

## **CURRICULUM VITAE**

### **Personal details:**



**Name : Dr. Kazi Sabnam Banu**

**Father's Name : Kazi Abu Taleb**

**Sex : Female**

**Nationality : Indian**

**Email : kazisabnam80@gmail.com**

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**Language Proficiency: Bengali, English & Hindi (Read, Speak, and Write),  
Hindi (Read and Speak)**

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no. 4, Kol-700070**

### **Educational Qualifications:**

<b>Degree</b>	<b>Year</b>	<b>Board / University</b>
<b>Ph. D. Course work Examination</b>	<b>2010</b>	<b>University of Calcutta</b>
<b>NET</b>	<b>2004</b>	<b>CSIR-UGC NET</b>
<b>M.Sc.</b>	<b>2004</b>	<b>Visva- Bharati</b>
<b>B.Sc. Hons.</b>	<b>2001</b>	<b>University of Calcutta</b>

### **Current Status:**

**Assistant Professor**  
**Department of chemistry**  
**Netaji Nagar Day College**  
**Netaji Nagar, Kolkata 700092**

### **Awards/Achievements:**

- a) GATE (Graduate Aptitude Test in Engineering) qualified in 2004 (97.79 percentile) (All India Rank -71)
- b) CSIR –JRF (conducted by UGC, India ) qualified in June 2004.

### **Expert in Handling Instruments :**

pH meter, Potentiometer, Conductometer, Polarimeter , Spectrophotometer. Infrared (IR) spectrometer, UV spectrometer, Spectrofluorimeter, Stopped flow apparatus, Refractometer, Rotavapour, Gas Chromatography, Viscometer, Stalagmometer, CV, Reflux condenser etc.

**Teaching Experience:** From 2008 till date

### **Subjects Taught in College (Year Wise Detail):**

**Year 2017: Inorganic Chemistry**  
**Year 2018: Inorganic Chemistry**  
**Year 2019: Inorganic Chemistry**  
**Year 2020: Inorganic Chemistry**  
**Year 2021: Inorganic Chemistry**  
**Year 2022: Inorganic Chemistry**

**Research Experience:** 5 years

**Title of the Thesis:** “Compartmental Ligand Complexes of d and f- block Element: Synthesis, Characterization and their Reactivity.” **Areas of Research Interest:** Bio-inorganic Chemistry

### **List of Publications:**

1. Mn(II) complexes of different nuclearity : synthesis, characterization and catecholase- like activity , Prateeti Chakraborty, Ishani Majumdar, **Kazi Sabnam Banu**, Bipinbihari Ghosh, Hulya kara, Ennio Zangrando and debases Das, **Dalton Transactions**, Published on Nov. 2015
2. Dinuclear copper(II) complexes: solvent dependent catecholase activity **Kazi Sabnam Banu**, Madhuparna Mukherjee, Averi Guha, Santanu Bhattacharya, Ennio Zangrando\*,Debasis Das\* *Polyhedron* 45 (2012) 245-254.
3. Synthesis, characterization and luminescence properties of polymeric cadmium(II) complexes with imidazole and it's derivatives mediated by thiocyanate and dicynamide anions

**Kazi Sabnam Banu**, Sandip Mondal, Averi Guha, Sudhansu Das, Tanmay Chattopadhyay, Eringathodi Suresh, Ennio Zangrando\*, Debasis Das\* **Polyhedron** **30** (2011) 163-168.

4. Bio-relevant manganese(II) compartmental ligand complexes: syntheses, crystal structures and studies of catalytic activities

Averi Guha, **Kazi Sabnam Banu**, Arpita Banerjee, Totan Ghosh, Santanu Bhattacharya, Ennio Zangrando\* and Debasis Das\* **Journal of Molecular Catalyst A: Chemical** **338** (2011) 51-57.

5. Structure and luminescence of a nitrate bridged heterotrimeric Cu<sub>2</sub>-Pr complex with compartmental Schiff base ligands

**Kazi Sabnam Banu**, Totan Ghosh, Averi Guha, Tanmay Chattopadhyay, Debasis Das\* , Ennio Zangrando\* , **Journal of Coordination Chemistry**, 2010,(63), 3714-3723.

6. Mono- and dinuclear manganese(III) complexes showing efficient catechol oxidase activity: syntheses, characterization and spectroscopic studies,

**Kazi Sabnam Banu**, Tanmay Chattopadhyay, Arpita Banerjee, Madhuparna Mukherjee, Santanu Bhattacharya, Ennio Zangrando\* and Debasis Das\* **Dalton Transactions** 2009, 8755-8764.

