars Graduated

1. **Kandukuri Usha Rani** was awarded with Ph.D on “*Synthesis, DFT Calculations and Molecular Docking Study of Novel Derivatives of 2-Hydroxyquinoline-4-Carboxylic Acid as Anti-TB and Antimicrobial Agents*” (press note released on 6 Feb 2020)
2. **Kondaparthi Mahesh** was awarded with Ph.D on “*A Study Of Novel Photoswitchable Dihetarylethenes Exhibiting Fluorescence*” (press note released on 17 Nov 2020).
3. **Ravi Kumar Shekunti** was awarded with Ph.D on **Synthesis and DFT studies of Biologically Active Benzoates, Benzamides, Sulfonates and Sulfonamides using Novel Lewis –Base DMAP Adducts** On 25th Jan, 2024 @ Chemistry Department, Osmania University, Hyderabad, India; Release of Press note by Osmania University: 5th Feb, 2024.
4. **Sai Prasad Gedam** submitted his thesis titled **Adapting machine learning-based global optimization algorithms** for designing nano-catalysts in September 2023 to the Osmania University for the Degree of Doctor of Philosophy in Chemistry. Reports arrived. Defence date to be scheduled.

Details of research scholars as on 30/7/24 - ongoing					
S. No	Name of scholar	Date of joining Full/Part time	Title	Fellow ship	Mail ID
1	G Sai prasad	22.3.2017/PT	Computational study of dye sensitized molecules (Thesis Submitted)	Nil	rush2saiprasad@gmail.com
3	B Anitha	22.9.2018/PT	Design synthesis & characterization and biological evaluation of novel hetrocyclic compounds by michael's addition under green methods.	Nil	bujjianitha32@gmail.com
4	Kommu Naresh	28.9.2018/PT	Tunneling of H-atom in chemical reactions	Nil	Naresh.kommu@gmail.com
5	Sreedhara Swamy	22.9.2018/FT	Kinetic studies of Forskolin	Nil	sridharswamyb@gmail.com

MS Projects

1. **K Siddhartha (Roll No. 20151018)** IISER Pune **completed** 1 year MS project in chemistry titled "*Tunneling Study of H-atom transfer reactions*" 6th Dec, 2021
2. **Vadithya MANJULA (Roll. No. 19-01-529-038)** a Five Year Integrated M.Sc. Chemistry student from Palamuru University, Mahabub Nagar completed 1 year MSc project in chemistry titled *Eco-friendly benzene sulfonylation of phenols by employing mild reagent [DMAPSO₂Ph]⁺Cl⁻* 14th June 2024

List of Publications

Peer-Reviewed Papers

1. Efficient green synthesis of a potential novel nosylation reagent and its DFT study ; Ravi Kumar Shekunti, **Annapurna Padmavathi Devarakonda**; Sridhar Reddy Kothakapu & D. S. Ramakrishna <https://doi.org/10.1080/10426507.2023.2191960> *Journal Phosphorus, Sulfur, and Silicon and th Related Elements*, Publication date; 2023/3/30 Publisher: Taylor and Francis.
2. Advanced machine learning based global optimizations for Pt nanoclusters; Sai Prasad Gedam, Siva Chiriki, **DA Padmavathi** ; *Journal of the Indian Chemical Society*; Publisher Elsevier ; <https://doi.org/10.1016/j.jics.2023.100978>; Volume 100, Issue 5, May 2023, 100978
3. Common Dimer-Responsible for the Trends in pKaHs of Both Pyridazinium Cations and Di-cations: An Educational Perspective ; Sanjeev Rachuru, Pandiri Sreedhar, **DA Padmavathi**, V Jagannadham *World Journal of Chemical Education*, 2023, Vol. 11, No. 1, 4-6 Available online at DOI:10.12691/wjce-11-1-2.
4. Why Cyclohexatriene (C₆H₆, pKa= 43) is Less Acidic than Cyclopentadiene (C₅H₆, pKa= 15) and Cycloheptatriene (C₇H₈, pKa= 36): A Freshmen Chemical Education Undergraduate Exercise; Sanjeev Rachuru, **Devarakonda A Padmavathi**, V Jagannadham *World Journal of Chemical Education*, 2023, Vol. 11, No. 1, 1-3 Available online at <http://pubs.sciepub.com/wjce/11/1/1> Published by Science and Education Publishing DOI:10.12691/wjce-11-1-1
5. The three pyridazines, three naphthyridines and two azoles: effect of the position of the second heteroatom on pKaH of their eight conjugate acids ; Sanjeev Rachuru, **Devarakonda A. Padmavathi**, Ravi Ramavath, Jagannadham Vandanapu and Adam A. Skelton. *Zeitschrift für Physikalische Chemie* <https://doi.org/10.1515/zpch-2022-0111> Received July 26, 2022; accepted October 20, 2022; published online November 9, 2022

