CURRICULUM VITAE

TAPAN KUMAR PRADHAN
Assistant Professor
Murshidabad Maharaja Krishnanath University, Berhampore
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RESEARCH INTEREST

Total Synthesis, organo-catalysis, synthetic methods and strategies, carbohydrates, oligosaccharides, glycoproteins, nano-biomaterials.

EDUCATION

2005 – 2010	Ph. D. Osmania University Department of Chemistry, Hyderabad, India Work Done: CSIR-Indian Institute of Chemical Technology (IICT), Hyderabad, India Thesis Title: Total Synthesis of Emericellamide A, Emericellamide B, (+)-Varitriol, (–)-Varitriol, 5′-epi-(+)-Varitriol, 4′-epi-(–)-Varitriol Thesis Advisor: Dr. Subhash Ghosh
2003 – 2005	M. Sc. University of Calcutta Organic Chemistry Raja Bazar Science College, Kolkata, India
2000 – 2003	B. Sc. (Chemistry Hons.) Ramakrishna Mission Vidyamandira, Belur Math, Howrah, (Affiliated to University of Calcutta), India

TEACHING INTEREST

Logics of Organic Synthesis, Carbohydrates, Medicinal Chemistry of Anticancer Agents, Drug design, Chemistry of Natural Products.

ACADEMIC HONORS AND AWARDS

2015	Taiwan Ministry of Science and Technology (MOST) Fellowship for postdoctoral research
2012	Taiwan National Science Council (NSC) Fellowship for postdoctoral research
2007	Recipient of Senior Research Fellowship, CSIR, INDIA
2005	Recipient of Junior Research Fellowship, CSIR, INDIA
2005	Graduate Aptitude Test: Percentile: 97.91; All India rank 73
2005	Recipient of National Scholarship from Calcutta University
2003	Recipient of Somnath Banerjee Memorial Awards: (Ramakrishna Mission Vidyamandira, Belur)

SPONSORED RESEARCH AND CONSULTANCY UNDERTAKEN

TEACHERS ASSOCIATESHIP FOR RESEARCH EXCELLENCE (TARE) PROJECT

Period	2021 – 2024
Status	Completed
Cost	18,30,000 L (equal amount each institute)
Funding Agency	ANRF (Anusandhan National Research Foundation), formerly known as SERB-DST
PI	Dr. Tapan Kumar Pradhan, Murshidabad Maharaja Krishnanath University, Berhampore, Murshidabad, WB-742101
Co-PI	Prof. Rajarshi Samanta, Indian Institute of Technology Kharagpur (IIT KGP), West Bengal, India.
Title	"Transition Metal Catalyzed Construction of 2-Pyridone based Extended Conjugated Systems and Macrocycles"

PROFESSIONAL/WORK EXPERIENCE

June, 2026 – Present **Assistant Registrar** (Acting), Murshidabad Maharaja Krishnanath University, Berhampore

Apr, 2026 – Present **Assistant Professor** (Stage – 1), Murshidabad Maharaja Krishnanath University, Berhampore. W.B.

Feb, 2025 – Apr, 2026 **Assistant Professor** (Stage – 1), Murshidabad University, Berhampore, W.B.

Nov, 2020 – Feb,2025 **Assistant Professor** (Stage – 1), Krishnath College, Berhampore, W.B.

Aug, 2016 – Oct, 2020 **Research Fellow**, R & D Center, Genovior Biotech Corporation (GBC), Taiwan.

My research in Genovior Biotech Corporation is on the topic of process development of peptide therapeutics like Glucagon, Teriparatide, and Liraglutide.

These projects involved solid phase peptide synthesis using wang resin and 2-Cl-trt resin, global deprotection, purification using RP-MPLC and lyophilization.

The drug molecules were characterized using various analytical techniques according to USP and EP monograph.

Feb, 2015 – Jul,2016 **Postdoctoral Research Fellow**
Department of Chemistry, National Tsing Hua University (NTHU), Taiwan.

Advisor: Prof. Reuben Jih-Ru Hwu

Syntheses of chroman-2-ones and α-amino acids through a diastereoselective domino reaction.