7. Catechol oxidase activity of dinuclear copper(II) complexes of Robson type macrocyclic ligands: Syntheses, X-ray crystal structure, spectroscopic characterization of the adducts and kinetic studies

**Kazi Sabnam Banu**, Tanmay Chattopadhyay, Arpita Banerjee, Santanu Bhattacharya, Ennio Zangrando\* and Debasis Das\* **Journal of Molecular Catalyst A: Chemical** 310 (2009) 34-41

8. A unique coordination chemistry of sodium

Tanmay Chattopadhyay, **Kazi Sabnam Banu**, Soubhik Chattopadhyay, Arpita Banerjee, Sandip Mondal, Eringathodi Suresh\*, Debasis Das\* **Inorganic Chemistry Communication** 12(2009) 26-28.

9. Catechol Oxidase Activity of a series of new Dinuclear Copper(II) Complexes with 3, 5- DTBC and TCC as substrates: Syntheses, X-ray Crystal Structures, Spectroscopic Characterization of the adducts and Kinetic Studies,

**Kazi Sabnam Banu**, Tanmay Chattopadhyay, Arpita Banerjee, Santanu Bhattacharya, Eringathodi Suresh, Munirathinam Nethaji\*, Ennio Zangrando\* and Debasis Das\* **Inorganic Chemistry**, 47 (2008) 7083-7093

10. A Novel Single Pot Synthesis of Binuclear Copper(II) Complexes of Macrocyclic and Macroacyclic Compartmental Ligands: Structures and Magnetic Properties

Tanmay Chattopadhyay , **Kazi Sabnam Banu** , Arpita Banerjee , Joan Ribas, Adinath Majee ,Munirathinam Nethaji , Debasis Das\* . **Journal of Molecular Structure** 833 (2007) 13-22.

11. Mono and Dinuclear Zn(II) Complexes of Schiff-base Ligands: Synthesis, Characterization and Study of Photoluminescence property, Tanmay Chattopadhyay,

Madhuparna Mukherjee, **Kazi Sabnam Banu**, Arpita Banerjee, Eringathodi Suresh, Ennio Zangrando, Debasis Das\*

*Journal of Coordination Chemistry* 6 (2009) 967-979.

12. Ligand effect on the growth reaction of copper(II) dicyanamide complexes: Syntheses, characterization and X-ray single crystal structure analyses of  $[\text{CuL}\{\text{N}(\text{CN})_2\}_2]_n$  and  $[\text{CuL}'\{\text{N}(\text{CN})_2\}_2]_2$  [L = 2-(aminoethyl)pyridine and L' = 2-(aminomethyl)pyridine],

Tanmay Chattopadhyay, Arpita Banerjee, **Kazi Sabnam Banu**, Nirmalya Podder, Madhuparna, Mukherjee, Manami Ghosh, Eringathodi Suresh, Debasis Das\* *Journal of Molecular Structure* 888 (2008) 62-69.

13. Cadmium-halide and mixed Cadmium-halide-dicyanamide polymers mediated by ancillary 2- aminoalkyl-pyridine ligands: synthesis, X-ray single crystal structures and luminescence property

Tanmay Chattopadhyay, Arpita Banerjee, **Kazi Sabnam Banu**, Eringathodi Suresh \*, Munirathinam Netahji\*, Giovanni Birarda, Ennio Zangrando\*, Debasis Das\* *Polyhedron* 27 (2008) 2452-2458.

14. Ligand steric effect on the coordination mode of nitrite ion: syntheses and X-ray single crystal structures of *trans*- $[\text{NiL}_2(\text{ONO})_2]$  and *cis*- $[\text{NiL}'_2(\text{ONO})](\text{NO}_2)$  and [L=2- (Aminomethyl)pyridine and L' = (2-Aminoethyl)pyridine]

Tanmay Chattopadhyay, Nirmalya Podder, **Kazi Sabnam Banu**, Arpita Banerjee, Manami Ghosh, Eringathodi Suresh, Munirathinam Nethaji, Debasis Das\*. *Journal of Molecular Structure* 839 (2007) 69-75.

15. Syntheses and crystal structures of cadmium(II)X<sub>2</sub>-hexamethylenetetramine (X= Br- /I- /SCN- )coordination polymers having different dimensionality

Arpita Banerjee, Pali Maiti, Tanmay Chattopadhyay, **Kazi Sabnam Banu**, Manami Ghosh, Eringathodi Suresh, Ennio Zangrando\* and Debasis Das\* *Polyhedron* 29 (2010) 951-958.