6. N-Benzoyl-4-Dimethylaminopyridinium Chloride: A Lewis Base Adduct For Efficient Poly And Monobenzoylation, Ravi kumar Shekunti, Swathi Thangallipalli , Chiranjeevi Dhonthulachitty, Sridhar Reddy Kothakapu, **Padmavathi Devarakonda Annapurna**, Chandra Kiran Neella, *ChemistrySelect* [September 2022 DOI: 10.1002/slct.202202636](#)
7. Equilibrium, DNA binding, docking and antimicrobial studies of Ni(II) and Cu(II) chelates with 1-(4'-nitrobenzoyl)-3-thiosemicarbazide, Leena Carlin Sandhepogu Thomas, Sree Kanth Sivan, **Annapurna Padmavathi Devarakonda** and Sireesha Berley *Applied Organometallic Chemistry*; [30 August 2022, DOI: 10.1002/aoc.6877](#)
8. pKaH of the Two Conjugate Acids (CH_2N_5^+) and (HN_6^+) of Two Hypothetical Molecules the Pentazine (CHN_5) and the Hexazine (N_6) of Azabenzene Series: A Chemical Education Perspective R. Sanjeev, R. Ravi, **D. A. Padmavathi** and V. Jagannadham, *World Journal of Chemical Education* **2022**, 10(3), 105-109, DOI: 10.12691/WJCE-10-3-3.
[Received June 20, 2022; Revised July 25, 2022; Accepted August 03, 2022.](#)
9. Coumarinyl (thienyl) thiazole molecules as fluorescent photo switches, K. Mahesh, **D. A. Padmavathi** Volume 34 (2022) *Asian Journal of Chemistry* ISSN 0970-7077. Received: [11 March 2022; Accepted: 25 May 2022; Published online: 19 August 2022](#)
10. Is Hammett Correlation of Dipole Moments of mono-Substituted Benzenes Helpful to Distinguish o,p-Directing Groups from m-Directing Groups in an Aromatic Electrophilic Substitution? A Chemical Education Perspective. R. Sanjeev, **D. A. Padmavathi**, V. Jagannadham *World Journal of Chemical Education* [Received November 21, 2021; Revised December 24, 2021; Accepted January 03, 2022.](#)
11. Why the Second Bond Exceptionally Effective on pKa Values of -ynoic ($-\text{C}\equiv\text{C}-$) Compounds? Chemical Education Perspective Rachuru Sanjeev, D. A. Padmavathi V. Jagannadham, *World Journal of Chemical Education*, 2021, Vol. 9, No. 3, 94-95 Available online at <http://pubs.sciepub.com/wjce/9/3/5> Published by Science and Education Publishing DOI:10.12691/wjce-9-3-5 9 (Accepted November 15, 2021)
12. Synthesis and characterization of 4-(4'-methoxy) benzylidene amino-5-phenyl-3-mercapto-1, 2, 4-triazole and its complexes with Cu(II), Mn(II) Aliya Begum, P. Sateesh Kumar, **D.A Padmavathi**, B. Sireesha, K. Eishwari and Ch. Sarala Devi; *IJRAR* [August 2021](#), Volume 8, Issue 3 *International Journal of Research and Analytical Reviews (IJRAR)* www.ijrar.org (E-ISSN 2348-1269, P-ISSN 2349-5138) IJRAR21C1614.
13. Practical synthesis of Sulfonates and Sulfonamides by employing a New Sulphonation Reagent $[\text{DMAPSO}_2\text{Ph}]\text{Cl}$ -. Ravi kumar Shekunti, Sudharshan Reddy Akkamolla, Swathi Thangallipalli, Chiranjeevi Dhonthulachitty, Sridhar Reddy Kothakapu, **Annapurna Padmavathi D.**, Chandra Kiran Neella *International Journal for Innovative Engineering and Management Research*; Vol 10 Issue 02, Feb 2021 ISSN 2456 – 5083. [DOI: 10.48047/IJIEMR/V10/I02/21](#)
14. Novel Photoswitchable dihetarylethenes exhibiting fluorescence, K. Mahesh, **D. A. Padmavathi** *Journal of fluorescence* ISSN 1053-0509 [Received: 26 July 2019 /Accepted: 10 September 2019.](#)

