

Curriculum Vitae

Dr. Penumaka Nagababu, M.Sc., Ph.D.,

Senior Scientist

Environmental Materials Division

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Educational Qualification

- ✚ **Ph.D.** in Chemistry from Osmania University, Andhra Pradesh, INDIA. Submitted January 28 2010 and Awarded in August 12 2010. **(score = 30)**
Title of the PhD Thesis: “Studies on DNA binding and photocleavage activities of Cobalt(III) and Ruthenium (II) complexes, Thesis Supervisor Prof. S. Satyanarayana, Vice chancellor, Osmania University, Hyderabad, India. 2005-2010.
- ✚ **M.Sc.** in Organic chemistry from Acharya Nagarjuna University, Guntur, Andhra Pradesh, INDIA. Secured 60.4 % (1st class). **(score = 23)**
- ✚ **B.Sc. (BZC)** in Botany, Zoology and Chemistry as major subjects from Acharya Nagarjuna University, Guntur, Andhra Pradesh, INDIA Secured 60.1 %. **(score = 13)**

Awards and Fellowships

- **CSIR-NEERI Best Scientist Award-2022** Presented on CSIR-NEERI Foundation Day on April 08 2022.
- **Outstanding Scientist Award** in Chemistry from Venus International Research Foundation- Chennai which was held on November 11 2017. **(APIs score = 7)**
- Selected for **CSIR-Pool Scientist Scheme (SRA)** and joined at CSIR-IICT Hyderabad from March 19 2014 to January 04 2017 **(APIs score = 7)**
- **Postdoctoral fellowship** January 01 2014 to March 18 (NSC), Advisor Prof. **Sunney I. Chan** and Prof. **Chung-Yuan Mou**, from National Taiwan University (NTU) Taiwan. **(APIs score = 7)**
- **Postdoctoral fellowship** September 01 2010 to December 31 2013 Institute of Chemistry, Academia Sinica, Taiwan. (NSC), Advisor Prof. **Sunney I. Chan**
Distinguished Research Fellow, is particularly well-known for his seminal

contribution to the understanding of the structures and functions of several important membrane proteins such as cytochrome c oxidase, for which he was nominated for a Nobel Prize. Taiwan. (APIs score = 7)

- **Research Assistant** -(National Science Council-from Taiwan (NSC), April 06 2010 to August 31 2010, Advisor **Prof. Sunney I. Chan** Institute of Chemistry, Academia Sinica, Taiwan. (APIs score = 7)
- **JRF** and **SRF**-Department of Science and Technology-India (project title "*DNA-binding and photocleavage activity of cobalt(II) and Ru(II) complexes*" (SR/S5/BC-17/06 dt.14.12.06),). June 2007 to 2010. (APIs score = 5)
- **President Award** in the Bharat Scouts and Guides in National WOSM Organization in 1988. (APIs score = 5)
- State-level 1st prize in **singing light vocal** music competition.

Area of Specialization: Material Development and Environmental Catalysis

1. Pyrotechnic formulations and green crackers

- New and improved formulations for green crackers

2. Material development for environmental and energy related applications

- Functional materials (Metal Organic Frameworks (MOF), Mesoporous Materials (MSNs) Graphene based materials (GO, rGO etc.)

3. Solar energy driven systems

- Organic semiconductors for solar hydrogen (copper complexes, naphthalene diimides and its derivatives
- Plasmonics driven disinfection systems

4. GHGs emissions control

- Methane into Methanol conversion
- CO₂ capture valorization and sequestration

5. Bioinorganic chemistry

- Synthesis of cobalt, copper and ruthenium metal complexes
- DNA-binding studies.

Overview

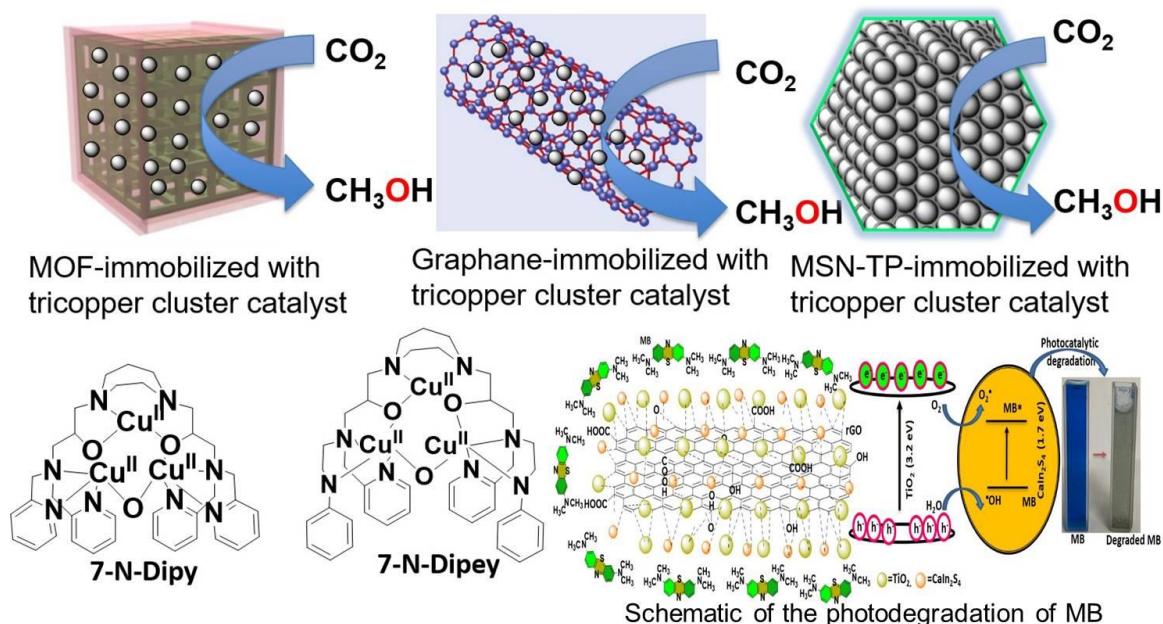
Total publications	: 52
International Publications	: 41
National Publications	: 4
Patent	: 3 (United State Patent No.:US2015/0099876A1US)

