

Research publications

1. A selective 'turn-on' chemosensor for detections of Al^{3+} in aqueous medium: Experimental and theoretical studies, Mukesh Kumar, Amit Kumar, Md. Sirajul Haque Faizi, Santosh Kumar, Mantu Kumar Singh, Sumanta Kumar Sahu, Shyam Kishor, **Rohith P. John**, *Sensor. Actuat. B Chem.* 260, **2018**, 888-899 (IF: 5.667).
2. Effect of hydrophobic modification on the properties of polymer-blended micro emulsion gels, Neetha V. Thampi, **Rohith P. John**, Keka Ojha, Udayabhanu G. Nair, *J. Surfact. Deterg.* 21, **2018**, 269-282 (IF: 1.450).
3. Non-toxic Schiff bases as efficient corrosion inhibitors for mild steel in 1 M HCl: Electrochemical, AFM, FE-SEM and theoretical studies, Dharmendra Kumar Singh, Eno E Ebenso, Debashis Behera, Mantu Kumar Singh, G. Udayabhanu, **Rohith P. John**, *J. Mol. Liq.*, 250, January **2018**, 88-99 (IF: 4.513).
4. Co(II), Ni(II), Cu(II) and Zn(II) complexes of acenaphthoquinone3-(4-benzylpiperidyl)thiosemicarbazone: Synthesis, structural electrochemical and antibacterial studies, Santosh Kumar, Arati Hansda, Angeera Chandra, Ashish Kumar, Mukesh Kumar, Maheswaran Sithambaresan, Md. Sirajul Haque Faizi, Vipin Kumar, **Rohith P. John**, *Polyhedron*, September, 134, **2017**, 11-21 (IF: 2.108).
5. Synthesis, characterization and antibacterial activity evaluation of trinuclear Ni(II) complexes with N-substituted salicylhydrazide ligands, Mantu Kumar Singh, Soumyabrata Roy, Arati Hansda, Santosh Kumar, Mukesh Kumar, Vipin Kumar, Sebastian C. Peter, **Rohith P. John**, *Polyhedron*, 126, **2017**, 100-110 (IF: 2.108).
6. A novel benzidine based Schiff base "turn-on" fluorescent chemosensor for selective recognition of Zn^{2+} , Mukesh Kumar, Amit Kumar, Mantu Kumar Singh, Sumanta K. Sahu, **Rohith P. John**, *Sensor. Actuat. B Chem.* 241, **2017**, 1218-1223 (IF: 5.667).
7. Synthesis, crystal structure and luminescence properties of acenaphthene benzohydrazide based ligand and its zinc(II) complex, Mukesh Kumar, Soumyabrata Roy, Md. Serajul Haque Faizi, Santosh Kumar, Mantu Kumar Singh, Shyam Kishor, Sebastian C. Peter, **Rohith P. John**, *J. Mol. Struct.* 1128, **2017**, 195-204 (IF: 2.011).
8. A coordination driven self-assembled Pd_6L_8 nano-ball catalyses copper and phosphine-free Sonogashira coupling reactions in both homogeneous and heterogeneous formats, Subhashis Pradhan, Subhadip Dutta, **Rohith P. John**, *New J. Chem.*, 40, **2016**, 7140-7147 (IF: 3.201).
9. A double stranded metal-organic assembly accommodating a pair of water trimers in the host cavity and catalysing Glaser coupling, Subhashis Pradhan, Dohyun Moon, **Rohith P. John**, *Acta Cryst. B* 72, **2016**, 102-106, (IF: 6.467).
10. 4 (N, N-dimethylamino) benzaldehyde nicotinic hydrazone as corrosion inhibitor for mild steel in 1M HCl solution: An experimental and theoretical study, Dharmendra K Singh, Santosh Kumar, G Udayabhanu, **Rohith P. John**, *J. Mol. Liq.* 216, **2016**, 738-746 (IF: 4.513).
11. A coordination driven supramolecular Pd_2L_4 self-assembly as heterogeneous catalyst for Buchwald-Hartwig amination reaction, Subhashis Pradhan, Arya Bhattacharyya, **Rohith P. John**, *Tetrahedron Lett.*, 57 (14), **2016**, 1532-1536 (IF: 2.125).
12. Self-assembled Pd_6L_4 cage and Pd_4L_4 square using hydrazide based ligands: synthesis, characterization and catalytic activity in Suzuki-Miyaura coupling reactions, Subhashis Pradhan, **Rohith P. John**, *RSC Advances*. 6 (15), **2016**, 12453-1246 (IF: 3.108).
13. A discrete self-assembled palladium nano-cage catalyses Suzuki-Miyaura coupling heterogeneously and Heck-Mizoroki coupling homogeneously, Subhashis Pradhan, **Rohith P. John**, *New J. Chem.* 39 (7), **2015**, 5759-5766 (IF: 3.201).
14. 1, 5-Bis (2-hydroxyacetophenone)thiocarbohydrazone: A novel colorimetric and fluorescent dual-mode chemosensor for the recognition of fluoride, S.L. Ashok Kumar, M. Saravana Kumar, **Rohith P. John**, A. Sreekanth, *Mat. Sci. Eng C Bio S.*, 33 (5), **2013**, 2519-2525.

