

Invitation

Dear Sir/Madam

We have the honor and privilege to inform you that the department of Chemistry of our college is going to organize a two day National Seminar on "Sustainable Development in Chemical Sciences" on August 17 & 18, 2023 sponsored by SERB, Govt. of India in our college campus. We cordially invite you, your colleagues, research scholars and students to attend the seminar and solicit your hearty co-operation in making it a grand success.

Thanking you.

Yours sincerely,

Dr. Swapan Kumar Misra
Principal
Organizing Secretary

Dr. Bidhan Chandra Samanta
Associate Professor & Head,
Dept. of Chemistry
Organizing Co-ordinator

Dr. Narottam Sutradhar,
Assistant Professor
Dept. of Chemistry
Organizing Jt. Co-ordinator

Two day National Seminar on "Sustainable Development in Chemical Sciences"

Date: August 17 & 18, 2023



Organized by:

Department of Chemistry
Mugberia Gangadhar Mahavidyalaya
Bhupatinagar, Purba Medinipur, West Bengal, India

-Sponsored by-
SERB, Govt. of India



REGISTRATION FORM

SERB Sponsored Two day National Seminar on "Sustainable Development in Chemical Sciences"

Date: August 17 & 18, 2023

- Name (BLOCK LETTERS): _____
- Address: _____
- Contact No.: _____
- Email ID: _____
- Designation: _____
- Areas of research interest: _____
- Organization: _____
- Category (Faculty Member / Research Scholar/ Student): _____
- Whether Presenting Paper/ Poster: _____
- Title of Paper / Poster: _____
- Whether Accommodation required (Please write YES / NO): _____ If "YES" whether Paid for in Advance: (Please write YES/ NO): _____

Signature of the applicant

Place: Date:

About the Organizing Institute

Mugberia Gangadhar Mahavidyalaya was established on 2nd July 1964 as co-educated college in Bhupatinagar village situated in Bhagwanpur II Block under Contai Sub-Division of Purba Medinipur District, West Bengal by a society of the same name. From its very inception the college is trying to fill full one of the noble objectives "To promote educational facilities of all types, including studies in Arts (Humanities), Science, Technical and Vocational Courses". This degree college began as an Arts college, but now it expands by opening three streams – Arts, Science, Commerce and a Physical Education Training Course (B.P.Ed & M.PED). It even runs many job oriented courses. Presently the college has been awarded with "DBT Star College Strengthening Scheme for Chemistry, Mathematics and Zoology departments and also awarded with "College with Potential for Excellence" status by the UGC under XII Plan. It is a NAAC Re-accredited 3rd cycle B+ Level Institution (CGPA 2.71) and is approved by NCTE. Thus the goals of the society are transmitted into academic and extension activities.

Background and objectives of the Seminar

Along with the quest for fundamental aspects, scientists have always been interested in designing practical applications of scientific advances in the form of devices, drugs, catalysts etc for mankind. The goal of fundamental science at the interface of chemical sciences and biology is to understand life in chemical terms. Our ability to accomplish the translation of biology into chemical terms is closely related to our fundamental understanding of life's machinery. However to meet these challenges, more and more researches at the interface of chemical sciences and biology are going on particularly for the prevention, diagnosis, and treatment of diseases. But the students belonging to this rural and backward area of West Bengal are completely unaware about these advances in chemical research. So, the main objective of this lecture workshop is to provide awareness, information, knowledge and encouragement to the target audience mainly students from host and nearby colleges regarding recent trends of application based researches in chemical sciences.

Call for papers

Interested participants are requested to send abstract of not more than 300 words with full paper of not more than 5000 words through Email as an attached file on the seminar theme.

Important Deadlines:

Submission of Abstract (paper/poster): 25.07.2023

Submission of full paper: 27-07-2023

Last Date of Registration: 10-08-2023

Registration Fee (Without accommodation):

Scientists/Faculty Members (Paper/Poster): 1000/-

Research Scholars/Self Help workers: 500/-

Students (UG & PG): 200/-

N.B. – The presented paper /poster will be published in seminar proceeding with ISBN.