Book chapters : 3
International and National Symposia/Conferences: 30

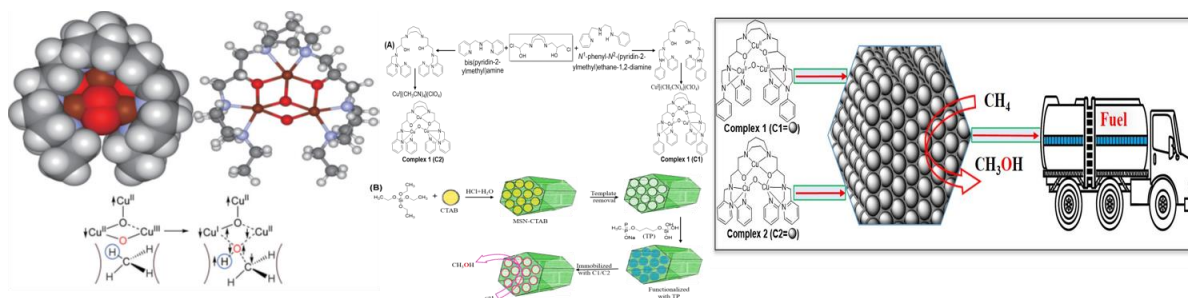
Best 10 publications

- 🚩 *Angewandte Chemie*, 52, (2013), 3731–3735 (**VIP**). (Impact Factor: **16.823**)
- 🚩 *J. Chem. Eng.* (2021) 128667 (Impact Factor: **16.744**)
- 🚩 *J. of Hazard. Mate.* 369 (2019) 474–482. (Impact Factor: **14.224**)
- 🚩 *Eur. J. of Med. Chem*, 72, (2014) 160-169 (Impact Factor: **7.08**)
- 🚩 *ACS-J. of Med. Chem*, 58, (2015) 5226–5241. (Impact Factor: **7.446**)
- 🚩 *Solar Energy* 174 (2018) 1019–1025 (Impact Factor: **7.188**)
- 🚩 *Mater. Sci. Engg. C-105* (2019) 110079 (Impact Factor: **7.328**)
- 🚩 *J. Environ. Chem. Eng* 8 (2020) 104103 (Impact Factor: **7.02**)
- 🚩 *Cat. Science & Tech*, 4, 4, (2014) 930-935, (**cover page**). (Impact Factor: **6.119**)
- 🚩 *Nature Scientific Reports*, 8084 (2021) (Impact Factor: **5.133**)

Presently working on



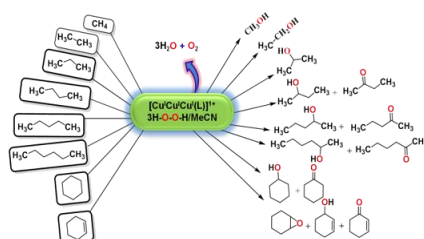
Recent research published on materials development for environmental applications



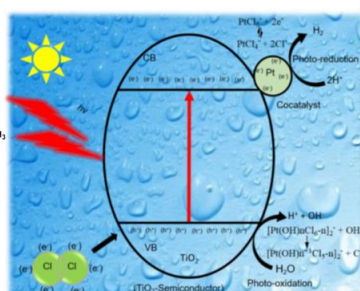
Formation of the transition-state complex during facile singlet oxene transfer to methane from a dioxygen-activated tricopper complex is shown at the bottom (*Angew. Chem. Int. Ed.* (2013) 52, 3731–3735).