15. Formation of an unusual copper(II) complex from the degradation of a novel tricopper(II) carbohydrazone complex, E. Manoj, M. Nethaji, A. Punnoose, **Rohith P. John**, M.R.P. Kurup, *Inorg. Chem. Commun.* 12, **2009**, 952-955
16. Novel 48-membered hexanuclear and 60-membered icosanuclear manganese metallamacrocycles, Wenlong Liu, Kyunjin Lee, Mira Park, **Rohith P. John**, Dohyun Moon, Yang Zou, Xinfang Liu, Hyeong-Cheol Ri, Ghyung Hwa Kim and Myong Soo Lah, *Inorg. Chem.*, 47, **2008**, 8807-8812.
17. Steric Control of the Nuclearity of Metallamacrocycles: Formation of an 18-Membered Hexanuclear Gallium Metalladiazamacrocycle and a 48-Membered Hexadecanuclear Manganese Metalladiazamacrocycle, Kyunjin Lee, **Rohith P. John**, Mira Park, Dohyun Moon, Hyeong-Cheol Ri, Ghyung Hwa Kim, and Myoung Soo Lah, *Dalton Trans.*, **2008**, 131-136,
18. A Chiral Pentadecanuclear Metallamacrocycle with a Sextuple Twisted Möbius Topology, **Rohith P. John**, Mira Park, Dohyun Moon, Kyungjin Lee, Seunghye Hong, Yang Zou, Chang Seop Hong, and Myoung Soo Lah, *J. Am. Chem. Soc.*, **2007**, 14142- 14143.
19. Porous Metal-Organic Frameworks based on Metal-Organic Polyhedra with Nanosized Cavities as Supramolecular Building Blocks: Two-Fold Interpenetrating Primitive Cubic Networks of $[\text{Cu}_6\text{L}_8]^{12+}$ of Nanocages, Jaejoon Park, Seunghye Hong, Dohyun Moon, Mira Park, Kyungjin Lee, Sangmi Kang, Yang Zou, **Rohith P. John**, Ghyung Hwa Kim and Myoung Soo Lah, *Inorg. Chem.* **2007**, 46(24), 10208-10213.
20. Two Octanuclear Gallium Metallamacrocycles of Topologically Different Connectivities, Mira Park, **Rohith P. John**, Dohyun Moon, Kyungjin Lee, Ghyung Hwa Kim, Myoung Soo Lah, *Dalton Trans.*, **2007** (46), 5412-18,
21. Solvent Effect on the Nature of the metallamacrocycles formed: Formation of Octanuclear and Dodecanuclear Manganese metalladiazamacrocycles, **Rohith P. John**, Kyungjin Lee, Mira Park, Myoung Soo Lah, *Bull. Korean Chemical Soc.*, **2007**, 28(11), 2009-14.
22. Metalladiazamacrocycles: Metallamacrocycles as potential supramolecular host system for small organic guest molecules and supramolecular building blocks for metal organic frameworks, **Rohith P. John**, Dohyun Moon, Myoung Soo Lah, *Supramolecular chemistry*, **2007**, 19(4) 295-308.
23. Synthesis, spectral characterization and crystal structure of copper(II) complexes of 2-hydroxyacetophenone N(4)-phenyl semicarbazone, U.L. Kala, S. Suma, M.R. P. Kurup, Suja Krishnan, and **Rohith P. John**, *Polyhedron*, **2007**, 26, 1427-35.
24. Encapsulation of guest molecule in a strained form: An extended 36-membered dodecanuclear manganese metallamacrocycle that accommodates a cyclooctane in the S_4 symmetry conformation, **Rohith P. John**, Jaejoon Park, Dohyun Moon, Kyungjin Lee and Myoung Soo Lah, *Chem. Commun*, **2006**, 3699-3701.
25. Face-driven corner-linked octahedral nano-cages: M_6L_8 cages formed by C_3 -symmetric triangular facial ligands linked via C_4 symmetric square tetratopic Pd^{II} ions at truncated octahedron corners Dohyun Moon, Sangmi Kang, Jaejoon Park, Kyungjae Lee, **Rohith P. John**, Hosik Won, Gi Hun Seong, Yang Sun Kim, Ghyun Hwa Kim, Hakjune Rhee and Myoung Soo Lah, *J. Am. Chem. Soc.*, **2006**, 128, 3530-1.
26. Steric control of a bridging ligand for high nuclearity metallamacrocycle formation: A highly puckered 60-membered icosanuclear metalladiazamacrocycle, Dohyun Moon, Kyungjae Lee, **Rohith P. John**, Ghyung Hwa Kim, ByoungJin Suh and Myoung Soo Lah, *Inorg. Chem.* **2006**, 45, 7991-3.
27. Tetra aza- copper(II) complex ions suspended in the cyanoargentate networks: X-ray structure and properties of a self-assembled $[\text{Cu}(3,2,3\text{-tet})][\text{Ag}_2(\text{CN})_4]$ having extraordinary short Ag-Ag distance, Chee-Hun Kwak, Rohith P. John, Joo-EunJee, HyungJin Kim, Jinkwon Kim, *Inorg. Chem. Commun* **2006**, 9, 533-36
28. Di- μ -dioxo-bis($\{1\text{-[phenyl(2-pyridyl-}\kappa\text{N)-methylene]-2-(pyrrolidin-1-ylthiocarbonyl-}\kappa\text{S)-hydrazinato-}\kappa\text{N}^1\}$ oxovanadium(V)), A. Sreekanth, Hoong-Kun Fun, **Rohith P. John**, M. R. PrathapachandraKurup, SuchadaChantrapromma, *Acta Crystallographica E*, **2006**, 62, m1919-21,