Accommodation & Contact Details:

Accommodations will be arranged for the participants on request in Hostel/Guest Houses/Hotels on charge basis.

All communication should be addressed to - Dr. Bidhan Chandra Samanta,

Head, Department of Chemistry, Mugberia Gangadhar Mahavidyalaya.

Contact No: 9732752907, 8250095619 (Whats/APP)

Email: bidhansamanta@yahoo.in

Organizing Committee Organizing President

Mr. Ardhendu Maity, Ex-MLA,
Bhagwanpur & President, G.B. of the College

Organizing Secretary

Dr. Swapan Kumar Misra,
Principal, Mugberia Gangadhar Mahavidyalaya

Organizing Co-ordinator

Dr. Bidhan Chandra Samanta
Associate Professor & Head, Dept. of Chemistry,
Mugberia Gangadhar Mahavidyalaya

Organizing Jt. Co-ordinator

Dr. Narottam Sutradhar, Asstt. Prof. Chemistry.

Organizing Members

Mr. Goutam Jana, SACT, Chemistry
Mrs. Minakshi Maity, SACT, Chemistry
Mr. Ribhu Maity, SACT, Chemistry
Mr. Mrigendu Midya, SACT, Chemistry

Tentative list of Invited Speakers

- Dr. Alakesh Bisai, Professor,
Department of Chemical Sciences (DCS), IISER Kolkata, West Bengal, India
- Dr. Samik Nanda, Professor,
Department of Chemistry, IIT, Kharagpur, West Bengal, India
- Dr. Tapan Kanti Paine, Professor,
School of Chemical Sciences, Indian Association for the Cultivation of Science (IACS), Jadavpur, Kolkata, India
- Dr. Debashis Chakraborty, Professor,
Department of Chemistry, Indian IIT Madras, India
- Dr. Debaprasad Mandal, Associate Professor,
Department of Chemistry, IIT Ropar, Punjab, India
- Dr. Subhash C. Ghosh, Senior Scientist,
CSIR-Central Salt and Marine Chemicals Research Institute,
Bhavnagar, India.
- Dr. Sagar Pal, Professor,
Department of Chemistry and Chemical Biology, Indian Institute of Technology (ISM) Dhanbad, Jharkhand, India
- Dr. Apurba K. Das, Professor,
Department of Chemistry, IIT, Indore, India
- Dr. Sanjib Kumar Patra, Associate Professor,
Department of Chemistry, IIT, Kharagpur, West Bengal, India
- Dr. Prasenjit Mal, Associate Professor,
School of Chemical Sciences, NISER Bhubaneswar, Odisha, India
- Dr. Debdas Ray, Associate Professor,
Department of Chemistry, School of Natural Sciences, Shiv Nadar University
- Dr. Soumen De, Assistant Professor,
School of Chemistry, IISER-TVM, Thiruvananthapuram, Kerala, India

Registration Link - <https://forms.gle/rnUXT9QEeop4a2J78>

Bank account details to pay the registration fee:

Account Name : Mugberia Gangadhar Mahavidyalaya, Account number :

00000034512074898, IFSC code : SBIN0014101, Bank name : SBI, Branch : Mugberia

Asymmetric Total Syntheses of Architecturally Intriguing Bioactive Natural Products

Alakesh Bisai*

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Nature produces a variety of complex natural products in entioenriched form (see, Figure).¹⁻² Since these are isolated from Nature in limited quantity (mostly in mg scale), total synthesis endeavors play a crucial role in bioactivity evaluation by providing access to significant quantity.³ This also provides platform for the invention of oxidative strategies for chemical synthesis, such as C-C, C-N, and N-N bond forming reactions.⁴⁻⁵ Since these processes avoid a protection and deprotection groups, the development of methodologies following aerobic oxidations are welcome to synthesize value added organic molecules, particularly for the synthesis of natural products and in pharmaceutical industries.