Development of new synthetic schemes for ribose-based trifunctional prodrug a new strategy for drug delivery (Taxol and Linalidomide). The target molecule showed a very good potency on cancer cell lines.

Synthesis of nanobulles containing DNA and Tegafur drug. These nano particles showed significant potency on MTT assay of various cell lines.

Feb, 2012 – Jan, 2015 **Postdoctoral Fellow**
Department of Applied Chemistry, Taiwan. National Yang Ming Chiao Tung University (NYCU), formerly known as National Chiao Tung University (NCTU),

Advisor: Prof. Kwok Kong Tony Mong

Development of new synthetic scheme for deoxy sugar and methodology for modulating glycosylation.

Development of new synthetic Scheme for Large Scale Preparation of 3-deoxy-D-manno-oct-2-ulosonic acid (Kdo), 3-deoxy-D-arabino-hepta-2-ulosonic acid (DAH) and New Glycosyl Donors for α-Ko- and α-Kdo-Glycosides.

Investigation of new synthetic methods to prepare complex deoxysugar containing oligosaccharides.

Synthesis of the core structure of LIPID A.

Nov, 2010 – Jan, 2012 **Junior Scientist**, Aurigene Discovery Technology Pvt, Hyderabad. India
Manager: Dr. Sanjita Sasmal

Designed and executed the synthesis of novel azacyclic and oxacyclic natural products that offer potent biological activities.

Synthesis of various aromatic moiety used for drug development (Novartis sponsored Project)

PUBLICATIONS

A. JOURNAL AND RIVEWS

1) Jih Ru Hwu*, Avijit Panja, Shwu-Chen Tsay, Wen-Chieh Huang, **Tapan Kumar Pradhan**, Chen-Sheng Yeh, Wu-Chou Su, Li-Xing Yang, Dar-Bin Shieh*, Synergism and Antagonism of Lenalidomide–(ß-D-Ribofuranose 2', 3'-phosphodiester)–Paclitaxel as a Selective Anticancer Codrug. *J. Biotechnol. Biomed.* (**Accepted for Publication, June 2026**)

2) Sarbojit Das, **Tapan Kumar Pradhan*** Rajarshi Samanta* Recent Progress on Transition Metal Catalyzed Macrocyclizations Based on C-H Bond Activation at

Heterocyclic Scaffolds *Chem. Asian J.*, **2024,** *16,* e202400397*. (Invited review in special issue of "Young Organic Talent in India"* (**TOP view article in 2025**)

3) **Tapan Kumar Pradhan*** Kdo Glycosylations and Their Application in Oligosaccharide Synthesis, *Euro JOC*, **2023**, *24*, e202300146.

4) Ming-Hua Hsu*, Mohit Kapoor, **Tapan Kumar Pradhan**, Man-Him Tse, Hsin-Ya Chen, Man-Jun Yan, Yu-Tsen Cheng, Yu-Cheng Lin, Cheng-Ying Hsieh, Ker-Yin Liu, Chien-Chung Han, Mild and Efficient Cu-Catalyzed Synthesis of Trisubstituted Pyrroles, *Synthesis* **2021**, *53*, 2212-2218. IF: 2.675

5) Kwok-Kong Tony Mong*, **Tapan Kumar Pradhan**, Cheng-Hsin Chiu, Wei-Cheng Hung, Chao-Ju Chen and Yi-Fang Wang, (2-Ketulosonyl) onate 2,3-*O*-thionocarbonate donors for the synthesis of KO and KDO α-glycosides and a one-pot glycosylation method for 2-keto acid donors. *Org. Chem. Front.*, **2020**, *7*, 2179-2186. IF: 5.155

6) Chandrasekhar, D. Balaji, Shwu-Chen Tsay, **Tapan Kumar Pradhan**, Hwu, Jih Ru*, Syntheses of Chroman-2-ones and α-Amino Acids through a Diastereoselective Domino Reaction. *J. Org. Chem.* **2017**, *84*, 5524–5537. IF: 4.849

