

GOVERNMENT GENERAL DEGREE COLLEGE, CHAPRA

ACADEMIC PROFILE



1. Name of the Faculty member: Dr. MANAN SAHA

2. Designation: Assistant Professor in Chemistry (W.B.E.S.)

3. Qualification: M.Sc. (UNIVERSITY OF KALYANI), Ph.D. (UNIVERSITY OF KALYANI)

4. Specialization: Inorganic Chemistry

5. E-mail address: manansaha04@gmail.com

6. Date of Joining in W.B.E.S.: 01.10.2020

7. Date of Joining in this College: 01.10.2020

8. Title of thesis (Ph.D.) : “*Studies on the Transition Metal ion Complexes of Pyrazole containing Ligands having N and S donor atoms*”

9. Publications:

i. Synthesis, characterization and antimicrobial activities of Co(III) and Ni(II) complexes with 5-methyl-3-formylpyrazole-N(4)-dihexylthiosemicarbazone(HMP_zNHex₂):

X-ray crystallography and DFT calculations of [Co(MP_zNHex₂)₂]ClO₄·1.5H₂O (I) and

[Ni(HMP_zNHex₂)₂]Cl₂·2H₂O (II)

M. Saha, J. K. Biswas, M. Mondal, D. Ghosh, S. Mandal, D. B. Cordes, A .M. Z. Slawin, T.

K. Mandal, N. C. Saha, *Inorg. Chim. Acta* 483 (2018) 271

- ii. Synthesis, crystal structure, spectral characterization and photoluminescence property of three Cd(II) complexes with a pyrazole based Schiff-base ligand. Susmita Mandal, Rajat Saha, Manan Saha, Rajesh Pradhan, Ray J. Butcher, Nitis Chandra Saha, *Journal of Molecular Structure* 1110 (2016) 11-18.
- iii. Synthesis, characterization and antimicrobial activity of some nickel, cadmium and mercury complexes of 5-methyl pyrazole-3yl-N-(2'-methylthiophenyl) methyleneimine, (MPzOATA) ligand. Susmita Mandal, Monojit Mondal, Jayanta Kumar Biswas, David B. Cordes, Alexandra M.Z. Slawin, Ray J. Butcher, Manan Saha, Nitis Chandra Saha. *Journal of Molecular Structure* 1152 (2018) 189-198.
- iv. Synthesis and characterization of two Cu(II) complexes with a new pyrazole-based Schiff base ligand: crystallography, DNA interaction and antimicrobial activity of Ni(II) and Cu(II) Complexes. Susmita Mandal, Ratan Sadhukhan, Utpal Ghosh, Soumik Mandal, Manan Saha, Ray J. Butcher and Nitis Chandra Saha. *Journal of Coordination Chemistry*, 2016,
- v. Synthesis, Characterization, Photoluminescence property, DFT study, Photocatalytic and Antifungal activity of a new Pyrazole containing Thiosemicarbazone ligand and its Co(III) and Ni(II) complexes, Manan Saha, Suman Mandal, Ankika Bhakat, Keka Sarkar, Asoke Prasun Chattopadhyay and Nitis Chandra Saha, *Journal of Coordination Chemistry* 76 (2023) 1261
- vi. Anticancer, antimicrobial and photocatalytic activities of a new pyrazole containing thiosemicarbazone ligand and its Co(III) and Ni(II) complexes: Synthesis, spectroscopic characterization and X-ray crystallography Manan Saha, Suman Mandal, Solanki Sarkar,

Arunima Biswas, Amit Ghata, David B. Cordes, Alexandra M.Z. Slawin, Nitis Chandra Saha,
Journal of Inorganic Biochemistry 257 (2024) 112577

10. Participation in OP/RC:

i. Faculty Induction Programme from 12 July 2023 to 17 August 2023 organized by the UGC Human Resource Development Centre, Aligarh Muslim University, Aligarh.

ii. Refresher Course on Advanced Molecules and Materials for sustainable Chemistry (Online) From 28.08.2024 to 10.09.2024 Organized by University of North Bengal.