15. The 'Yard Stick' to Interpret the Entropy of Activation in Chemical Kinetics: A Physical-Organic Chemistry Exercise * R. Sanjeev, **D. A. Padmavathi**, V. Jagannadham 2018, *World Journal of Chemical Education* 6 (No. 1), 78-81
16. Cooxidation not to be Confused with Catalysis: A Chemical Education Article to Physical-organic Chemists R. Sanjeev, **D. A. Padmavathi**, V. Jagannadham *Oriental Journal of Chemistry*, 2018, Vol. 34, No.(1):Pg. 526-531
17. Filter Paper Salt Bridge in Potentiometric Titrations: An Undergraduate Laboratory Chemical Education Article G. Mallika Devi, **D. A. Padmavathi**, R. Sanjeev, V. Jagannadham, *World Journal of Chemical Education*, 2016, Vol. 4, No. 6, 117-123.
18. Synthesis, characterization, equilibrium studies, DNA binding and anti microbial activity of 2- Propionyl-amino-5- alkyl, 1,3,4-thiadiazoles and their complexes Firasath Unnisaa , B. Sireesha and **D. A. Padmavathi** *IOSR Journal of Applied Chemistry* (IOSR-JAC) e-ISSN: 2278-5736. Volume 9, Issue 7 Ver. I (July 2016). 2278-5736.
19. Kandukuri Usha Rani and **Padmavathi, D.A** Computational Study of Cyclic Derivatives From Pyridine-4-Carboxylic Acid As Potential Anti-Tb Agents *Biolife* | 2014 | Vol 2 | Issue 1 2(1):392-395.
20. Govind Reddy, Bharath , Naveen J., Srikanth A., **Padmavathi D. A** A study of atomic term symbols of ground and excited states and their importance. *Journal of the Maharaja Sayajirao University*, 2014, Vol 49, 9-28.
21. Mahesh, G. Mallika Devi **D. A. Padmavathi** Semiempirical study of 1,2-bis(3-thienyl) perfluorocyclopentene derivatives. *Int J Pharma and BioSciences* 2014 Oct; 5(4) Special Issue Sp- 131-138.
22. Udaya Kumari, G.L. David Krupadanam , G. Srimannarayana , **D. Annapurna Padmavathi**, A.K.D. Bhavani and S. Veeresham Photooxidative cyclization of 3-aryl/heteroaryl-4-heteroaryl coumarins: an experimental and semi-empirical study *Heterocyclic Communications* 2012
23. **Devarakonda Annapurna Padmavathi**, Potential Energy Curves & Material Properties *Materials Sciences and Applications*, 2011, 2, 97-104.
24. Jagannadham, **D. Annapurna Padmavathi**, R. Sanjeev, Why Benzyl-gem-Diacetate Is Remarkably Stable in Aqueous Solution? *International Journal of Chemical Kinetics* 41, 547 (2009).
25. Joel M. Bowman and **D. A. Padmavathi**, Quantum Calculations of inelastic scattering of HCN and HNC by Ar, *Mol. Phys.* 88, 21(1996).
26. **D. A. Padmavathi**, M.K.Mishra and H. A. Rabitz, Isolation of the Regions of Potential Significance in Fine Structure Transitions using Adiabatic and Functional Sensitivity Analyses: A Comparative Investigation with Application to Na (2P 1/2) + He Na (2P3/2) + He and Na (2P1/2) + Ar Na (2P3/2)+ Ar, *Phys. Rev. A* 50, 3142 (1994).

27. **D. A. Padmavathi**, M.K.Mishra and H. A. Rabitz, A probe of Dynamical Models using Functional Sensitivity Densities with Application to $\text{He}^+ + \text{Ne}(2p6)$ $\text{He}^+ + \text{Ne}(2p5\ 3s)$ and $\text{Li} + \text{I}$ $\text{Li}^+ + \text{I}^-$, *Theor. Chim. Acta* 90, 323-329 (1995).
28. Boyd, T-S. Ho, H. Rabitz, **D. A. Padmavathi** and M.K.Mishra, Determination of Diabatic Coupling Potentials by the Inelastic Atom-Atom Scattering Data : Case Studies for $\text{He}^+ + \text{Ne}$ and $\text{Na} + \text{I}$, *Journal of Chem. Phys* 101, 2023 (1994)
29. **D. A. Padmavathi**, M.K.Mishra and H. A. Rabitz, On the Role of Potential Structure in Fine Structure Transitions with Application to $\text{H}^+ + \text{F}(2P\ 1/2)$ $\text{H}^+ + \text{F}(2P3/2)$, *Chemical Phys.*, 179, 469 (1994).
30. **D. A. Padmavathi**, M.K.Mishra and H. A. Rabitz, On the Role of Potential Structure in the Collisional Excitation of Metastable O(1D) Atoms, *Phys. Rev. A*, 48, 286(1993).
31. **D. A. Padmavathi**, M. K. Mishra and H. A. Rabitz, On the Role of Potential Structure in Nonadiabatic Collisions with Applications to $\text{He}^+ + \text{Ne}(2p6)$ $\text{He}^+ + \text{Ne}(2p5\ 3s)$ and $\text{Na} + \text{I}$ $\text{Na}^+ + \text{I}$, *Phys. Rev. A*, 48, 279 (1993).

Conferences

POSTERS PRESENTED

1. **Ravi kumar Shekunti** and **D. A. Padmavathi** presented a paper in the Two day International Seminar on “**Current Trends and Futuristics Challenges in Chemical Sciences**” on 29th and 30th July, 2022 on N-Benzoyl dimethylpyridinium chloride: An Effective New Benzoylation Reagent of phenols, amines, alcohols and Polyols.
2. Duggi Suresh, K Mahesh and **D. A. Padmavathi** presented a paper on " Photoswitchable Dihetarylethene Derivatives as Chemosensors to Detect Anions" in Three Day National Seminar on Science and Technology for Sustainable Development with Women Empowerment (STSD-2020) 25th - 27th February, 2020 at Satavahana University, Karimnagar.
3. Kandukuri Usha Rani, **D. A. Padmavathi** presented a poster on "Synthesis and molecular docking study of Novel Peptide Derivatives of 2-Hydroxyquinoline-4-carboxylic acid as Potential AntiMtb and anti Microbial agents" on "Material Science For Societal Advancement" 20-22 January, 2020. Osmania university, Hyderabad .
4. K Mahesh and **D. A. Padmavathi** presented a paper on “Computational Study on Photo switching Behaviour of Dihetarylethene Derivatives” in International Conference on "Material Science For Societal Advancement" 20-22 January, 2020. Osmania university, Hyderabad.
5. Kandukuri Usha Rani, **D. A. Padmavathi** presented a paper on “Quantum Chemical Investigation and Docking Study of Novel Derivatives of 2-Hydroxy Quinoline-4-Carboxylic Acid as Potential Anti-TB Agents” in 20th International Conference of International Academy of Physical Sciences (CONIAPS XX) on Recent Advances in Physical Sciences and Future Challenges, July 14-16, 2017.