7) **Tapan Kumar Pradhan**, Kwok Kong Tony Mong*, Glycosylation Chemistry of 2-Keto-3-Deoxy-D-manno-Octoulsonic Acid (Kdo) Glycosyl Donors. (Invited Review), *Isr. J. Chem.* **2015**, *55*, 285–296. IF: 2.221

8) **Tapan Kumar Pradhan**, Chun Cheng Lin, Kwok Kong Tony Mong*, Preparation of a Protected 3-Deoxy-D-Manno-Oct-2-ulosonate Glycal for the Synthesis of ß-KDO containing Oligosaccharides. *Org. Lett.* **2014**, *16*, 1474–1477. IF: 6.579

9) Bhaswati Ghosh, Yen-Hsun Lai, Yu-Yin Shih, **Tapan Kumar Pradhan**, Chun-Hung Lin, Kwok-Kong Tony Mong*, Total Synthesis of a Glycoglycerolipid from Meiothermus taiwanensis through a One-Pot Glycosylation Reaction and

Exploration of its Immunological Properties *Chem. Asian J.* **2013**, *12*, 3191–3199. IF: 4.587

10) **Tapan Kumar Pradhan**. Karla Mahindar Reddy, Subhash Ghosh*. Total synthesis of emeriricellamide A and B. *Tetrahedron: Asymmetry* **2013**, *24*, 1042–1051. IF: 2.126

11) **Tapan Kumar Pradhan**, Chun Cheng Lin, Kwok Kong Tony Mong*, Formal Synthesis of a 3-deoxy-D-manno-octulosonic acid (KDO) and 3-deoxy-D- arabino-2-heptulosonic acid (DAH). *Synlett* **2013**, *24*, 219–222. IF: 2.151

12) Sudhakar Athe, Balla Chandrasekhar, Saumya Roy, **Tapan Kumar Pradhan**, Subhash Ghosh*, Formal Total Synthesis of (+)-Neopeltolide *J. Org. Chem*. **2012**, *77*, 9840–9845. IF: 4.849

13) A.V. Jithender Reddy, **Tapan Kumar Pradhan**, Subhash Ghosh*, Total syntheses of 28, 29-diepi-arenamide A, 29-epi-arenamide A, and28-epi- arenamide *Tetrahedron Lett*. **2012**, *53*, 6148–6150. IF: 2.193

14) Subhash Ghosh*, **Tapan Kumar Pradhan**, Stereoselective Total Synthesis of natural (+)-Varitriol, (–)-Varitriol, 5′-epi-(+)-Varitriol, 4′ epi-(–)-Varitriol from D-Mannitol. *J. Org. Chem.* **2010**, *75*, 2107–2110. IF: 4.849

15) Subhash Ghosh*, **Tapan Kumar Pradhan**, The first total synthesis of emericellamide A. *Tetrahedron Lett*. **2008**, *49*, 3697–3700. IF: 2.193

16) Subhash Ghosh*, **Tapan Kumar Pradhan**, Stereoselective Synthesis of (3S,8R,9R,10R)-Heptadeca-1-ene-4,6-diyne Tetrol and Its 3-Epimer from D-Mannitol. *Synlett* **2007**, 2433–2435. IF: 2.151

B. BOOK CHAPTER

Jih Ru Hwu, **Tapan K. Pradhan**, Shwu Chen Tsay, Mohit Kapoor, Sergey O. Bachurin,

Oleg A. Raevsky, Johan Neyts *In,* Antiviral Agents towards Chikungunya Virus: Structures, Syntheses, and Isolation from Natural Sources; *New Horizon of Process Chemistry by Scalable Reactions and Technologies* Publisher: Springer.