29. Modulation of the Ring Size and Nuclearity of Metallamacrocycles via the Steric Effect of Ligands: Preparation and Characterization of 18-Membered Hexanuclear, 24-Membered Octanuclear, and 30-Membered Decanuclear Manganese Metalladiazamacrocycles with α - and β -branched *N*-Acylsalicyl hydrazides, **Rohith P. John**, Lee, K., Kim, B. J., Suh, B. J., Rhee, H., Lah, M. S., *Inorg. Chem.*, **2005**, 44, (20) 7109-21
30. Chelating behavior of 2-hydroxyacetophenone N(4) substituted thiosemicarbazones: unusual formation of Mn(IV) complexes, structure, EPR and cyclic voltammetric studies, **Rohith P. John**, A. Sreekanth, Maliyeckal R. PrathapachandraKurup, H. K. Fun, *Polyhedron*, **2005**, 24(5), 601-610
31. Bis(μ -phenyl 2-pyridyl ketone N⁴,N⁴-butane-1,4-diylthiosemicarbazonato)bis[chlorocopper(II)] A. Sreekanth, V. Suni, **Rohith P. John**, MunirathinamNethaji and M. R. PrathapachandraKurup, *Acta Crystallographica*, **2005**, C61, m284-86
32. Novel 36-membered dodecanuclear manganese metalladiazamacrocycle, **Rohith P. John**, Kyungjae Lee, Myoung Soo, Lah, *Chemical Communications* **2004**, 2660-1
33. New copper(II) complexes of 2-hydroxyacetophenone N(4)-substituted thiosemicarbazones and polypyridyl co-ligands: Structural electrochemical and antimicrobial studies, **Rohith P. John**, A. Sreekanth, V. Rajakannan, T. A. Ajith, M. R. P. Kurup, *Polyhedron*, 23, **2004**, 2549-59
34. Spectral studies and structure of a 2-hydroxyacetophenone 3-hexamethyleneiminyl thiosemicarbazone copper(II) complex containing 1,10-phenanthroline **Rohith P. John**, A. Sreekanth, Maliyeckal R. PrathapachandraKurup, Anwar Usman, Ibrahim Abdul Razak, and Hoong-Kun Fun, *Spectrochim Acta, Part A, Molecular and Biomolecular Spectroscopy*, 59, **2003**, 1349-58
35. Synthesis, structural and spectroscopic studies of low spin Co(III) complexes of N(4)-substituted thiosemicarbazones of 2-hydroxyacetophenone and heterocyclic bases, **Rohith P. John**, A. Sreekanth, M. R. P. Kurup and S. M. Mobin, *Polyhedron*, 21, **2002**, 2515-21.