6. Kandukuri Usha Rani, **D. A. Padmavathi** presented a poster on “ The Development of Derivatives of 2-HydroxyQuinoline-4-Carboxylic Acid as Potential Anti-TB Agents” in ICOS 21, 21st International Conference on Organic Synthesis, December 11 -16, 2016-IIT Bombay, Mumbai, India.
7. Participated and presented a poster on Poster on "**semiempirical study of 1,2-bis(3-thienyl)perfluorocyclopentene derivatives**" by **K. Mahesh**, G. Mallika Devi, D. A. Padmavathi is presented at "A.P.Science Congress-2013", 14-16 November, 2013 conducted by Andhra Pradesh Akademi of Sciences & University of Hyderabad.
8. Kandukuri Usha Rani, **D. A. Padmavathi** presented a paper on “Computational Study of Cyclic derivatives from Pyridine-4-Carboxylic acid as potential Anti-TB Agents” in International Conference Harmony – 2013 on Harmony with nature in context of Ecotechnological intervention and climatic change, 11-13 Nov 2013. D.D.U, Gorakhpur University, Gorakhpur, India.
9. Presented a poster by Govind Reddy, Sheelam Bharath , Naveen J., Srikanth A., Padmavathi D. A on **A study of atomic term symbols of ground and excited states and their importance** at National conference 2013, Department of Physics, University College of science, Osmania University, Hyderabad.
10. “Biological Activity of 3-Mercapto-1,2,4-Triazoles And their Semi-empirical Studies”. B Sireesha, **D. A. Padmavathi**, A.K.D. Bhavani, and Ch. Sarala Devi at International Symposium on Current Trends in Drug Discovery Research (CTDDR-2010) from 17th to 21st Feb, 2010 organized by CDRI, Lucknow.
11. “Semi-Empirical Studies of Biologically Active 5-substituted-2-Amino-1,3,4-Thiadiazoles”. Firasat Unnisa, B Sireesha, **D. A. Padmavathi**, Aliya Begum and Ch. Sarala Devi at National seminar on “New Dimensions in Chemical Sciences-2010” (NDCS-2010) on 30th January 2010 organized by Dept. of Chemistry, PG College of Science, Saifabad, Osmania University.
12. “Spectro-analytical, computational and microbial studies of 4-(2'-hydroxy)benzylidene-amino-5-phenyl-3-mercapto-1,2,4-triazole and its metal complexes”. Aliya Begum, B Sireesha, **D. A. Padmavathi**, Ch. Sarala Devi at National seminar on “New Dimensions in Chemical Sciences-2010” (NDCS-2010) on 30th January 2010 organized by Dept. of Chemistry, PG College of Science, Saifabad, Osmania University.
13. “Semi-empirical studies of 1-acyl-3-thiosemicarbazides” B.Sireesha, **D. A. Padmavathi** and Ch Sarala Devi, at International conference “Fourth Indo-US Lecture Series on Discrete Mathematical Chemistry” 6th–9th Jan, 2009, organized by Dept. of Chemistry, Nizam College, Osmania University.

Books: Book Chapters/Books published

1. Two Chapters Homogeneous Catalysis in B.Sc 3rd year Sem- V Elective B (Both Telugu and English medium) [A Telugu Academy Hyderabad Publication, in Press 2022.](#)
2. Molecular Spectroscopy in B.Sc V Semester Elective A [Telugu Academy Hyderabad Publication, in press 2022.](#)

3. BSc Sem IV Theories of bonding in metals ISBN 978-81-8180-725-0 [Tel. Acad. 2021](#)
4. Two Chapters on Evaluation of analytical data Chapters in B.Sc III Semesters, ISBN 978-81-8180-724-3 [Telugu Academy 2021](#)
5. Molecular Spectroscopy Chapter in B.Sc Chemistry V Semester [Telugu Academy Hyderabad](#) Telugu Medium [2019](#) ISBN : 978-81-8180-623-9
6. Molecular Spectroscopy Chapter in B.Sc Chemistry V Semester [Telugu Academy Hyderabad English 2018](#) ISBN : 978-81-8180-525-6
7. Evaluation of analytical data Chapter in B.Sc Chemistry I Semester, [Telugu Academy Hyderabad Publication 2017](#) (English Medium) ISBN : 978-81-8180-374-4
8. Evaluation of analytical data Chapter in B.Sc Chemistry I Semester, [Telugu Academy Hyderabad Publication 2017](#) (Telugu Medium) ISBN : 978-81-8180-400-7
9. Material science Chapter in B.Sc Chemistry II Semester, A [Telugu Academy publication, 2016](#) (English Medium) ISBN : 978-81-8180-875-42.
10. Material science Chapter in B.Sc Chemistry II Semester, [A Telugu Academy publication, 2017](#) (Telugu Medium) ISBN : 978-81-8180-401-5
11. Solutions Question Bank [Telugu Academy, 2014](#) (Tel. Med.) ISBN :978- 81-8180-259-4
12. Lecture Notes on Biophysics, D. A. Padmavathi, Ist Edition., [The Icfai Institute of Science and Technology August, 2006](#).