16. Metal Assisted Oxazolidine/Oxazine Ring Formation in Dinuclear Zinc(II)

Complexes: Synthesis, Structural Aspects, and Bio-activity Arpita Banerjee, Subhalakshmi Ganguly, Tanmay Chattopadhyay, **Kazi Sabnam Banu**, Santanu Bhattacharya, Ennio Zangrando\* and Debasis Das\* *Inorganic Chemistry* 48 (2009) 8695-8702

17. Syntheses, Characterization and solid state studies of N-propyl-1,2-diaminoethane (L) and N-isopropyl-1,2-diaminoethane (L') complexes of nickel(II) nitrite: X-ray single crystal structure of *trans*-  $[\text{NiL}_2(\text{NO}_2)_2]$ , Tanmay Chattopadhyay, Manami Ghosh, Arpita Banerjee, **Kazi Sabnam Banu** and Debasis Das\* *Transition Metal Chemistry* 32 (2007) 531-535.

18. A unique nickel system having versatile catalytic activity of biological significance

Tanmay Chattopadhyay, Madhuparna Mukherjee, Arindam Mondal, Pali Maiti, Arpita Banerjee, **Kazi Sabnam Banu**, Santanu Bhattacharya, Bappaditya Roy, D.J. Chattopadhyay, Tapan Kumar Mondal, Munirathinam Nethaji\*, Ennio Zangrando\* and Debasis Das\* *Inorganic Chemistry* 49 (2010) 3121-3129.

19. Mn(II) complexes of different nuclearity: synthesis, characterization and catecholase-like activity†  
Prateeti Chakraborty, Ishani Majumder, **Kazi Sabnam Banu**, Bipinbihari Ghosh, Hulya Kara, Ennio Zangrando\* and Debasis Das\* **Dalton Transactions**(2015)

20. "Impact of chemical pollutants in the air and role of plants in combating air pollution" **Kazi Sabnam Banu** and Bhumika Pradhan, Vol-II, Issue-II, page-17-31, 2017

### **Book Chapters:**

1. Book Chapter in Peer-Reviewed Book - Women Education in India: Basic problems, Needs and Challenges ISBN: 978-1-387-70304-3 ISBN-10: 1-387-70304-8 DIP:

18.10.1387703048 ,DOI: 10.25215/1387703048 ,Edition: August, 2022 (First)

2. Book Chapter in Peer-Reviewed Book- A DEEP INSIGHT INTO WOMAN EDUCATION IN INDIA IN **WOMEN EMPOWERMENT IN INDIA THE CHANGING SCENARIO** ISBN:978-91-987662-5-7, ISBN-10: 91-987662-5-2, DIP: 18.10.9198766252, DOI: 10.25215/9198766252, March, 2022

3. Book Chapter in Peer-Reviewed Book – OBESITY: A SERIOUS SOCIAL AND PSYCHOLOGICAL DIMENSION IN LIFE , ISBN:978-91-7947-9064-3 ISBN-10: 1-79-479064-0, DIP: 18.10.1794790640 DOI: 10.25215/1794790640, November 2021

4. Effect of Contamination on Characteristics of Plastic and Polymeric Materials (Encyclopedia of Materials: Plastics and Polymers, Elsevier), doi:10.1016/B978-0-12-820352-1.00210-8

5. Book Chapter in Peer-Reviewed Book -Challenges encountered by Female Education Sector in India (Accepted, May 2022)

6. Book Chapter in Peer-Reviewed Book- ROLE OF EDUCATION IN ENVIRONMENTAL AWARENESS AND ENVIRONMENTAL RELATED ISSUES' in **TEACHER EDUCATION 'EMERGING TRENDS AND CHALLENGES'** ISBN: 978-91-987662-4-0, ISBN-10: 91-987662-4-4 DIP: 18.10.9198766244, DOI: 10.25215/9198766244, March, 2022