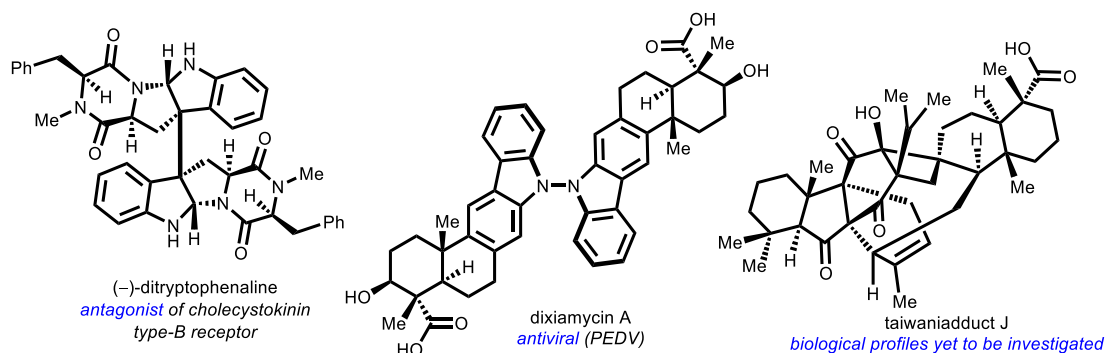


Figure. Architecturally intriguing indole alkaloids of biological relevance.

In the above context, naturally occurring alkaloids with impressive diversity of biological activities drew our interest for the development of strategies to form C-C, C-N, and N-N bonds under oxidative conditions.^{1a} Interestingly, a variety of alkaloids of this family show interesting biological activities, such as antibacterial and cytotoxic activities.^{1a} Towards this direction, we explored novel oxidative strategies under mild condition that will be discussed in this talk.⁶

References & Notes:

1. (a) N. Kumar, M. K. Das, S. Ghosh, A. Bisai, *Chem. Commun.* **2017**, 53, 2170. (a) N. Babu, A. Roy, M. Singh, A. Bisai, *Org. Lett.* **2018**, 20, 6327. (b) M. K. Das, N. Kumar, A. Bisai, *Org. Lett.* **2018**, 20, 4421.
2. (b) S. Bhunia, S. Chaudhuri, A. Bisai, *Chem. –Eur. J.* **2017**, 23, 11234. (c) N. Babu, L. K. Kinthada, P. P. Das, A. Bisai, *Chem. Commun.* **2018**, 54, 7963. (d) S. Sharma, A. Roy, K. Shaw, A. Bisai, A. Paul *J. Org. Chem.* **2020**, 54, 14926.
3. (a) A. Roy, M. K. Das, S. Chaudhuri, A. Bisai, *Chem. Commun.* **2018**, 54, 940. (b) S. Chaudhuri, S. Bhunia, A. Roy, M. K. Das, A. Bisai, *Org. Lett.* **2018**, 20, 288.
4. (a) K. Shaw, S. Sharma, A. Khatua, A. Paul, A. Bisai, *Org. Biomol. Chem.* **2021**, 19, 9390. (b) A. Khatua, P. Shyamal, S. Pal, A. Mondal, A. Bisai, *Chem. Commun.* **2022**, 58, 3929.
5. (a) N. Kumar, A. Maity, V. R. Gavit, A. Bisai, *Chem. Commun.* **2018**, 54, 9083. (b) S. Sharma, S. Shaheeda, K. Shaw, A. Bisai, and A. Paul, *ACS Catal.* **2023**, 13, 2118.
6. (a) R. Nandi, S. Kundu, V. R. Gavit, M. Munda, S. Niyogi, A. Bisai *Chem. Sci.* **2022**, 13, 11666. (b) R. Nandi, S. Niyogi, S. Kundu, V. R. Gavit, M. Munda, R. Murmu, A. Bisai *Chem. Sci.* **2023**, 14, ASAP.