Edited Volumes e-Resources

1. Prepared PG practical manual and provided e-resources for the 3 Day workshop on “[Teaching Pedagogy For PG Teachers In Chemistry](#)” was Organised from 18-20 Mar 2019 to UG teachers of various constituent and affiliated colleges at Department of Chemistry, OU.
2. Physical Practicals related to Potentiometry, Conductometry, Polarimetry, pH metry, Iodine clock reaction were [recorded as Video Clippings and uploaded](#) 18- 20 Mar 2019.
3. Prepared UG practical manual and provided e-resources for the One week “[Faculty Development Programme in Chemistry for UG Teachers: A Re-orientation to the Restructured CBCS Curriculum](#)” was Organised from 13 – 18 December 2018 to UG teachers of various constituent and affiliated colleges at Department of Chemistry, OU.
4. Open source software was provided to the participants in the form of CD for the 3-day workshop on “[Molecular Modeling Using Open Source Software](#)” was conducted under the UGC-SAP programme in the month of October 28-31, 2018 Department of Chemistry, OU.

Seminars Organized

1. *From 24th – 26th March 2022*, organized various [chemistry based programs in Taksh, the Open house celebrations](#) conducted by Osmania University
2. Coordinated Open House Exhibition (TAKSH 2024)-[Display of Chemistry experiments by MSc Chemistry students to UG, PG and School students from various institutions on 25th April 2024.](#)
3. Organized [Refresher Course in Chemistry with the Theme: Comprehensive Chemical Analysis and Characterization](#), as Course Coordinator from Dept. of Chemistry, OU under UGC-MMTTC(HRDC), OU from 6th to 20th December 2023.
4. Organized One day National seminar on “[Organocatalysis: Opportunities & Challenges](#)” as a member of organizing committee from Dept. of Chemistry, OU on 1st July 2023.
5. [Coordinated Open House Exhibition \(TAKSH 2023\)-Display of Chemistry experiments](#) by MSc Chemistry students to UG, PG and School students from various institutions on 25th April 2023.
6. Organized Two-day international seminar on “[Current Trends and Futuristic Challenges in Chemical Research](#)” @ Dept. of Chemistry, OU during 29th & 30th July 2022 as a member.
7. *From 24th – 26th March 2022*, organized various [chemistry based programs in Taksh, the Open house celebrations](#) conducted by Osmania University
8. *On 5th Mar 2022*, organized [CHEMFEST 2022](#) in association with ISCA, Hyderabad Chapter as part of National day celebrations, UCS-OU.
9. *On 5th & 6th August 2020* helped in organizing [Two-Day National webinar on Online teaching tools for the faculty: Live Sessions](#) Prof Vidyullatha and Dr Sireesha at Department of Chemistry, Osmania University
10. *On 4th & 5th Aug, 2020, 9.30AM* organized and conducted 2 Day International Webinar on [Real World Applications of Nanomaterials](#) at Department of chemistry, Osmania University
11. *On 3rd Aug 2020, 3.00PM to 7PM* helped in organizing International Webinar [Recent Advances in Organic Synthesis & Clinical Trial Process for Drug Approval](#) conducted by Prof A K D Bhavani & Dr Jalapathi at Department of chemistry, Osmania University
12. *On 1st Aug 2020, 11.00AM to 1PM* helped in organizing National webinar [Role of Chemist in COVID 19 Pandemic: An Interactive session with Distinguished Alumni of Chemistry](#) conducted by Dr Anantha Lakshmi and Dr P Someshwar at Department of chemistry, Osmania University
13. *On 29th July 2020, 4PM to 7PM* helped in organizing International webinar [Talk to your peer](#) conducted by Dr Anantha Lakshmi and Team at Department of chemistry, Osmania University
14. *From 24th – 26th July 2020*, organized and conducted Online [CHEM COGNIZANCE 2020](#) by Prof Leelavathi, Dr Padmavathi, Dr Sarita Reddy, Dr A. Haripadmasri at Department of chemistry, Osmania University

