

## Resume

Dr. Md Yousuf, Ph.D.



### ❖ Personal Details

Sex- Male  
Nationality: Indian

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### ❖ Contact Details:

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❖ Current Position: Assistant Professor, Department of Chemistry, City College  
(Affiliated to Calcutta University), 102/1 Raja Rammohan Sarani, Kolkata-700009.  
**w.e.f. 16.01.2026**

### ❖ Previous Working Experience:

| Sl. No. | Post                | College, University and Organisation        | Department | Duration              |
|---------|---------------------|---------------------------------------------|------------|-----------------------|
| 1       | Assistant Professor | Ramnagar College, Purba Medinipur           | Chemistry  | 31-07-2020-15-01-2026 |
| 2       | Research Scientist  | TCG Lifesciences, Salt Lake, Kolkata-700091 | Chemistry  | 09-09-2019-30-06-2020 |

### ❖ Educational Qualifications:

| Course    | Year      | University                                                  | Subject/Topic                                                                                                               |
|-----------|-----------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| B.Sc.     | 2006-2009 | Burdwan University                                          | Chemistry (H)                                                                                                               |
| M.Sc.     | 2009-2011 | West Bengal State University                                | Chemistry (Organic Chemistry)                                                                                               |
| NET       | 2011      | CSIR-HRDG                                                   | Chemical Science                                                                                                            |
| Ph.D.     | 2012-2017 | Calcutta University                                         | Design and Development of Oxindole and Ferrocene Based Small Molecules for the Treatment of Breast Cancer and Leishmaniasis |
| Post Doc. | 2017-2019 | CSIR-Indian Institute of Chemical Technology, Hyderabad, TS | Development of Stilbene-Based Autophagy Inducer for the Treatment of Cancer                                                 |

### ❖ Technical, Workshop & Academic Training :

| Course                              | Duration                              | Year | University                            |
|-------------------------------------|---------------------------------------|------|---------------------------------------|
| Faculty Induction Program           | 04-07-2022 to 06-08-2022<br>(30 days) | 2022 | UGC-HRDC<br>Aligarh Muslim University |
| Workshop on Indian Knowledge System | 28-08-2023 to 02-09-2023<br>(6 days)  | 2023 | UGC-HRDC<br>Banaras Hindu University  |
| Refresher Course in Chemistry       | 14-09-2023 to 28-09-2023<br>(14 days) | 2023 | UGC-HRDC<br>Aligarh Muslim University |

### ❖ Area of Expertise and Research Interest:

- Synthetic methodology: Development of novel methodology for small molecules
- Medicinal Chemistry: Design and synthesis of novel scaffolds with anticancer and antileishmanial property
- Nanomedicine: Targeted delivery of drug/synthetic potent molecule via liposome, nanoparticles for anticancer treatment

### ❖ Publication:

#### PAPERS

1. Cationic Lipid-Conjugated Bis-arylidene Oxindole Derivatives as Broad-Spectrum Breast Cancer-Selective Therapeutics,  
**Md Yousuf**, Kathyayani Sridharan, Tanushree Mishra, Namita S. Mahadik, Rajkumar Banerjee, and Susanta S. Adhikari, *Bioorganic Chemistry* **2023**, 133, 106395.
2. Mitoapocynin, a Mitochondria Targeted Derivative of Apocynin Induces Mitochondrial ROS Generation and Apoptosis in Multiple Cell Types Including Cardiac Myoblasts: a Potential Constraint to Its Therapeutic Use,  
Amena Mahmood, Padmini Bisoyi, Rajkumar Banerjee, **Md Yousuf**, Shyamal K. Goswami, *Molecular and Cellular Biochemistry*, **2021** <https://doi.org/10.1007/s11010-020-04039-4>. [As corresponding author]
3. Self-Assembling Derivative of Hydrocortisone as Glucocorticoid Receptor-Targeted Nanotherapeutics for Synergistic, Combination Therapy against Colorectal Tumor