Diagrammatic representation of functionalized MSN to MSN-TP, and immobilization of synthesized complexes (C1@MSN-TP (or) C2@MSN-TP) on MSN-TP for methane to methanol conversion (*Journal of Environmental Chemical Engineering* 8 (2020) 104103)

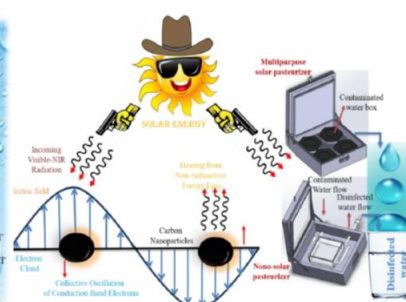
The two catalysts namely C1@MSN-TP and C2@MSN-TP improved the methane to methanol conversion by a factor of 30 which is quite higher compared to the reported catalysts in the literature.



Oxidation of n-alkanes, cycloalkanes and cycloalkenes by H₂O₂ catalyzed by the tricopper complex [Cu^ICu^ICu^{II}(7-N-Etppz)]¹⁺ at room temperature. (*Catal. Sci. Technol.* (2014), 4, 930–935).



Photoreduction by Pt/TiO₂ nanocomposite in presence of H₂PtCl₆ and ethanol as a sacrificial donor (*Solar Energy* 174 (2018) 1019–1025).



Plasmonics driven engineered pasteurizers for solar water disinfection (SWADIS) (*Journal of Hazardous Materials* 369 (2019) 474–482).

Research Publications with complete APIs score, impact factors and Science Citation Index (SCI)

Citation indices (Google Scholar Citations)	
Citations	1050
h-index	17
i10-index	25

Patents:

1. CHAN; Sunney Ignatius; (South Pasadena, CA); YU; Sheng-Fa; (TW) **NAGABABU; Penumaka** (TW) ; MAJI; Suman; (IN) ; CHEN; Ping-Yu; (TW) ; RAMU; Ravirala; (TW) MOU; Chung-Yuan; (TW) ; LIU; Chih-Cheng; (TW). *Molecular Catalysts Capable of Catalyzing Oxidation of Hydrocarbons and Method for Oxidizing Hydrocarbons*, **United**

State Patent No.:US2015/0099876A1US, (Published 08/04/2015, Filing Date 02.10.2014). (**APIs score = 10**).

2. Sadhana Rayalu, Rakesh Kumar, S. Kumari, G. Hippargi, **Penumaka Nagababu**, L. satish, G. Sangita **STAR**: safe thermite cracker (Application no: 0008NF2019) India date of filed; 9/01/2019. (**APIs score = 7**).
3. Sadhana Rayalu, Rakesh Kumar, S. Kumari, G. Hippargi, **Penumaka Nagababu**, S.A Praveen M. Anirban, Aluminium Less Cracker (**Patent**: Application no: 0009NF2019) India date of filed; 9/01/2019. (**APIs score = 7**).

Submitted

1. Ankush Kularkara, Sachin Chaudharia, Someshwar Pola, Sadhana S. Rayalu, Sunney I Chand, Penumaka Nagababu, Hijacking the hydrogen atoms in photo-splitting of H₂O₂ for reduction of CO₂ to CH₃OH, submitted to *Chemical Engineering Journal* under review.

Published:

1. Sachin D. Chaudhari, Abhishek Deshpande, Ankush Kularkar, Disha Tendulkar, Girivyankatesh Hippargi, Sadhana S. Rayalu, **Penumaka Nagababu**, *Metallic nanocomposites embedded graphene architecture for rapid degradation of organic dyes and real wastewater*, **Journal of Industrial and Engineering Chemistry**, Accepted 14th July 2022 (impact factor 7.67)
2. Penumaka Nagababu., Ankush Kularkar, Sehba Anjum Mumtaz Ahmed, Anil D. Bhanarkar, Reddithota J. Krupadam, Rakesh Kumar, Sadhana Rayalu, Reduced Emission Firecrackers: Barium-free Pyrotechnic Formulations. **Fuel** 317 (2022) 123500. (impact factor 8.0)
3. Venkateshwar Rao D, Mahesh Subburu, Ramesh Gade, Manohar Basude, Prabhakar chetti, Narendra Babu S, **Penumaka Nagababu**, Yadagiri Bhongiria and Someshwar Pola, New Zn (II) Complex-Composite Material: Piezo-Enhanced Photomineralization of Organic Pollutants and Wastewater from Lubricant Industry, **Environ. Sci.: Water Res.**

Technol. 7, 1737-1747(2021), <https://doi.org/10.1039/D1EW00378J> (Impact factor: 5.819)

