

a) Name of the faculty: Dr. Shuvankar Mandal



b) Academic qualifications: M.Sc., Ph.D

c) Area of Specialization: Inorganic Chemistry

d) Research interest:

- i) Molecular Magnetism
- ii) Crystal Engineering
- iii) Biomimetic Inorganic Chemistry
- iv) Steady State and Time-Resolved Photophysical Properties

e) Total no. of publications:

- i) National – 1
- ii) International – 13

f) Total no. of conferences/workshops attended:

- i) National – 2
- ii) International – 3

Publications of Dr. Shuvankar Mandal

| Sl. No. | Title with page no. | Journal | ISSN No. |
|---------|--|--|-----------|
| 1 | Syntheses, Crystal Structures and Experimental/Theoretical Magnetic Properties of Two Butterfly $\text{Ni}^{\text{II}}_2\text{Y}^{\text{III}}_2$ Compounds, <i>ChemistrySelect</i> , 2019 , 4, 8074–8081 | <i>ChemistrySelect</i> | 2365-6549 |
| 2 | Experimental and theoretical exploration of sensing and magnetic properties of a triply bridged dicopper(II) complex: The first discrete metal complex to sense picric acid in pure water , <i>J. Photochemistry and</i> | <i>Journal of Photochemistry and Photobiology A: Chemistry</i> | 1010-6030 |

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| | <i>Photobiology A: Chemistry</i> , 2019 , 383, 111987–111997. | | |
| 3 | Thermal behavior and decomposition mechanism of a series of crown ether based lanthanide(III) hexacyanometallate(III) compounds, <i>J. Indian Chem. Soc.</i> , 2019 , 96, 557–583. | <i>Journal of Indian Chemical Society</i> | 0019-4522 |
| 4 | Syntheses, crystal structures and magnetic properties of two heterobridged μ -phenoxo- $\mu_{1,1}$ -azide/isocyanate dinickel(II) compounds: experimental and theoretical exploration, <i>Eur. J. Inorg. Chem.</i> , 2018 , 4556–4565. | <i>European Journal of Inorganic Chemistry</i> | 1099-0682 |
| 5 | Dinuclear, dimer-of-dinuclear and new type of polymeric metal complexes of copper(II)–zinc(II)/cadmium(II) derived from a less explored compartmental ligand, <i>Inorg. Chim. Acta</i> , 2018 , 483, 527–538. | <i>Inorganica Chimica Acta</i> | 0020-1693 |
| 6 | Dimer-of-Dinuclear, Dinuclear Based 2-D and Metal-Centered Rectangle Type Heterometallic $\text{Cu}^{\text{II}}\text{-Ag}^{\text{I}}/\text{Cd}^{\text{II}}/\text{Ba}^{\text{II}}$ Systems Derived from a Single Compartmental Ligand, <i>ChemistrySelect</i> , 2018 , 3, 9610–9616. | <i>ChemistrySelect</i> | 2365-6549 |
| 7 | Linear trinuclear copper(II)-alkali/alkaline earth metal compounds derived from a compartmental ligand, <i>Inorg. Chim. Acta</i> , 2018 , 482, 612–620. | <i>Inorganica Chimica Acta</i> | 0020-1693 |
| 8 | Single Crystal to Single Crystal Transformation and Magnetic Properties of a Series of ‘Butterfly’ $\text{Ni}^{\text{II}}_2\text{Ln}^{\text{III}}_2$ compounds: SMM behavior of the Dysprosium(III) analogue, <i>Eur. J. Inorg. Chem.</i> , 2018 , 2793–2804. | <i>European Journal of Inorganic Chemistry</i> | 1099-0682 |
| 9 | Experimental and theoretical exploration of magnetic exchange interactions and single molecule magnetic behaviour of bis($\eta^1:\eta^2:\mu_2$ -carboxylate) $\text{Gd}^{\text{III}}_2/\text{Dy}^{\text{III}}_2$ systems, <i>Dalton Transiction</i> , 2018 , 47, 11455–11469. | <i>Dalton Transiction</i> | 1477-9226 |
| 10 | Syntheses, crystal structures, magnetic properties and ESI-MS studies of a series of trinuclear $\text{Cu}^{\text{II}}\text{M}^{\text{II}}\text{Cu}^{\text{II}}$ compounds (M = Cu, Ni, Co, Fe, Mn, Zn), <i>RSC Advance</i> , 2018 , 8, 7315– | <i>RSC Advance</i> | 2046-2069 |

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| | 7329. | | |
| 11 | Syntheses, crystal structures and magnetic properties of two mixed-valence Co(III)Co(II) compounds derived from Schiff base ligands: field-supported single-ion-magnet behavior with easy-plane anisotropy, <i>Dalton Trans.</i> , 2017 , <i>46</i> , 13135 – 13144. | <i>Dalton Transiction</i> | 1477-9226 |
| 12 | Syntheses, crystal structures, magnetochemistry and catechol oxidase activity of a tetracopper(II) compound and a new type of dicopper(II) based 1-D coordination polymer, <i>New J. Chem.</i> , 2017 , <i>41</i> , 4689 – 4701. | <i>New Journal of Chemistry</i> | 1144-0546 |
| 13 | A Series of M ^{II} Cu ^{II} ₃ Stars (M = Mn, Ni, Cu, Zn) Exhibiting Unusual Magnetic Properties, <i>Inorg. Chem.</i> , 2015 , <i>54</i> , 117 – 131. | <i>Inorganic Chemistry</i> | 0020-1669 |
| 14 | Dinuclear, star-shaped tetranuclear and trinuclear-based two-dimensional metal complexes derived from a less investigated Schiff base ligand: Syntheses, crystal structures and spectroscopic correlation, <i>Inorg. Chim. Acta</i> , 2014 , <i>415</i> , 138 – 145. | <i>Inorganica Chimica Acta</i> | 0020-1693 |

Paper Presentation details

| Title of Paper presented | Name of the Seminar/Conference with date | Organised by | Level |
|--|--|---|------------------------------|
| Single Crystal to Single Crystal Transformation and Magnetic Properties of a Series of 'Butterfly' $\text{Ni}^{\text{II}}\text{Ln}^{\text{III}}_2$ compounds: SMM behavior of the Dysprosium(III) analogue | Challenges and Opportunities in Chemistry towards Sustainable Environmental Developments. Date: 17/07/2020 and 18/07/2020 | BhairabGangulyCollege, Belghoria, Kolkata and National Environmental Engineering Research Institute, Nagpur | International Web Conference |