7. Effects of Pesticides on Environmental Degradation , ISBN: 978-81-921697-3-6, 2013

## Conferences/Symposium/Seminar/Workshop/Presentation

1. International Conference On “Chemistry in Daily Life” (ICCDL-2022)  
ORGANIZED BY DEPARTMENT OF CHEMISTRY ,DIAMOND HARBOUR  
WOMEN’S UNIVERSITY, SARISHA, WEST BENGAL, INDIA IN  
ASSOCIATION WITH Internal Quality Assurance Cell (IQAC) on 24th November  
2022
2. One day International Seminar on “Recent Advances in Chemistry and Chemical  
Biology” , Vijaygarh Jyotish Raj College, August 21, 2022
3. Online Short Term Course on Science and Technology of Yoga and Meditation  
organized by  
UGC-HRDC, Osmania University, Hyderabad from 25.2.2021 to 27.2.2021.
4. Workshop on U.G.Inorganic Chemistry Honours Practical of Semester-4(under  
CBCS), University of Calcutta. Dept.of Chemistry, St. Paul’s C.M College In  
collaboration with UGBOS in Chemistry, University of Calcutta, 19<sup>th</sup> February, 2020
5. Workshop on U.G.Inorganic Chemistry Honours Practical of Semester-3(under  
CBCS), University of Calcutta. Dept.of Chemistry, Asutosh College In collaboration  
with UGBOS in Chemistry, University of Calcutta, 29<sup>TH</sup> June, 2019
6. One day National Webinar on COVID-19: Defeat the myths, Let the Doctors  
Speak", 19th June, 2020
7. the Webinar presentation (of one hour) on RECENT TRENDS IN CHEMICAL  
SCIENCES: BASICS, APPLICATIONS AND PROSPECTS jointly organized by the  
Department of Chemistry and the IQAC, Narasinha Dutt College, dated 18th June,  
2020
8. International Symposium on Current Trend in Chemistry, Department of Chemistry,  
Diamond Harbour Womens’ University, 10<sup>th</sup> June, 2020[sponsored by Higher  
Education Dept., Govt. of West Bengal)
9. 5- Day Online Faculty Development Programme on “**Green Technologies  
towards Sustainable Future GTTSF-2022**” (08th – 12th March 2022) Jointly  
Organized by Department of Chemical Engineering, GMR Institute of Technology,  
Rajam, Srikakulam, Andhra Pradesh, and National Institute of Technology-Warangal,  
Telangana, India
10. State level webinar on Legal Empowerment on Women Internal Quality  
Assurance Cell Netaji Nagar Day College. Kolkata, WB, 22<sup>nd</sup> October, 2022
11. E-Short Term Course on “Earth: Our Home”, IQAC and Chemistry Department of  
Basanti Devi College (June., 5th –11th, 2020)

12. International Virtual Conference on Expanding Frontiers in Chemistry (EFC-21), November 11 & 12, 2021, PG Department of Chemistry, Arul Anandar College (Autonomous), Karumathur – 625 514, Tamil Nadu, India

13. INTERNATIONAL CONFERENCE ON ENVIRONMENT AND SUSTAINABLE DEVELOPMENT (27-28 FEBRUARY, 2021), ICESD, 2021, Organized by the Department of Applied Science and Humanities and Hospital Management Guru Nanak Institute of Technology

14. Webinar on Pharmaceutical Chemistry, Semester IV, Chemistry Course (BDC In collaboration with UG Board of Studies, University of Calcutta, 6<sup>th</sup> June, 2020

15. College Level Webinar on Intellectual Property Rights, NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION, Internal Quality Assurance Cell Netaji Nagar Day College, Kolkata, WB. (7<sup>th</sup> January, 2022)

16. One-Day National Webinar on ‘Modern Trend in Chemistry for Sustainable Development, Dept. of Chemistry, Viaygarh Jyotish Ray College (Affiliated to the University of Calcutta) in collaboration with The Indian Chemical Society, 3<sup>rd</sup> March, 2020

17. International Seminar on “Elements of Periodic Table in the Chemical Avenues of Biological World in the Universe and Diversity” South Calcutta Girls College, Department of Chemistry in collaboration with Department of Zoology (17<sup>th</sup> December, 2019)

18. Material Chemistry for Better Tomorrow [MCBT 2017], Asutosh College and Indian Chemical Society, 7<sup>th</sup> November, 2017

19. A Student Motivating State Level Webinar on ‘Energy and Sustainability’, Dept. Of Chemistry in collaboration with IQAC, Netaji Nagar Day College, 19<sup>th</sup> September, 2020

20. One Day Webinar on Legal Remedy for Women Against Domestic Violence in Contemporary Pandemic Situation *Organised by Internal Complaints Committee, Netaji Nagar Day College, 30<sup>TH</sup> August, 2020*

21. An International Seminar on Itinerary of Classical to Modern Era of Chemistry, Department of Chemistry, The Bhawanipur Education Society College, Kolkata, 4<sup>th</sup> November, 2019

22. International Webinar on ‘Survival Strategies for Covid 19 Crisis in India in respect of Economy Finance and Education’, Dept of Commerce and B.Voc (software development), Egra Sarada Shashi Bhushan College in collaboration with Dept. of Commerce, Belda College, 13<sup>th</sup>-14<sup>th</sup> June, 2020

23. One day national Seminar on MATERIAL CHEMISTRY FOR BETTER TOMORROW [MCBT 2017] - Organized by Dept. of Chemistry, Asutosh College, Kolkata in association with Indian Chemical Society, Nov. 07, 2017.

**Teaching Experience:**

- Assistant Professor at Murshidabad College of Engineering & Technology, April, 2010 – June, 2017.
- Part time Lecturer at Rammohan College, Kolkata, Nov., 2008- April, 2010.