4. **Penumaka Nagababu**, Damodar Y. Maskare, Ankush Kularkar, Md. Osim Aquatar, Sadhana S. Rayalu and Reddithota J. Krupadam, Graphene-copper nanocomposite: An efficient material for rapid degradation of organic dyes, ***Environmental Nanotechnology, Monitoring and Management***. Volume 16, December (2021), 100545. <https://doi.org/10.1016/j.enmm.2021.100545>.
5. **Penumaka Nagababu**, Sehba Anjum Mumtaz Ahmeda, Y. Taraka Prabhub, Ankush kularkara, Subhamoy Bhowmick and Sadhana S. Rayalua, Synthesis of Ni₂P/CdS and Pt/TiO₂ nanocomposite for photoreduction of CO₂ into methanol, ***Nature Scientific Reports***, 8084 (2021). (IF. 5.2) <https://doi.org/10.1038/s41598-021-87625-w>.
6. **Penumaka Nagababu**, Perala Sudheer Paul, Reddithota J. Krupadam, Efficient and region-selective conversion of octanes to epoxides under ambient conditions: Performance of tri-copper catalyst, [Cu₃^I(L)]⁺ (L=7-N-Etppz), ***Indian Journal of Chemistry, Vol. 60B, May (2021), pp. 742-745 Impact factor 0.49***
7. Payel Singh, Prabir Pal, Priyanka Mondal, Govindachetty Saravanan, **Penumaka Nagababu**, Swachchha Majumdar, Nitin Labhsetward, Subhamoy Bhowmick, Kinetics and mechanism of arsenic removal using sulfide-modified nanoscale zerovalent iron, ***Chemical Engineering Journal***, 412, 15 (2021), 128667 <https://doi.org/10.1016/j.cej.2021.128667> (Impact Factor: 16.744)
8. **Penumaka Nagababu**, Y. Taraka Prabhu, Ankush Kularkar, Subbalakshmi M.S, Jidnyasa Nagarkar, Sadhana Rayalu, Manifestation of Cu-MOF templated TiO₂ nanocomposite for synergistic photoreduction of CO₂ to methanol production, ***Emergent Materials*** (2021) 4, pages 503–514, <https://doi.org/10.1007/s42247-021-00187-5>.
9. **Penumaka Nagababu**, Thulasiram B, Jidnyasa N, C. S. Devi, Perala Sudheer Pauld & T. B. Reddy, CT-DNA-binding and biological activity of mononuclear copper(II) complexes with imidazo-phenanthroline ligands, ***Indian Journal of Chemistry*** Vol. 60A (2021), pp. 37-44. (IF=0.51)
10. **Penumaka Nagababu**, Sehba Anjum Mumtaz Ahmed, Jidnyasa Nagarkar, Reddithota J. Krupadam, Girivyanaktesh Hippargi, Y. T. Taraka Prabhu, Ujjwal, Sadhana S. Rayalu, Heterogeneous Catalytic Conversion of Methane to Methanol at Ambient Conditions,

***Journal of Environmental Chemical Engineering* 8 (2020) 104103. ISSN; 22133437, (Impact factor 7.968), (APIs score = 14)**

11. Vishnu Sravan Bollua, Thulasiram Bathini, Ayan Kumar Barua, Arpita Roy, Nagarjuna Chary Ragi, Swamy Maloth, Prabhakar Sripadi, Bojja Sreedharb, **Penumaka Nagababu**, Chitta Ranjan Patra, Design of DNA-intercalators based copper(II) complexes, investigation of their potential anti-cancer activity and sub-chronic toxicity, ***Mater Sci Engg C*** 105 (2019) 110079 (**Impact 7.328**), (**APIs score = 8.75**) UGC No; 3997, ISSN: 0928-4931
12. Aditi Kulkarni, Atya Kapley, Rita S. Dhodapkar, **Penumaka Nagababu**, Sadhana Rayalu, Plasmonics driven engineered pasteurizers for solar water disinfection (SWADIS) *Journal of Hazardous Materials* 369 (2019) 474–482. (**Impact factor 14.224**), (**APIs score = 1**) UGC No; 28386, ISSN: 1873-3336
13. Anushree A. Chilkalwara, Priti A. Mangrulkarab, Afsha Anjum Moinuddina, **Penumaka Nagababu**, Sadhana S. Rayalua, In-situ Cl⁻ ions formation during photocatalytic reaction of platinized nanocomposite for hydrogen generation accepted manuscript in *Solar Energy* 174 (2018) 1019–1025. (**Impact factor 7.188**), <https://doi.org/10.1016/j.solener.2018.09.047>.
14. C. Shobha Devi, B. Thulasiram, Rajeshwar Rao Aerva, **Penumaka Nagababu**, Recent Advances in Copper Intercalators as Anticancer Agents, *Journal of Fluorescence* September 2018, Volume 28, Issue 5, pp 1195–1205. (**Impact factor 2.093**), (**APIs score = 7**) UGC No; 7603, ISSN: 1573-4994
15. Sunney I. Chan, Yu-Jhang Lu, **Penumaka Nagababu**, Suman Maji, Mu-Cheng Hung, Marianne M. Lee, I-Jui Hsu, Pham Dinh Minh, Jeff C.-H. Lai, Kok Yoah Ng, Sridevi Ramalingam, Steve S.-F. Yu, and Michael K. Chan. Efficient Oxidation of Methane to Methanol by Dioxygen Mediated by Tricopper Clusters, ***Angewandte Chemie International Edition***. 52, (2013), 3731 –3735 selected for VIP (Very Important Paper category) (**Impact factor 16.823**), (**APIs score = 1**). UGC; 15311, ISSN: 0570-0833.
16. **Penumaka Nagababu**, Ayan Kumar Barui, C. Shobha devi, B. Thulasiram, Chitta Ranjan Patra, V. Kumar Singh, S. Satyanarayana, B. Sreedhar, *Anti-angiogenic ctivity of copper(II) polypyridyl complexes for the treatment of cancers*, ***ACS-Journal of Medicinal Chemistry***, 2015, 58, 5226–5241(**Impact factor 7.446**), (**APIs score = 15**). ISSN: 0022-2623, UGC: 21614