11. Participation in Seminars/Symposia/Conferences/Workshops:

- i. Participated in the National seminar on current trends in chemistry-VI (NSCTC-VI) (Sponsored by the University Grants Commission, New Delhi) organized by Department of Chemistry, University of Kalyani, Kalyani, 741235, West Bengal, India during March 2, 2012.
- ii. Presented a poster entitled “Synthesis, spectroscopy and Antimicrobial activities of a new Schiff base ligand and its Cobalt(III) and Ni(II) complexes: X-ray crystal structure of Cobalt(III) and Ni(II) complexes” at the National seminar on current trends in chemistry- VII (NSCTC-VII) (Supported by University of Kalyani, UGC-SAP (DRS-II) of the Chemistry Department and DST PURSE program of the university) organized by Department of Chemistry, University of Kalyani, Kalyani, Nadia, Pin-741235, West Bengal, India during February 24, 2016.
- iii. Presented a poster entitled “ Synthesis, spectroscopic Characterisation and Antimicrobial activities of a new NNS tridentate Schiff base ligand and its Cobalt(III) complexes: X-ray crystal structure of [Co^{III}(MP_zNHPrⁱ)₂]Br” at the national seminar on current trends in chemistry- VIII (NSCTC-VIII) (Sponsored by the University Grants Commission, New Delhi) organized by Department of Chemistry, University of Kalyani, Kalyani, 741235, West Bengal, India during March 23, 2018.

- iv. Participated in One-day international webinar entitled “Recent Advancement in Chemical Sciences” organized by Department of chemistry in coordination with IQAC, Ranaghat College on 7th July 2020.
- v. Participated in 3 Days International Virtual Workshop on “COVID 19: RTPCR Diagnostics & Therapeutics” Organized by University of Kalyani in association with CoM-JNM Hospital during August 5th-7th, 2020.
- vi. Participated and presented paper (**Oral**) online on Synthesis, spectroscopic and structural characterization of a copper (II) complex with 5-methyl-3-formylpyrazole-N(4)-dihexylthiosemicarbazone (HMPzNHex₂): Catalytic activity for chemical fixation of CO₂ into cyclic carbonates in 40th Annual National Conference (Online) of Indian Council of Chemists held at department of chemistry, Satavahana University, Karimnagar (T.S.) on 29th-30th Decembder, 2021.
- vii. Online webinar on Career Advancement of Teachers According to UGC Guidelines 2016 and 2018 organized by Jhargram Raj College (Seminar Sub-Committee in collaboration with IQAC) on 12th September, 2021.
- viii. Online webinar on “Various Aspects on Child Protection” organized by GGDC, Chapra on 4th September, 2021.
- ix. Online webinar on “West Bengal Govt. Health Scheme” organized by GGDC, Chapra on 8th September, 2021.
- x. One day national level webinar on recent trends of climate change and its impact on mankind and its biosphere organized by GGDC, Chapra on 5th June, 2021.
- xi. State level one day webinar on Awareness for prevention of HIV/AIDS organized by GGDC, Chapra (Under the wings of red ribbon club of National Service Scheme) on 27th April, 2021.

xii. One day webinar on Mucormycosis: The Black Fungus Infection Maiming Covid-19 patients in India organized by GGDC, Chapra in collaboration with NSS on 3rd June, 2021.

xiii. Presented a poster entitled “Synthesis, Spectroscopic and Structural Characterization, Photocatalytic, Anticancer and Antimicrobial activities of a new NNS tridentate Thiosemicarbazone ligand and its Co(III) and Ni(II) complexes” at the National Seminar on Recent trends in Chemistry and related disciplines organized by Organized by Department of Chemistry, The University of Burdwan, Burdwan 713104, India during January 11, 2024.