

Dr. Sanjib Ganguly (Ph.D)



Associate Professor

Department of Chemistry

St. Xavier's College (*Autonomous*), Kolkata

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Academic Background:

Graduation: *Presidency College, Kolkata*

Post Graduation: *Science College (Calcutta University)*

Ph. D.: *IACS, Kolkata* (under the supervision of *Prof. Animesh Chakravorty*)

Areas of Research Interest:

1. Metal mediated chemical transformation
2. Spin-state interaction of redox sensitive coordination moieties.
3. Coordinated radicals: Stabilization & Electron Transfer Pathways

Current Research Projects

WBDST Major Research Project entitled "Mono and Polynuclear Complexes with π -acidic Oximato Function: Synthesis and Spectral, Electrochemical, Theoretical & Reactivity Study

Research Group:

Current Ph. D student: Soumitra Dinda (WBDST project)

Past Ph. D. Student: Dr. Shuvam Pramanik

Summer Research Fellows

Gaurav Ranjan De, Arijit Dasgupta

Paulami Chakraborty, Ayona Goswami

Debadrita De, Sourav Adhikari, Teesta Parui

List of Publications:

1. Rhodium(III) complex with pyrene-pyridyl-hydrazone: synthesis, structure, ligand redox, spectral characterization and DFT calculation.
J. Chem. Sci. **2019**, 131(3), 24 (doi.org/10.1007/s12039-019-1598-5)
Soumitra Dinda, Sarat Chandra Patra and **Sanjib Ganguly***
2. Synthesis, X-ray crystal structure, DFT calculations, spectroscopic characterization and redox behaviour of a rhodium(III) complex of an anthracene–pyridylhydrazone ligand.
Transition Met. Chem. **2019**, 44, 0000 (doi.org/10.1007/s11243-018-00300-4)
Soumitra Dinda, Sarat Chandra Patra, Bikash Kumar Panda and **Sanjib Ganguly***
3. Ambient-Stable Bis-Azoaromatic-Centred Diradical $[(L\bullet)M(L\bullet)]$ Complexes of Rhodium(III): Synthesis, Structure, Redox and Spin-Spin Interaction
Inorg. Chem. **2017**, 56(21), 12764-12774. **(Impact Factor: 4.82)**
Sima Roy, Shuvam Pramanik, Sarat Chandra Patra, Basab Adhikari, Abhishake Mondal, **Sanjib Ganguly** and Kausikisankar Pramanik
4. Luminescent Closed Shell Nickel(II) Pyridyl-azo-oximates and the Open Shell Anion Radical Congener: Molecular and Electronic Structure, Ligand Redox and Biological Activity
New. J. Chem., **2017**, 41, 4157-4164. **(Impact Factor: 3.277)**
Shuvam Pramanik, Suhana Dutta, Sima Roy, Soumitra Dinda, Tapas Ghorui, Arup Kumar Mitra, Kausikisankar Pramanik* and **Sanjib Ganguly***
5. Iridium(III) Mediated Reductive Transformation of Closed-Shell Azo-oxime to Open-Shell Azo-imine Radical Anion: Molecular and Electronic Structure, Electron Transfer and Optoelectronic Properties"
Inorg. Chem., **2016**, 55(4), 1461-1468. **(Impact Factor: 4.82)**
Shuvam Pramani, Sima Roy, Tapas Ghorui, Kausikisankar Pramanik* and **Sanjib Ganguly***

6. Molecular and electronic structure of nonradical homoleptic pyridyl-azo-oxime complexes of cobalt(III) and the azo-oxime anion radical congener: an experimental and theoretical investigation

***Dalton Trans.*, 2014, 43, 5317. (Impact Factor: 4.19)**

Shuvam Pramanik, Sima Roy, Tapas Ghorui, **Sanjib Ganguly*** and Kausikisankar Pramanik*

7. Oximate Bridged Hetero-binuclear $\text{Ru}^{\text{III}}\text{M}^{\text{I}}$ Complexes (M = Cu, Ag)

***J. Ind. Chem. Soc.*, 2012, 89, 107. (Impact Factor: 0.729)**

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8. Trinuclear $\text{Ru}^{\text{III}}\text{-Mn}^{\text{II}}\text{-Ru}^{\text{III}}$ Complexes incorporating azo-oxime function

***J. Ind. Chem. Soc.*, 2010, 87, 1299. (Impact Factor: 0.729)**

Indranil Bhattacharyya and **Sanjib Ganguly***

9. Oximate bridged $\text{Rh}_2^{\text{III}}\text{M}^{\text{II}}$ and $\text{Rh}^{\text{III}}\text{M}^{\text{I}}$ species (M^{II} = Mn, Co, Ni; M^{I} = Cu, Ag)

***J. Chem. Sci.*, 2008, 120, 87. (Impact Factor: 1.30)**

Indranil Bhattacharyya, **Sanjib Ganguly**, Bikash Kumar Panda and Animesh Chakravorty.

10. Planar four coordinate nickel(II) complexes of tridentate ligands incorporating azo,-oxime-carboxyl chelation: synthesis and structure.