15. On 13th July 2020, 4PM to 7PM helped in organizing International webinar “[Heterogeneous Catalysis: Rudiments & Industrial Relevance](#)” conducted by Dr A. Haripadmasri at Department of chemistry, Osmania University
16. 18th-20th Mar 2019, a 3 Day workshop on “[Teaching Pedagogy For PG Teachers In Chemistry](#)” was organized to UG teachers of various constituent and affiliated colleges at Department of Chemistry, Osmania University.
17. 13th-18th December 2018, organized “[Faculty Development Programme in Chemistry for UG Teachers: A Re-orientation to the Restructured CBCS Curriculum](#)” to UG teachers of various constituent and affiliated colleges at Department of Chemistry, OU.
18. 28th – 31st October 2018, as Co-convenor, conducted a 3-day work shop on “[Molecular Modeling Using Open Source Software](#)” under the UGC-SAP programme, Chemistry, OU.
19. Organised UGC sponsored one day seminar on “[Challenges and Recent Trends in Chemistry](#)” in August 2018.
20. Organised the [CONIAPS XX 20th International Academy Of Physical Sciences On Recent Advances In Physical Sciences and Future Challenges](#) held on July 14-16, 2017. at OU
21. Organised a [2-Day Chem Fest](#) event at University College of Science, Osmania University held on 14-15th April 2017.
22. Organised [Swaccha bharat Abhiyaan Program](#) at University College of Science, Osmania University held on 8th April 2017.
23. Organised [1-Day Brain Crackers Quiz Program](#) at University College of Science, Osmania University held on 28 February 2017 the national Science day.
24. Attended the [National seminar on Biodiversity](#) conducted on 12th April 2016 by Botany Department UCSS-OU. [10 M.Sc students were encouraged and motivated to present posters.](#)
25. Organised [Chem Quiz Program](#) at University College of Science, Saifabad, OU 2016
26. Organised [Chem Quiz Program](#) at University College of Science, Saifabad, OU 2015
27. Organised [1-Day Brain Crackers Quiz Program](#) at University College of Science, Osmania University held on 28 february 2017 the National Science Day.
28. Conducted a 2-day Workshop on “[Molecular Design](#)” 26th & 27th April, 2010 in the Department of Chemistry, P.G. College of Science, Saifabad, Osmania University, Hyderabad.
29. Organised a seminar on “[New Dimensions in Chemical Sciences-2010](#)”(NDCS-2010) 30th Jan, 2010. Department of Chemistry, P.G. College of Science, Saifabad, Osmania University, Hyderabad.
30. Organised [A Two day workshop on “Current approaches in Chemical Analysis”](#) held on 18th-19th Aug’08 at Osmania University College for Women, Koti, Hyderabad.

31. Organised [A One day seminar on “Chemistry in Bio-Nano World”](#) held in Feb’08 at Osmania University College for Women, Koti, Hyderabad.

Invited Lectures at Seminars and Conferences

1. On 19th July, 2024, gave an Invited lecture on “**Topic: Unlocking Molecular secrets: An introduction to NMR Spectroscopy**” for teachers , in [A one-week FDP on “Chemistry Convergence: Recent Trends in Organic, Molecular and Materials science”](#) from 16th To 20th July, 2024 Conducted By Department Of Chemistry, **Geethanjali College Of Engineering & Technology** Ugc Autonomous Institution Affiliated To Jntuh, Cheeryal (V), Keesara (M), Medchal Dist, Telangana – 501301
2. On 4th April 22, gave a Invited lecture on “INSTRUMENTATION : Bringing the instruments into the Lecture Hall” for teachers , in [A Five Day National Online Faculty Development Program \(FDP\) on "Enhancing Academic and Research Endeavours in Chemistry at Higher Education Institutions"](#) conducted by Department of Chemistry, St. Ann's College for Women, Hyderabad
3. On 2nd February 22, evaluated seminar presentations at [UGC-HRDC ASC OU at REFRESHER COURSE IN CHEMICAL SCIENCES - \(20.1.2022 to 3.2.2022\)](#)
4. On 24th January 22, gave an Invited Talk at [UGC-HRDC ASC OU at REFRESHER COURSE IN CHEMICAL SCIENCES - \(20.1.2022 to 3.2.2022\)](#) on “Molecular insights through computational analysis”.
5. On 25th February 21, gave an Invited Talk on [“Common ion effect” for teachers in the 3 Day ChemCollective Lab workshop at IIT Bombay](#)
6. On 2nd February 21, gave an Invited Talk on [“Conceptual learning of chemistry Using computers” for teachers](#) in One Week On Line FDP for Chemistry Teachers on " Traditional Classroom to Virtual Labs: Improvisation of teaching and Learning Chemistry" from 27th Jan – 2nd Feb 21 organized by Anwar- Ullum College, Osmania University, Hyderabad.
7. On 2nd March 20, gave an Invited Talk on [“IR Spectroscopy” for BE students at their TECH FEST -GENOS 2020](#)
8. On 7th June 19, gave an Invited lecture on [“Atomic Structure” for School teachers at Pallavi Model School, Boduppal, Hyderabad organized by Royal Society of Chemistry, London.](#)
9. Gave an Invited Lecture for PG Teachers to handle Physical Chemistry Practicals, prepared PG practical manual for the 3 Day workshop on [“Teaching Pedagogy For PG Teachers In Chemistry”](#) was Organised from 18th – 20th March 2019 to UG teachers of various constituent and affiliated colleges at Department of Chemistry, OU.
10. Gave an Invited Lecture for UG Teacher to handle Physical Chemistry Practicals prepared UG manual for the One week [“Faculty Development Programme in Chemistry for UG Teachers: A Re- orientation to the Restructured CBCS Curriculum”](#) was Organised from 13th – 18th December 2018 to UG teachers of various constituent and affiliated colleges at Department of Chemistry, OU.
11. Gave an invited lecture in a [National Workshop at OUCW, Koti Osmania University, Hyderabad on Physical Chemistry Practicals on 23rd December 2017.](#)