Bio-Sketch of Speaker

Sustainable Developments in Chemical Sciences

Mugberia Gangadhar Mahavidyalaya, Purba Medinipur, WB

August 17-18, 2023 @S. N. Bose Seminar Hall

Alakesh Bisai

Convener, PGAC & Professor
(& Former Professor, IISER Bhopal)
Department of Chemical Sciences
IISER Kolkata, India
Homepage: <https://www.iiserkol.ac.in/~alakesh/>



PhD Guided: **21** Current PhD Students: **15** BS-MS Guided: **18** Project Assistant: **~65**
Extramural Funding: 14 Extramural Fundings (**11** completed & **3** ongoing)

Research Focus: Strategies/Methodologies for Structurally Intriguing Natural Product of Biological Relevance

Representative Publications:

Chem. Sci. (2023, 14, ASAP); *ACS Catal.* (2023, 13, 2118); *Chem. Sci.* (2022, 13, 11666); *Chem. Commun.* (2022, 58, 3929); *Org. Lett.* (2018, 20, 4421); *Chem. Eur. J.* (2017, 23, 11234)

Position held:

- Professor (May 2019 - till date): Dept. of Chemical Sciences, IISER Kolkata
- Professor (2018 - 2020): Dept. of Chemistry, IISER Bhopal; Associate Professor (2013 – 2018); Assistant Professor (2009 – 2013)
- Post-Doctoral (2006 –2009): Dept. of Chemistry, UC Berkeley, CA, USA.

Awards & Recognitions:

- Fellow, Royal Society of Chemistry (FRSC), (March 2023)
- STARS-MoE 2023 Proposal Sanctioned
- Prof. A. Srikrishna Memorial Lecture 2023 (UoH)
- ‘CDRI Award’ 2022 for Excellence in Drug Research (2022)
- SERB Special Call on 'Reagentless Chemistry' 2022
- Prof. Dhananjay Nasipuri Memorial Award 2021 (ICS)
- Silver Medal, Chintan Rasayan Sanstha (CRS) 2021 (June 2021)
- ‘SERB-STAR Award’ (2021-2024)
- ‘Bronze Medal’, CRSI, India (July 2020)
- Fellow, Indian Chemical Society (FICS), (July 2020)
- Young Scientist Award by CRSI, India (July, 2018)
- Young Scientist Award by the BRNS, DAE (2011-2014) through a research grant
- DST Fast-Track Research Project (March, 2013-February, 2016) for Young Scientist
- GRC award to Post-docs by chair, 17th GRC on Stereochemistry (2008), RI, USA

Other Administrative (Supporting) Duties:

- CVO, IISER Bhopal (July, 2015 - April, 2019); DoFA, IISER Bhopal (Jan., 2015 - Dec., 2016); Chairperson, Health Centre User Committee (HCUC) (Jan., 2015 - Dec., 2016); Member, DFAC (Jan., 2017 – Jan., 2020); Member, DUGC (Jan., 2018 - Mar., 2019); Coordinator, Outreach Activities (Jan., 2014 - Dec., 2015); Convener, DUGC and DPGC, Chemistry (Feb., 2011- Apr., 2013)
- Convener, PGAC Committee, IISER Kolkata (Jan., 2022 - till date); Coordinator, SRP (J & K & Ladakh & North-East) (2022 - 2023); Member, Campus Oversight Committee (Jan., 2022 - till date); Coordinator, SRP (2020); Member, UGAC Committee (Jan., 2020 – Jan., 2022); Member, Institution's Innovation Cell (IIC) (July, 2019 - July, 2021)

17th – 18th August, 2023@Dept. of Chemistry, Mugberia Gangadhar Mahavidyalaya