17. Sunney I Chan, Minh D Pham, Ya-Ping Lin, Quan V Vuong, **Penumaka Nagababu**, Brian T Chang, Kok Y Ng, Chein-Hung Chen, Chau-Chung Han, Chung H Chen, Mai S Li, Steve S Yu, Inactivation of the particulate methane monooxygenase (pMMO) in *Methylococcus capsulatus* (Bath) by acetylene, ***BBA-Proteins and Proteomics*** 2015: 1854 (12):1842-52 (**Impact factor 4.125**), (**APIs score = 0.6**). ISSN: 1570-9639, UGC No: 14575

18. **Penumaka Nagababu**, Suman Maji, M. P.Kumar, Peter, P.-Y. Chen, Steve S.-F Yu, Sunney I. Chan. Efficient room-temperature oxidation of hydrocarbons mediated by tricopper cluster complexes with different ligands, ***Advanc. Synth. & Catalysis***. 354, (2012), 3275–3282 (**Impact factor 6.042**), (**APIs score = 8.75**). ISSN:1615-4169, UGC: 11669

19. Sunney I. Chan, Claire Y.-C. Chien, Cinda S.-C. Yu, **Penumaka Nagababu**, Suman Maji, Peter P.-Y. Chen, Efficient catalytic oxidation of hydrocarbons mediated by tricopper clusters under mild conditions ***Journal of Catalysis***, 293, (2012) 186–194 (**Impact factor 8.047**), (**APIs score = 2.5**). ISSN: 0253-9837, UGC No; 18437

20. Peter P.-Y.Chen, **Penumaka Nagababu**, Steve S.-F. Yu, Sunney I. Chan, Development of the Tricopper Cluster as a Catalyst for Efficient Conversion of Methane to Methanol, (Review ***CHEMCATCHEM***, Vol. 6 Issu. 2 (2014) 429–437 (**Impact factor 5.1**), (**APIs score = 7.5**). ISSN: 1867-3880, UGC No: 5425

21. **Penumaka Nagababu**, Suman Maji, Ravirala Ramu, Steve S.-F.Yu, and Sunney I. Chan, Developing an efficient catalyst for controlled oxidation of small alkanes under ambient conditions, ***Catalysis Science & Technology***, Vol. 4, issue 4, (2014) 930-935 **cover page article** (**Impact factor 6.117**), (**APIs score = 8.75**). ISSN: 2044-4761 UGC No: 5174

22. C. Shobha Devi, **Penumaka Nagababu**, Sumathi Natarajan, N. Deepika, P. Venkat Reddy, N. Veerababu, Surya S. Singh, S. Satyanarayana, Cellular uptake, cytotoxicity, apoptosis and DNA-binding investigations of Ru(II) complexes, ***European Journal of Medicinal Chemistry***, 72, (2014) 160-169 (**Impact factor 7.088**), (**APIs score = 1.5**). ISSN: 0223-5234, UGC No; 28767.

23. Y. P. Kumar, C. Shobha Devi, A. Srishailam, N. Deepika,V. Ravi Kumar, P. Venkat Reddy, K Nagasuryaprasad, & Surya S. Singh, **Penumaka Nagababu**, S. Satyanarayana. Studies on Photocleavage, DNA Binding, Cytotoxicity, and Docking Studies of

Ruthenium(II) Mixed Ligand Complexes, *J Fluoresc* (2016) Vol. 26, Issue 6, 2119–2132. (Impact factor 2.2), (APIs score = 0.7). UGC No; 7603, ISSN: 1573-4994