12. Gave an invited lecture on [SOLID WASTE in a National Seminar at Anwar- Ullum College, Osmania University, Hyderabad on 23rd Dec 2015.](#)
13. Gave an invited lecture on [“Biological Applications of Nanotechnology” at UGC – Academic Staff College, Osmania University, Hyderabad on 23rd Dec 2014.](#)
14. Gave an invited lecture on [“IMPACT OF SOLID WASTE ON HEALTH AND THE ENVIRONMENT ” in National Conference](#) held at KRD college, Kodada, Nalgonda District. on 12th July 2014.
15. Gave an invited talk on [“Synthetic Polymers” for NSS teacher volunteers workshop](#) at UCS Saifabad, Osmania University, Hyderabad on 6th January 2014.
16. Gave a invited talk on [“Chemistry is Life & Life is Chemistry” for NSS volunteers workshop](#) at UCS Saifabad, Osmania University, Hyderabad On 26th February 2013.
17. Gave an invited lecture on [Computational Chemistry in the UGC sponsored 2 days seminar ”Role of Chemistry in Modern Life”](#) at AV College of Arts, Science and Commerce, Gaganmahal, Hyderabad On 28th June 2012.
18. Spoke about [“Thermodynamics” in the Orientation Programme for Teachers at Keshav Memorial College, Osmania University, Hyderabad.](#) On 24th Oct 2010
19. Gave a talk on [“Spectroscopic Techniques” for participants attending workshop on “Current Approaches in Chemical Analysis” held on 18th&19th August 2008](#) at the Department of Chemistry, Osmania University College for Women, Koti, Hyderabad. 18th August 2008

Guest Lectures at Colleges

1. On 5th November 2024, gave a guest lecture on [“Spectroscopic techniques- Fundamentals and Applications in Industry and Research”](#) for Engineering students at Department Of Chemistry, **Geethanjali College Of Engineering & Technology Ugc Autonomous Institution Affiliated To JNTUH, Cheeryal (V), Keesara (M), Medchal Dist, Telangana – 501301**
2. On 5th July, 2022, gave a guest lecture on [“Quantum Chemistry”](#) for MSc students at St Pious degree and PG college, Hyderabad.
3. On 17th November 2021, gave a guest lecture on [“Quantum Chemistry”](#) for MSc students at St Pious degree and PG college, Hyderabad.
4. On 12th February 2019, gave a guest lecture on [“Thermodynamics”](#) for B.Sc students at Khairtabad Degree College, Hyderabad.
5. On 4th January 2019, gave a guest lecture on [“Elementary Quantum Chemistry”](#) for M.Sc students at St. Francis College for women, Begumpet, Hyderabad.
6. On 31st January, 2019, gave a guest lecture on [“Electrochemistry”](#) for B.Sc students at LFI College, Uppal, Hyderabad.
7. On 26th March, 2016, was chief guest and delivered an inaugural lecture at MahiRuham, The knowledge tree an ["open design challenge for children"](#) at Manikonda, Hyderabad
8. On 16th Oct 2015, gave a guest lecture on [Polymers](#) at Madina College, Hyderguda, OU, Hyd.

9. On 1st August 2015, went as a [Judge to assess science fare](#) at Delhi Public School, Manikonda
10. On 22nd Dec 2014, gave a guest lecture on “[Fireworks](#)” for B.Sc students at UCS Saifabad, Osmania University, Hyderabad.
11. On 12th November 2014, gave a guest lecture on “[Quantum Chemistry](#)” for M.Sc students at Bhavans New Science College, Narayanaguda, Hyderabad.
12. On 4th March 2014, gave a guest lecture on “[Quantum Chemistry](#)” for M.Sc students at Vanitha Mahavidyalaya, Exhibition Grounds, Nampally, Hyderabad.
13. On 2nd August 2013, gave a guest lecture on [Application of Software in Molecular Modeling and Structural Elucidation of Molecules](#) at Osmania University College for Women, Koti, O.U.
14. On 1st August 2012, gave a guest lecture on [Introduction to Computational Chemistry for Research Scholars](#) at UCS Saifabad, Osmania University, Hyderabad.
15. On 30th December 2011, gave a guest lecture on “[Chemistry is Life & Life is Chemistry](#)” for School Children on the eve of International Year of Chemistry Nobel Prize Centenary Celebrations at Tejasvi Vidyanaya, Jodimetla, Hyderabad.
16. 12th July 2008 - Delivered Guest Lecture on “[Computational Chemistry Methods And Applications](#)” for M.Sc students at Anwar- Ullum College, Osmania University, Hyderabad.
17. 22nd July 2008- Guest Lecture for B.Sc students on “[Solutions](#)” at Andhra Mahila Sabha, OU.

Administrative Experience

1. [2021-2024 \(till date\)](#) Academic coordinator: UCS-OU for PG Chemistry
2. [2021-2022](#) Member Internal complaints committee 2021-2022
3. [2019-2020](#) Tender committee member DST-FIST project, UCS Saifabad, OU
4. [April 2013- Mar 2017](#) Coordinator DST-FIST project, Chemistry Department, UCS Saifabad, OU.
5. [Aug 2014- Aug 2016](#) I/C Head, Chemistry Department, UCS Saifabad, OU.
6. [July 2009 - July 2010](#) Additional Controller of Examinations from at OUCW, Koti, HYD.