- Kathyayani Sridharan, Bhowmira Rathore, **Md Yousuf**, Hari Krishna Reddy Rachamalla, Sudhakar Jinka, Madhan Mohan Chandra Sekhar Jaggarapu, and Rajkumar Banerjee, *Molecular Pharmaceutics*, **2021**, *18*, 3, 1208–1228.
4. Targeting the Trypanothione Reductase of Tissue-Residing Leishmania in Hosts' Reticuloendothelial System: A Flexible Water-Soluble Ferrocenylquinoline-Based Preclinical Drug Candidate,  
Debarati Mukherjee, **Md Yousuf**, Somaditya Dey, Sondipon Chakraborty, Ankur Chaudhuri, Vinay Kumar, Biswajyoti Sarkar, Supriya Nath, Aabid Hussain, Aritri Dutta, Tanushree Mishra, Biswajit Gopal Roy, Sushma Singh, Sibani Chakraborty, Susanta Adhikari, and Chiranjib Pal, *Journal of Medicinal Chemistry* **2020**, *63*, 15621–15638.  
[Equal contributing first author]
  5. Methoxy-Enriched Cationic Stilbenes as Anticancer Therapeutics,  
**Md Yousuf**, Sudhakar Jinka, Susanta Sekhar Adhikari, Rajkumar Banerjee, *Bioorganic Chemistry* **98**, **2020**, 103719, [As corresponding author]
  6. In vitro antileishmanial activity of polyhydroxylated stilbene conjugated bis-arylidene oxindole against Leishmania donovani  
**Md Yousuf**, Debarati Mukherjee, Somaditya Dey, Sourav Chatterjee, Chiranjib Pal, Susanta Adhikari, *Bioorg. Med. Chem. Lett.* **2018**, *28*, 1056-1062.
  7. Cationic Folate-Mediated Liposomal Delivery of Bis-Arylidene Oxindole Induces Efficient Melanoma Tumor Regression  
Chandra Kumar Elechalawar, Kathyayani Sridharan, Abhishek Pal, Mohammed Tanveer Ahmed, **Md Yousuf**, Susanta Sekhar Adhikari, Rajkumar Banerjee, *Biomaterial Science*, **2017**, *5*, 1898-1909.
  8. One-Pot Synthesis of 3-Substituted 2-Arylpyrrole in Aqueous Media via Addition-Annulation of Arylboronic Acid and Substituted Aliphatic Nitriles  
**Md Yousuf** and Susanta Adhikari, *Organic Letter* **2017**, *19*, 2214–2217.
  9. Antileishmanial ferrocenylquinoline derivatives: Synthesis and biological evaluation against Leishmania donovani  
**Md Yousuf**, Debarati Mukherjee, Somaditya Dey, Chiranjib Pal, Susanta Adhikari, *Eur. J. Med. Chem.* **2016**, *124*, 468-479.
  10. Palladium catalyzed decarboxylative acylation of arylboronic acid with ethyl cyanoacetate as a new acylating agent: synthesis of alkyl aryl ketones  
**Md Yousuf**, Tuluma Das, and Susanta Adhikari, *New J. Chem.*, **2015**, *39*, 8763-8770.
  11. Bis-Arylidineoxindole-conjugated betulinic acid as a unique fluorescent indicator for selective cancer cell detection, reactive oxygen species generation and cytotoxicity

Abhishek Pal, Anirban Ganguly, Sumit Chowdhuri, **Md Yousuf**, Avijit Ghosh, Ayan Kumar Barui, Rajesh Kotcherlakota, Susanta Adhikari, and Rajkumar Banerjee, *ACS Med. Chem. Lett.* **2015**, 6, 612-616.

12. Synthesis and Biological Evaluation of Small Molecule Ferrocenylquinoline as a Potential Antileishmanial Agent

**Md Yousuf**, Debarati Mukherjee, Abhishek Pal, Somaditya Dey, Supratim Mandal, Chiranjib Pal, and Susanta Adhikari, *ChemMedChem.* **2015**, 10, 546-554.