***J. Ind. Chem. Soc.*, 2005, 82, 898. (Impact Factor: 0.729)**

Sanjib Ganguly and Soma Karmakar

11. Azo-oxime-carboxylates of bivalent platinum

***J. Ind. Chem. Soc.*, 2004, 81, 327. (Impact Factor: 0.729)**

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12. A very rare mononuclear nickel(II) species bonded via oxygen atom of oximate function using pyridyl-azo-oxime type of ligands

***J. Ind. Chem. Soc.*, 2002, 79, 271. (Impact Factor: 0.729)**

Chandan Kumar Pal and **Sanjib Ganguly***

13. Synthesis, structure and reactivity of palladated azo-oxime-carboxylates.

***Indian J. Chem.*, 2001, 40A, 90. (Impact Factor: 0.729)**

Chandan Kumar Pal, Soma Mukherjee (Karmakar) and **Sanjib Ganguly***

14. Synthesis and Structure of Silver Azo-oximates. Hydrogen Bonding and Non-bonded Ag...Ag Interactions.
***Inorg. Chem.*, 2000, 39, 2954. (Impact Factor: 4.82)**
Sanjib Ganguly, Surajit Chattopadhyay, Chittaranjan Sinha and Animesh Chakravorty
15. Regiospecific Oximato-O coordination at the oxygen site: Ligand Design and Low-spin Mn^{II} and Fe^{II/III} Species.
***Inorg. Chem.* 1999, 38, 5984. (Impact Factor: 4.82)**
Sanjib Ganguly, Soma Karmakar, Chandan Kumar Pal and Animesh Chakravorty
16. A New Family of Acylrhodium Organometallics.
***Organometallics*, 1999, 18, 1486. (Impact Factor: 4.13)**
Sujay Pattanayak, Swarup Chattopadhyay, Kaushik Ghosh, **Sanjib Ganguly**, Prasanta Ghosh and Animesh Chakravorty.
17. Synthesis and structural studies of cobalt complexes of tridentate ligands incorporating azo, oxime and carboxylate functions.
***Indian J. Chem.*, 1999, 38A, 335.**
Sanjib Ganguly and Soma Karmakar
18. Synthesis and structure of bis azooximes of dichlororhodium(III): the oxime...oximato OH...O bridge and effect of its deprotonation.
***J. Chem. Soc., Dalton Trans.* 1998, 461. (Impact Factor: 4.19)**
Sanjib Ganguly, Vadivelu Manivannan and Animesh Chakravorty.
19. Azo oximes of bi- and tri-valent Nickel
***J. Chem. Soc., Dalton Trans.* 1997, 585. (Impact Factor: 4.19)**
Soma Karmakar, Suranjan Bhanja Chowdhury, **Sanjib Ganguly** and Animesh Chakravorty
20. First examples of carboxyl-bonded low-spin Mn(III) complexes
***Inorg. Chem.*, 1997, 36, 116. (Impact Factor: 4.82)**
Sanjib Ganguly, Soma Karmakar and Animesh Chakravorty

Convener/ Coordinator in Symposia

- **Convener** of the “National Symposium on Modern Research Trends in Chemistry, **MRTC-2019**”, **February 22-23, 2019** at the St. Xavier’s College, Kolkata (jointly with the Royal Society of Chemistry, Eastern India Section)
- **Convener** of the “International Symposium on Chemistry in Modern day Cancer Research, **CMCR-2019**”, **January 8th, 2019** at the St. Xavier’s College, Kolkata
- **Convener** of the “International Symposium on Chemistry & its Role in Environmental Biology, **CREB-2018**”, **June 20th, 2018** at the St. Xavier’s College, Kolkata
- **Convener** of the “National Symposium on Facets of Chemistry in Materials & Biology, **FOCMB-2018**”, **February 16- 17, 2018** at the St. Xavier’s College, Kolkata
- **Convener** of the “International Symposium on Facets of Chemistry in Biology, **FOCB-2017**”, **January 12th, 2017** at the St. Xavier’s College, Kolkata
- **Convener** of the “National Symposium on Facets of Chemistry in Biology, **FOCB-2016**”, **February 22- 23, 2016** at the St. Xavier’s College, Kolkata

Recent Presentations in Symposia, Conferences & Workshops

1. **Resource Person** in UGC CPE funded State Level Workshop on “**Refreshing Chemistry for Biologist**” on **December 14, 2017** at the BRSN College.
2. **Asian Meeting on Metal Oxide Assemblies** (AMMOA 2017), **May 9-10, 2017** at IISER, Kolkata. (**ORAL PRESENTATIONS**)
3. **National Seminar on Emerging Trends in Chemistry** (ETC- 2017), **February 15, 2017**. (**POSTER PRESENTATION**)
4. **International Symposium on Advanced Biological Inorganic Chemistry**, SABIC-2017, **January 7- 11, 2017** at the Stadel Kolkata (**ORAL PRESENTATION**)
5. **International Symposium on Modern Trends in Inorganic Chemistry- XVI** (MTIC-XVI), **December 3-5, 2015** at the Jadavpur University, Kolkata. (**POSTER PRESENTATION**)
6. **International Conference on Structural Chemistry of Molecules and Materials**, SCOMM-2014, **November 30- December 2, 2014** at Centre for Research in Nanoscience and Nanotechnology (CRNN), University of Calcutta. (**POSTER PRESENTATION**)

ARCHIVES







A token of appreciation after delivering the Invited Lecture at IISER, Kolkata



The Inaugural Session of the National Seminar FOCMB-2018