Membership of Academic bodies

1. [2020-2021](#) BOS(Board of studies) Member UCS-OU for UG
2. [2021-2023, 2016-2018, 2012-2013](#), Member BOS in Chemistry (PG), O.U
3. [2017-2019](#) Member, BOS, M.Sc. Chemistry, 5 yr integrated course, Palamur University
4. [2018-2019, 2010-2011](#), Member BOS in Chemistry, OUCE, Hyd
5. [2016-2018, 2019](#) Member BOS in Chemistry (UG), O.U.
6. [2019-2020](#) Tender committee member DST-FIST project, UCS Saifabad, OU
7. [2017-2019](#) Member, BOS, M.Sc. Chemistry, 5 yr integrated course, Palamur University
8. [2017-2018](#) DRC member in Chemistry, Osmania University

9. [2017-19](#) Member, Departmental Committee(DC) Osmania University
10. [2013 - 2016](#) Member UG Admissions, UCS, Saifabad, OU, Hyderabad.
11. [April 2013- Mar 2017](#) Coordinator DST-FIST Project, Chem. Dept., UCS Saifabad, OU.

Trainings and Other Programs Attended

Personal Development Orientation / Refresher Courses Attended

1. Attended Orientation Course at Centre for International Programme (OUCIP) Osmania University during [12th –22nd June 2007](#).
2. Attended Orientation Course at UGC– Academic Staff College, Osmania University, [from 8th April 2008 to 7th May 2008](#).
3. Refresher Course in Chemistry at UGC – Academic Staff College Osmania University from [15th Sep t to 9th Oct 2009](#).
4. Refresher Course in Chemistry at UGC – Academic Staff College OU in [July 2013](#).
5. One week “Faculty Development Programme in Chemistry for UG Teachers: A Re- orientation to the Restructured CBCS Curriculum” from [13th – 18th December 2018](#) to UG teachers of various constituent and affiliated colleges organised by Department of Chemistry, OU.

Other Programs Attended

1. Attended SPARC sponsored IITH-Hokkaido university workshop/Webinar on 'Hot and Multi Electron Mediated Photoelectrochemical Methods of High Efficiency Water Splitting' held on 21 - 22 January 2022 in virtual mode.
2. Attended JMOL advanced workshop held during 5th Sept 2020 to 12th Sept 2020 conducted by Teaching Learning Centre, IIT Bombay
3. Attended Chemcollective advanced workshop held during 28th Nov 2020 to 5th Dec 2020 conducted by Teaching Learning Centre, IIT Bombay
4. Attended the National seminar on Biodiversity conducted on 12th April 2016 by Botany Department UCSS-OU. 10 M.Sc students were encouraged and motivated to present posters.
5. Attended the Proceedings of the National Conference on "Recent Advances in Applied Nano Materials" held on 4-5 March,2016 Conducted by UCS, Saifabad, Osmania University, Hyderabad.
6. 5-day national workshop on “Innovations in electrochemical science and technology” 10th & 14th Dec, 2013, sponsored by TEQIP Phase- II organized by NIT, Warangal.
7. Three-day International Conference on “Recent Trends in Nano & Bio-Sciences” ICORTNBS- 2010, 24th -26th Feb, 2010, held at P.G College of Science, Saifabad, Osmania University, Hyderabad.
8. Two-day workshop on “Computational Drug Design- for Research Aspirants” 24th & 25th Oct, 2009, organized by Dept. of Chemistry, Nizam College, Osmania University, Hyderabad.

9. One day workshop on “User awareness programme on access to e- Resources under the UGC-INFONET digital library consortium“ at University library, Osmania University, Hyderabad in collaboration with INFLIBNET centre (an IUC UGC) on 23rd June 2009.
10. Two-day National conference on “Recent Advances in Chemical Research” (NCRACR-2009) 6th & 7th Feb, 2009 organized by Dept. of Chemistry, University College of Science, Osmania University.
11. Four-day International conference “Fourth Indo-US Lecture Series on Discrete Mathematical Chemistry” 6th – 9th Jan, 2009, organized by Dept. of Chemistry, Nizam College, Osmania University, Hyderabad.
12. One day seminar on “Molecular modeling & drug designing” held in July '07 at Nizam College, Basheerbagh, Osmania University., Hyderabad.
13. One day workshop for U.G. Teachers held in Sep'07 at Department of Chemistry, O.U., Hyderabad.
14. Three-day National Symposium on “ Chemistry Technology Interface: A Synergistic Approach” 30th Sep to 2nd Oct 2007, jointly organized by Dept. of Chemistry Nizam College and University College of Technology, O.U., Hyderabad.
15. Two-day Workshop for “ Chemistry Teachers of Post Graduate Colleges” on 2st and 22nd Nov 2007 at Dept. of Chemistry, University College of Science, OU
16. “BioConvene 2007” International conference & Instructional Workshop On Bioinformatics and Drug Discovery, held at CMSD, University of Hyderabad from December 16 – 22, 2007 (one week program)

Place : Hyderabad

Date : 30.07.24

(Dr. D Annapurna Padmavathi)