24. B. Thulasiram, C. Shobha devi, Y. P. Kumar, Rajeshwar Rao A, S. Satyanarayana **Penumaka Nagababu**, Correlation between molecular modelling and spectroscopic techniques in investigation with DNA binding interaction of ruthenium(II) complexes, *Journal of Fluorescence*, 27, Issue 2, pp 587–594 (2017). (Impact factor 2.2), (APIs score = 7). UGC No; 7603, ISSN: 1573-4994
25. Rajender Reddy Mallepall, Nagamani Chintakuntla, Venkat Reddy Putta, Nagasuryaprasad K, Ravi Kumar Vuradi, Madhuri P, Satyanarayana Singh S, Ramesh Kumar Chitumalla, Joonkyung Jang, **Nagababu Penumaka**, Satyanarayana Sirasani Synthesis, Spectral Properties and DFT Calculations of new Ruthenium (II) Polypyridyl Complexes; DNA Binding Affinity and in Vitro Cytotoxicity Activity, *J Fluoresc*. 2017 July; 27(4):1513-1530. (Impact factor 2.093), (APIs score = 0.6) UGC No; 7603, ISSN: 1573-4994
26. C. Shobha Devi, Thulasiram, B., Satyanarayana, S. **Penumaka Nagababu**, Analytical Techniques Used to Detect DNA Binding Modes of Ruthenium(II) Complexes with Extended Phenanthroline Ring *J Fluoresc* (2017) 27: 2119- 2130, (Impact factor 2.093), (APIs score = 7) UGC No; 7603, ISSN: 1573-4994
27. C. Shobha Devi, **Penumaka Nagababu**, V. Venkat Reddy, V. Sateesh, A. Srishailam and S. Satyanarayana Synthesis, Characterization, Interaction with DNA, Cytotoxicity and Apoptotic studies of Ru(II) polypyridyl complexes, *Australian Journal of Chemistry*, 67, (2014) 225–233. (Impact factor 1.2), (APIs score = 1.12). UGC No: 1612, ISSN: 0004-9425
28. **Penumaka Nagababu**, S. Satyanarayana, DNA binding and cleavage properties of certain ethylenediamine Cobalt (III) complexes of modified 1,10-phenanthrolines, *Polyhedron* 26, (2007) 1686–1692 (Impact factor 2.3), (APIs score = 7). UGC NO: 38105, ISSN: 0277-5387
29. Y.P. Kumar, M. Shilpa, **Penumaka Nagababu**, M. R. Reddy, K.L. Reddy, Nazar Md Gabra, S. Satyanarayana, Study of DNA Light Switch Ru(II) Complexes : Synthesis, Characterization, Photocleavage and Antimicrobial Activity. *Journal of Fluorescence*, 22 (2012) 835–847 (Impact factor 2.01), (APIs score = 1.2). UGC No; 7603, ISSN: 1573-4994

30. **Penumaka Nagababu**, D. A. Kumar, K. L. Reddy, K. Ashwini Kumar, Md. B. Mustafa, M. Shilpa, S. Satyanarayana, DNA Binding and Photocleavage Studies of Cobalt(III) Ethylenediamine Pyridine Complexes: $[\text{Co}(\text{en})_2(\text{py})_2]^{3+}$ and $[\text{Co}(\text{en})_2(\text{mepy})_2]^{3+}$, *Metal-Based Drugs*, Volume: (2008) Article ID 275084, pages:8. (Impact factor 0.4). (APIs score = 6). UGC No: ISSN :0793-0291

31. N. Navaneetha, D. Ramasree, M. Kiran Kumar, M. Vasavi, V. Uma **Penumaka Nagababu** S. Satyanarayana. Molecular dynamic simulations of Co(III) and Ru(II) polypyridyl complexes and docking studies with dsDNA, *Med Chem Res*, November 22, (2013) 5557-5565 (Impact factor 1.2), (APIs score = 0.9). ISSN: 1054-2523, UGC No; 5865

32. M. Shilpa, C. Shobha Devi, **Penumaka Nagababu**, J. N. Lavanya latha, Ramjee Pallela, k. Aravind, S. Satyanarayana. Ruthenium(II) ethylenediamine complexes with dipyrrophenazine ligands: Synthesis, characterization, DNA-interactions and antiproliferative activities. *Journal of Coordination Chemistry*, 66, (2013)1661-1675. (Impact factor 1.5), (APIs score = 0.8). ISSN: 0095-8972 UGC No; 23688

33. **Penumaka Nagababu**, M. Shilpa, J.N.L. Latha, I. Bhatnagar, P. N. B. S. Srinivas Y. P. Kumar, K. L. Reddy, S. Satyanarayana, Synthesis, Characterization, DNA Binding Properties, Fluorescence Studies and Toxic activity of cobalt(III) and ruthenium(II) polypyridyl complexes *Journal of Fluorescence*, 21 (2), (2011) 563-572 (Impact factor 2.093), (APIs score = 7). UGC No; 7603, ISSN: 1573-4994

34. Bakheit Mustafa, Nazar Md. Gabra, Penumaka Nagababu and S. Satyanarayana, Spectroscopic characterizations of benzyl(ligand) Cobaloximes: DNA binding and antimicrobial activity *J. Chem. Pharm. Res.*, 2011, 3(6):968-981. (Impact factor 0.4), (APIs score = 1.5) ISSN: 0975-7384, UGC NO;

35. **Penumaka Nagababu**, M. Shilpa, C. Shobha devi, R. R. Reddy, S. Satyanarayana. DNA-binding and Cleavage studies of Imidazole Cobalt (III) Ethylenediamine Complexes. *J. Chem. Pharm. Res.*, 2, (6). (2010) 144-153 (Impact factor 0.4), (APIs score = 1.7). ISSN : 0975-7384