13. Bis-arylidene Oxindoles as Anti-Breast-Cancer Agents Acting via the Estrogen Receptor  
Abhishek Pal, Anirban Ganguly, Avijit Ghosh, **Md Yousuf**, Bhowmira Rathore, Rajkumar Banerjee, and Susanta Adhikari, *ChemMedChem.* **2014**, 9, 727-732.

### **BOOK CHAPTER**

14. Scaffold-Based Selective ROS Generation as Viable Therapeutic Strategies Against Cancer,

**Md Yousuf**, Mohammed Tanveer Ahmed, Rajkumar Banerjee (Editor: Prof Sajal Chakraborti, Springer Nature **2021**).

15. Arylboronic Acids and Esters Based Prodrugs Targeting Oxidative Stress in Cancer,

**Md Yousuf**, Aasia Ansari, Rajkumar Banerjee; (Editor: Prof Sajal Chakraborti, Springer Nature **2021**), [As corresponding author]

### **REVIEW**

16. Cationic Lipid Modification of Nuclear Hormone Receptor-Ligands: A Strategy for Developing a New Class of Targeted Anticancer Therapeutics,

**Md Yousuf** and Rajkumar Banerjee, *Current Indian Science*, **2024**, e2210299X314913, <http://dx.doi.org/10.2174/012210299X314913240909071917>

### **❖ Awards:**

**2019** SERB-NPDF in Chemical Science

**2016** APC Ray Young Scientist Award 2016 for best oral presentation

**2011** Qualified 'CSIR' in National Eligibility Test for Junior Research Fellowship & Lectureship (CSIR Rank-073)

### **❖ List of Participation in Seminar, Conference and Workshop**

#### **Workshop:**

1. SWAYAM-NPTEL Awareness Workshop held at Ramnagar College on 19<sup>th</sup> July 2025.  
Organiser: NPTEL Local chapter Ramnagar College.
2. Online Faculty Development Workshop on “How to Use ICT in Teaching, Learning & Administrative Practices in Higher Education Institutions” held during June 18<sup>th</sup> to 20<sup>th</sup>, 2021.  
Organiser: Surendranath College 24/2, M.G. Road, Kolkata 700009.

### **International/National:**

1. Poster presented in International Conference on Recent Trends in Green Chemistry (ICRTGC-2021) 28<sup>th</sup>-30<sup>th</sup> September 2021, Akal University, Punjab, India & Indian Chemical Society, Kolkata.
2. Participated in [SERB-ACS Online Research Poster Competition 2021](#).
3. Participated in “Webinar on Writing of Service Book and Service Related Issues” organized by IQAC, Ramnagar College, held on January 4, 2021.
4. Participated in Webinar on "Turn chemical drawings into knowledge with ChemDraw & ChemOffice+ Cloud v20" organized by Chemistry World and PerkinElmer on 20<sup>th</sup> October 2020.
5. Participated in the two-day webinar on ‘Learning Chemistry During CoVID-19’ organized by The Department of Chemistry (UG & PG), Jhargram Raj College, held on 30<sup>th</sup> September and 1<sup>st</sup> October, 2020.
6. Participated in the webinar "COVID-19 Pandemic & Waste Managements" organized by Dept. of Chemistry, Ramnagar College in collaboration with Dept. of Chemistry, NIT Jamshedpur, held on September 26, 2020.
7. Poster presented in International Conference on Biotechnological Research and Innovation for Sustainable Development BioSD-2018, being held in CSIR-IICT, Hyderabad on November 22–25, 2018.

### **❖ Additional Activities :**

- Performed as the Observer for WBSSC Examination 2025, held on 07.09.2025 at Paniparul High School, Purba Medinipur, WB.
- Nodal Officer, Aikyashree Scholarship, Ramnagar College, W.B Govt.
- Help Desk Officer, Student Credit Card, Ramnagar College, W.B Govt.
- Member, Grievance Redressal Cell, Ramnagar College
- Member, IIC Cell, Ramnagar College
- Convener, Minority Cell, Ramnagar College