

Dr. MANOJ, E.

Dr. Manoj E. received his Bachelor and Post Graduate degree in Chemistry from University of Kerala in 2001 and 2003 respectively. He took his Ph.D in Inorganic Chemistry from Cochin University of Science and Technology in 2008 and worked as a UGC Dr DS Kothari Postdoc fellow at the Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore during 2009-2010. He started his career as an ad-hoc Lecturer at the Dept of Applied Chemistry, CUSAT during 2008-2009 and in 2010 he became an Assistant Professor in the Dept of Chemistry, Sree Krishna College, Guruvayur. In 2019 he joined at the Dept of Applied Chemistry, CUSAT and he has now over 12 years of teaching and research experience.

Research

Metallosupramolecular chemistry

Metal Organic Frameworks

Biologically active transition metal complexes

Teaching

Inorganic Chemistry

Main group elements

Coordination chemistry

Symmetry and Group Theory

Qualitative and quantitative inorganic analysis

Publications (Total 20)

Research articles (Latest 10)

1. K.K.M. Hashim, E. Manoj, M.R.P. Kurup, A novel manganese(II) bithiocarbohydrazone complex: Crystal structures, Hirshfeld surface analysis, DFT and molecular docking study with SARS-CoV-2, Journal of Molecular Structure, 1246 (2021) 131125.
2. P.F. Rapheal, E. Manoj, M.R.P. Kurup, H.-K. Fun, Nickel(II) complexes of N(4)-substituted thiosemicarbazones derived from pyridine-2-carbaldehyde:

- Crystal structures, spectral aspects and Hirshfeld surface analysis, *Journal of Molecular Structure*, 1237 (2021) 130362.
3. P.F. Rapheal, E. Manoj, M.R.P. Kurup, P. Venugopalan, Zinc(II) complexes of N(4)-monosubstituted thiosemicarbazones derived from pyridine-2-carbaldehyde: Structural and spectroscopic studies, *Chemical Data Collections* 33 (2021) 100681
 4. R.S. Nair, E. Manoj, R. Thankappan, S.K. Chandrika, M.R.P. Kurup, P. Srinivas, Molecular trail for the anticancer behavior of a novel copper carbohydrazone complex in BRCA1 mutated breast cancer. *Molecular Carcinogenesis* 56 (2017) 1501.
 5. Formation of an unusual copper(II) complex from the degradation of a novel tricopper(II) carbohydrazone complex, E. Manoj, M.R.P. Kurup, R.P. John, M. Nethaji, A. Punnoose, *Inorganic Chemistry Communications*, 12 (2009) 952.
 6. Preparation, magnetic and EPR spectral studies of copper(II) complexes of an anticancer drug analogue, E. Manoj, M.R.P. Kurup, A. Punnoose, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 72 (2009) 474.
 7. Structural and spectral studies of nickel(II) complexes with N(4),N(4)-(butane-1,4-diyl) thiosemicarbazones, E. Manoj, M.R.P. Kurup, *Polyhedron*, 27 (2008) 275.
 8. Synthesis and spectral studies of bithiocarbohydrazone and biscarbohydrazone of quinoline-2-carbaldehyde: Crystal structure of bis(quinoline-2-aldehyde) thiocarbohydrazone, E. Manoj, M.R.P. Kurup, E. Suresh, *J. Chem. Cryst.*, 38 (2008) 157.
 9. Self-assembled macrocyclic molecular squares of Ni(II) derived from carbohydrazones and thiocarbohydrazones: Structural and magnetic studies, E. Manoj, M.R.P. Kurup, H.-K. Fun, A. Punnoose, *Polyhedron*, 26 (2007) 4451.
 10. Macrocyclic molecular square complex of zinc(II) self-assembled with a carbohydrazone ligand, E. Manoj, M.R.P. Kurup, H.-K. Fun, *Inorganic Chemistry Communications*, 10 (2007) 324.

Patent

- A metal complex and a process thereof, P. Srinivas, M.R.P. Kurup, E. Manoj, R.S. Nair, Indian Pat. No. 286230 dt 10-08-2017.

Membership

- RSC Affiliate member

Projects

- Structural and biological investigations of transition metal complexes of Schiff based ligands bearing heterocyclic systems, CUSAT/PL(UGC) - (2021-2023)-ongoing
- Probing self-assembled novel magnetic materials: - Structural and spectral investigations, UGC MRP (2014-2016)- completed