36. K.S. Karthikeyan, P. Nagababu, K. Sivarama Sastry and S. Satyanarayana, Metabolism and Glucose Tolerance Factor Activity of Synthetic Amino acid- Chromium Complexes in Yeast *Current Trends in Biotechnology and Pharmacy*. Vol. 4 (4) 908-916 October 2010. (Impact factor 0.4), (APIs score = 1.7). ISSN 0973-8916. UGC No; 14438

37. P. Pallavi, **Penumaka Nagababu**, K.L.Reddy, T.Padmaja S. Satyanarayana, Synthesis, DNA and Photocleavage studies of Ru(II) polypyridyl complexes: [Ru(dppz)(pyz)₄](ClO₄)₂ & [Ru(dppz)(dmpyz)₄](ClO₄)₂ complexes, *Chin. J. Chem.* 30, (2012) 1641–1646 (**Impact factor 3.5**), (**APIs score = 2**). ISSN: 1001-604X, UGC NO; 18441

38. C. Shobha Devi, **Penumaka Nagababu**, M. Shilpa, Y. P. Kumar, M. R. Reddy, Nazar Md Gabra, S. Satyanarayana. Synthesis, characterization and DNA-binding characteristics of Ru(II) molecular light switch complexes *J. IRAN. CHEM. SOC.* 9, (5) (2012) 671-680. (**Impact factor 2.02**), (**APIs score = 0.9**). UGC NO; 11140 ISSN: 1735-207X.

39. **Penumaka Nagababu**, M. Shilpa, C.Shobha devi, R. R. Reddy, S. Satyanarayana. DNA-binding and Cleavage studies of Imidazole Cobalt (III) Ethylenediamine Complexes. *J. Chem. Pharm. Res.*, 2(6). (2010) 144-153 (**Impact factor 0.4**). (**APIs score = 3.5**) ISSN : 0975-7384

40. K. L. Reddy, K. Ashwini Kumar, S. Vidhisha, **Penumaka Nagababu**, S. Satyanarayana, characterization, photocleavage, antimicrobial activity and DNA binding studies of [Co(bpy)₂MHPIP]₃⁺, [Co(dmb)₂MHPIP]₃⁺ and [Co(phen)₂MHPIP]₃⁺ complexes, *Journal of Coordination Chemistry* 62, (2009) 3997– 4008 (**Impact factor 1.7**), (**APIs score = 1.3**). ISSN: 0095-8972 UGC No; 23688

41. M. Shilpa, **Penumaka Nagababu**, S. Satyanarayana, Studies on DNA-binding and plasmid-cleavage of cobalt(III) mixed ligand complexes *Main Group Chemistry*, 8 (2009) 33–45 (**Impact factor 1.5**), (**APIs score = 4**). ISSN: 1024-1221, UGC NO: 5746

42. K. L. Reddy, K. Ashwini Kumar, N. R. Reddy, **Penumaka Nagababu**, A. P. Reddy, S. Satyanarayana, Kinetics and Equilibria for the axial ligation of bromomethyl(aqua)cobaloxime with pyridines. Isolation, Characterization and DNA binding. *Journal of Chemical Sciences*, 121, (2009) 1053–1060 (**Impact factor 1.4**). (**APIs score = 1.2**). UGC No; 21838, ISSN: 0974-3626

43. **Penumaka Nagababu**, J. N. L. Latha, Y. Prashanthi. S. Satyanarayana, DNA-binding and photocleavage studies of cobalt (III) ethylenediamine complexes: [Co(en)₂phen]₃⁺ and [Co(en)₂bpy]₃⁺ *J. Chem. Pharm. Res* 1, (1) (2009) 238-249. (**Impact factor 0.38**), (**APIs score = 3.5**). ISSN : 0975-7384

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Book chapters:

- 1 **Penumaka Nagababu**, C. Shobha Devi, Ankush Kularkar and Rajeshwar Rao Aerva, *Energy, Environmental and Biomedical Applications of Metal-Organic Frameworks (MOFs)*, Volume: Advances in Material Research and Technology, March 08, 2021, edited by: Shadia Jamil Ikhmayies, ISSN: 2662-4761.
- 2 **Penumaka Nagababu**, Ankush Kularkar, C. Shobha Devi, Thupakula Padmavathi, and Sadhana Rayalu, *Activation & Characterisation of Bamboo Charcoal by Physio-Chemical Methods*; its Environmental & Pyrotechnic applications, volume "Advances in Structure Materials". Series Ed.: Ikhmayies, Shadia Jamil, ISSN: 2662-4761.
- 3 J. N. L. Latha, **Penumaka Nagababu**, P. Rakesh, K. Ashok Kumar, M. Anupama, L. Susheela, *Advances in Medicine and Biology*. Volume 53 Editors: Leon V. Berhardt ***Fungal Cell Walls as Protective Barriers for Toxic Metals*** Nova Science Publishers USA, September 11 (2012), 181-198 (book chapter), (APIs score = 3). ISBN: 978-1-62081-589-2.