Papers presented in conference/symposia

1. Synthesis and Biological Studies of copper complexes of N(4) disubstituted 2-hydroxyacetophenone thiosemicarbazone and heterocyclic bases, **Rohith P. John** and M. R. P. Kurup, *National Seminar on Newer Vistas in Bio-Active Agents*, December 20-21, **1999**, Department of Chemistry, Gandhigram Rural Institute, Gandhigram-624 302, Tamilnadu, India. (Oral)
2. Synthesis and Biological Studies of Copper complexes of N(4) disubstituted 2-acetylpyridine thiosemicarbazones, T. N. Jayaprakash, M.R.P.Kurup and **Rohith P. John**, *National Seminar on Newer Vistas in Bio-Active Agents*, December 20-21, **1999**, Department of Chemistry, Gandhigram Rural Institute, Gandhigram-624 302, Tamilnadu, India. (Oral)
3. ESR Spectral Investigations of Heterocyclic Base Adducts of Copper complexes of N(4) substituted thiosemicarbazone, **Rohith P. John** and M.R.P.Kurup, *National Symposium on Magnetic Resonance and Biomolecular Structure and Function*, January 17-20, **2000**, Tata Institute of Fundamental Research, Mumbai-400 005. (Oral)
4. *International School on Crystal growth Methods and Processes*, Jan. 24- Feb. 4th **2000**, Crystal Growth Center, Anna University, Chennai- 600 025, India
5. Crystal Structure of a Mononuclear Base Adduct of 2-hydroxyacetophenone thiosemicarbazone, **Rohith P. John**, M.R.P.Kurup, L. Govindasamy and D. Velmurugan, *Recent Trends In Crystallography, Biophysics and Computational Biology*, April 24-26 **2000**, Department of Crystallography and Biophysics, Madras University, Guindy Campus, Chennai-600 025. (Oral)
6. EPR investigation of Ternary complexes of Oxovanadium(IV) containing thiosemicarbazone and bases, **Rohith P. John**, M.R.P.Kurup, *Symposium on Spatially Resolved Magnetic*