List of conferences and symposiums

1. 6th the Asian Biological Inorganic Chemistry Conference Hong Kong, 5th to 8th November 2012. (Best Poster award). Minh D. Pham, Penumaka Nagababu, Ya-Ping Li, Chien-Hung Chen, C.-C. Han, Chung-Hsuan Chen, Steve S.-F. Yu, Sunney I. Chan Identification of the catalytic site in pMMO: a proteomic and model-compound study (P033 A0572). Academia Sinica Nankang Taiwan. (APIs score = 0.6)
<http://myweb.polyu.edu.hk/~AsBIC6/ListOfAcceptedAbstracts.pdf>
2. ICBIC 15 Conference University of British Columbia Vancouver Western Canada (August 7-12- 2011) (APIs score = 4)
3. 5th The Asian Biological Inorganic Chemistry Conference Taiwan November 1-5 2010. (APIs score = 6)
4. National conference on current research trends & developments in heterocyclic chemistry (March 18, 2006) PG college, Osmania University Hyderabad (APIs score = 6)
5. 10th National symposium in chemistry (1-3 Feb, 2008 IISC Bangalore). (APIs score = 6)
6. National workshop on Green Chemistry-2006 Department of Chemistry Osmania University. (APIs score = 6)
7. National Seminar Green Organic Synthesis in Pharmaceuticals an overview December 15 2007 Department of Chemistry Osmania University (APIs score = 6)
8. One-day seminar on Futuristic Chemistry March 08 2007 Nizam College Hyderabad.

(APIs score = 6).

9. Poster presentation on National conference on Emerging Trends in Pharmaceutical and Chemical Sciences (ETPCS-2016). 28-29th March 2016 **(APIs score = 6)**
10. Four days ISO/IEC 17025:2005 Laboratory Management System and Internal Audit Course completed during 16-19th January 2018 **(APIs score = 6).**
11. Five days certificate course completed on Role of Technology in Community Level Disaster Mitigation for Scientist & Technologists during 19-23 August 2019. From Lal Bahadur Shastri National Academy of Administration Mussoorie **(LBSNAA)** Mussooria-Uttarakhand. **(APIs score = 6).**
12. Seminar talk has given on January 09, 2015 (Fri 5:15 pm) "Bioinorganic chemistry is growing significance in both therapeutic and diagnostic medicine at IISER Mohali. **(APIs score = 2).**
13. Poster presentation in the 5th Symposium on Advanced Biological Inorganic Chemistry (SABIC-2017) will be held during January 7-12th, 2017 at Kolkata. PC28 Copper (II) polypyridyl complexes for the treatment of cancers. **(APIs score = 7).**
14. Poster presentation on Workshop on *Connecting People to Nature world environmental* day June 06 2017 at Kolkata Zonal Centre CSIR- NEERI- held on June 06 2017. At CGCRI- Kolkata **(APIs score = 2).**
15. Annual pharma conference on Intellectual property rights 5th and 6th October, 2016 Nizam College, Bahseerbagh, Hyderabad. **(APIs score = 2).**
16. Seminar on Skill Development and Career Guidance 27-01-2017 Nizam College, Hyderabad. **(APIs score = 2).**
17. International conference of International Academy of Physical Sciences on Recent Advances in Physical Sciences and Future Challenges 14th -16th July ,2017 Osmania University, Hyderabad. **(APIs score = 2).**
18. Five days' workshop on Soft Skills 11th -15th September, 2017 Osmania University, Hyderabad. **(APIs score = 2).**
19. Two-day workshop on Innovation: A key to Intellectual property rights 11th and 12th December, 2017 Nizam College, Bahseerbagh, Hyderabad. **(APIs score = 2).**
20. Invited talk on "to Enhance the Solar Energy Awareness in Rural Society Through Student's Participation". By Dr. Bhabha Vidnyan Lokshikshan Sanstha's K. Z. S. Science College Bramhni – Kalmeshwar, On February 23 2018. **(APIs score = 2).**
21. Seminar on Personality Development, Communication Excellence & Career Opportunities 15-02-2019 Nizam College, Hyderabad. **(APIs score = 2).**
22. International Conference on Sustainable Energy and Environmental Challenges 27th-29th November 2019 NEERI, Nagpur. **(APIs score = 7).**
23. National workshop on Advanced Research in Chemical & Environmental Science December 02, 2019 Sri YN College (autonomous), Narsapur (Invited talk). **(APIs score**

= 3).

24. Industrial **Green Chemistry** World (IGCW-2019) during October 16-17, 2019 at Department of Chemical Engineering at IIT Bombay. (**APIs score** = 7).
25. Participating in Webinar on “Air Pollution, Global Warming, Climate Change, Society and Sustainability” organized by Eco Club in association with Department of Humanities & Applied Sciences of K. C. College of Engineering & Management Studies & Research, Thane (E) on “**World Environment Day**” 05.06.2020 (APIs score = 2).

References

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