- Resonance and National Magnetic Resonance Symposium*, Feb. 9-10, **2001**, Central Leather Research Institute and Indian Institute of Technology, Chennai – 600 020. (Oral)
7. Copper(II) complexes of substituted thiosemicarbazones. A biological activity study, **Rohith P. John**, M.R.P.Kurup and T. A. Ajith, *National Conference on Material for the New Millennium*, March 1-3, **2001**, Department of Applied Chemistry, Cochin University of Science & technology, Kochi-692022. (Oral)
 8. Preparation and X-ray Crystal Structure of Cu(II) complex of macrocycles with pendant arms containing bromine and sulfur atoms. Kim Hye-In, Kwak Chee-Hun, **Rohith P. John**, Ee Hey-Sun, Ee Young-bu, *91st National Meeting of Korean Chemical Society* April 18-19, **2003**. (Poster)
 9. Metallodiazamacrocycles and networks: strategies and comparison. **Rohith P. John**, Kyungjae Lee, Myoung Soo lah, *93rd National Meeting of Korean Chemical Society* April 22-23, **2004**. (Poster)
 10. Structural and magnetic behaviour of a series of metalladizamacrocycles: strategies and comparison. **Rohith P. John**, Kyungjae Lee, Myoung Soo Lah, *94th National Meeting of Korean Chemical Society* October 21-22, **2004**. (Poster)
 11. Investigation on structural aspects of a series of metalladiazamacrocycles brought about by systematic ligand modifications, **Rohith P. John**, Kyong Jin Lee, Myoung Soo Lah, *11th Asian Chemical Congress*, August 24-26, **2005**, Korea University, Seoul, S. Korea. (Poster)
 12. Metallamacrocycles of manganese and gallium: Influencing size and nuclearity by modification of N-terminal group of the ligand and guest inclusion studies on a dodecanuclearmetalladiazamacrocycle, **Rohith P. John**, Dohyun Moon, Kyungjae Lee, Myoung Soo Lah, *13th Korea-Japan Joint Symposium on Organometallic and Coordination Chemistry*, Nov. 23-26, **2005**, ICC Jeju-do, S. Korea. (Poster)
 13. Encapsulation of small organic molecules in the hydrophobic cavity of a metallamacrocycle, Jaejoon Park, **Rohith P. John**, Dohyun Moon, Kyongjin Lee, Myoung Soo Lah, *97th National Meeting of Korean Chemical Society*, April 20-21, **2006**, Seoul, Korea. (Poster)
 14. A manganese based metalladiazamacrocycle as hydrophobic host with selectivity for S_4 symmetric molecules, **Rohith P. John**, Dohyun Moon, Myoung Soo Lah, *98th National Meeting of Korean Chemical Society*, Oct. 19-20, **2006**. Gwangju, South Korea. (Poster)
 15. Influence of ligand modification on the structure and nuclearity of metalladiazamacrocycles and selective encapsulation behavior by a metallamacrocyclic host. **John, Rohith P.**; Moon, Dohyun; Lee, Kyungjin; Park, Mira; Lah, Myoung Soo. Department of Chemistry and Applied Chemistry, Hanyang University, Ansan, S. Korea. *233rd ACS National Meeting*, Chicago, IL, United States, March 25-29, **2007** (Oral), **INOR-051**.
 16. Novel manganese based 48-membered hexadecanuclearmetallamacrocycle and its comparison with related structures. Lee, Kyungjin; **John, Rohith P.**; Moon, Dohyun; Park, Mira; Lah, Myoung Soo. Department of Chemistry and Applied Chemistry, Hanyang University, Ansan, S. Korea. Abstracts of Papers, *233rd ACS National Meeting*, Chicago, IL, United States, March 25-29, **2007** (Poster), **IEC-094**
 17. Neutral and cationic octanuclear gallium metallamacrocycles with two different topological connectivities. Park, Mira; **John, Rohith P.**; Moon, Dohyun; Lee, Kyungjin; Lah, Myoung Soo. Department of Chemistry and Applied Chemistry, Hanyang University, Ansan, S. Korea. Abstracts of Papers, *233rd ACS National Meeting*, Chicago, IL, United States, March 25-29, **2007** (Poster), **IEC-092**.
 18. Guest encapsulation behavior of a dodecanuclearmetalladiazamacrocyclic host. **John, Rohith P.**; Moon, Dohyun; Lah, Myoung Soo. Department of Chemistry and Applied Chemistry, Hanyang University, Ansan, S. Korea. Abstracts of Papers, *233rd ACS National Meeting*, Chicago, IL, United States, March 25-29, **2007** (Poster) **IEC-091**
 19. A Chiral PentadecanuclearMetallamacrocycle with a SextupleTwisted Topology, **Rohith P. John**, Mira Park, Seunghye Hong, Dohyun Moon, Myoung Soo Lah, *100th National Meeting of Korean Chemical Society*, EXCO, Daegu, 18-19th Oct. **2007**.
 20. Multinuclear metallomacrocycles: Effect of steric modifications and weak interactions, **Rohith P. John**, Dohyun Moon, Myoung Soo Lah, *National Seminar on Current trends in*

- Chemistry, CTriC 2011*, March 4-5, **2011**, Cochin University of Science and Technology, Cochin-22. (oral)
21. Synthesis, structural and spectroscopic characterization of acenaphthaquinonesalicyloylhydrazine zinc complex and its photoluminescence study, Mukesh Kumar, Sebastian C. Peter, Md. SerajulHaqueFaizi, **Rohith P. John**, *33rd Annual Conference of Indian Council of Chemists (ICC-2014)*, 15-17th December **2014**, Indian School of Mines, Dhanbad-826004. (poster)
 22. Synthesis, structural and antimicrobial studies of Novel Ni(II) complex containing N(4) substituted thiosemicarbazone of acenaphthoquinone, Santosh Kumar, Md. SerajulHaqueFaizi, ArtiHansda, **Rohith P. John**, *33rd Annual Conference of Indian Council of Chemists (ICC-2014)*, 15-17th December **2014**, Indian School of Mines, Dhanbad-826004. (poster)
 23. Discrete Supramolecular Palladium Nano-Cages as Efficient Catalysts for C-C Coupling Reactions, **Rohith P. John**, Subhashis Pradhan, *35th Annual Conference of Indian Council of Chemists (ICC-2016)*, 22-24th December, **2016** (Oral lecture)
 24. Coordination Driven Palladium Nano-Cages as Efficient Catalysts for C-C Coupling Reactions, **Rohith P. John**, Subhashis Pradhan, *National Seminar on Current Trends in Chemistry (CTriC-2017)*, 3-4th February **2017**, Cochin University of Science and Technology, Cochin-22 (Invited lecture)

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