CONFERENCES/ SEMINAR/ WORKSHOP/ WEBINER ATTENDED

1. Full paper presentation **8th Regional Science & Technology Congress, 2025-26 (REGION II)** at Kazi Nazrul University, Asansol on 30th Jan, 2026 on the topic "Transition Metal Catalyzed Construction of 2-Pyridone Based Macrocycles".
2. Participated in one-day international seminar **on 'Current Research Trends in Physical & Chemical Science (CRTPCS)" (Hybrid Mode)'** organized by Berhampore Girls' College on 10th Feb, 2026.
3. Participated in one-day international seminar **on "Promoting Teaching & Research in Contemporary Science & Engineering for Sustainable Development Goals'** organized by Sripad Sing College on 21st Feb, 2026.
4. Participated in one-day national seminar **on 'Governance, Leadership and Management of the College Administration in view of NAAC and NEP-2020'** organized by Krishnath College on 27th May, 2023.
5. Participated in the UGC Sponsored '**Webinar on NEP-2020: Changing Role of Teacher**' organized by UGC-Human Resource Development Center, Gujarat University, Ahmedabad, on 8th September, 2022.
6. Participated in the **New IPR 2023 e-workshop organized by Innovative technology Enabling Centre (InTEC),** CSIR-IMMT, Bhubaneswar during June 12-17, 2023
7. Subhash Ghosh*, **Tapan Kumar Pradhan** "Total Synthesis of Emericellamide A" Poster presented at the international symposium on natural products (ASOMPS - XIII) on November 3-6th, 2008, held at IICT, Hyderabad, India.
8. Oral presentation at 5th J-NOST Symposium for Research Scholars, December 4-7th, 2009, held at IIT KANPUR, India. Topic of the oral presentation: "The total synthesis of Varitriol and its analogues from D- mannitol".
9. Subhash Ghosh*, **Tapan Kumar Pradhan** "Total Synthesis of Emericellamide B via aldol strategy" poster presented at the international symposium on

Organic Synthesis and Human Well being (OSHB): Emerging opportunities and Challenges on Aug 1-4th, 2010, held at IICT, Hyderabad, India.

10. 2013-Glyco-Retreat, on 17-18th may, held at Yilan, TAIWAN.
11. The First RIKEN-NCTU Symposium on Physical and Chemical Science, April 26 (Fri.) – 27 (Sat.), B1 Conference Hall, Science Building III, National Chiao Tung University, 2013.
12. 2015 Chinese Chemical Society Annual Meeting hosted by the National Dong Hwa University, on December 4-6 at Donghua, Taiwan.

REVIEWER FOR PEER-REVIEWED JOURNALS

Sl NO	Journal Name	Publishers
1	European Journal of Organic Chemistry	Wiley
2.	Frontiers in Microbiology	Springer

SORT TERM COURSE, REFRESHER COURSE, FACULTY INDUCTION PROGRAMME

1. Participate in the 14th Online Guru-Dakshta Faculty Induction Programme (FIP) (11/09/2023 to 10/10/2023) organized by UGC-Human Resource Development Centre of Gujarat University, Ahmedabad.

2. Participated 5days online Faculty Development Program (FDP) on "Recent Advances in Chemical and Molecular Science" from 31st July 2023 - 4th August 2023 organized by Amity University, Uttar Pradesh, Noida.

3. Participated in UGC sponsored 3rd online 'Refresher Course' in Chemistry organized by Gujarat University from 21/06/2022 to 04/07/2022

PROFESSIONAL MEMBERSHIP

Life member of *American* Peptide Society (Membership No 4952)

M.Sc. PROJECT (REVIEW WRITING) SUPERVISED

Ongoing (2026)

Sl.NO	Name	Title
1	Shreya Mukherjee	Recent Progress on the Cupper Catalyzed Synthesis of Quinazoline and Quinazolinone.
2	Salma Ansari	Recent Advances in Inverse-Electro-Demand Diels Alder Reactions.

Completed (2025)

1	Rupchand Bera	Application of Reverse Electron-Demand Diels-Alder Reaction in Total Synthesis.
2	Priyanka Saha	Metal catalyzed C4 and C3 alkylation of Indole

B.Sc. PROJECT (Review Writing) SUPERVISED

Completed (2025)

1	Akimuddin Sk	Skeletal Editing Through Carbon Atom Insertion, Deletion and Transmutation (Overview and Progress)
2	Parimal Karmakar	Metal Catalysed Alkylation and Arylation of Indole
3	Subhadeep Halder	Metal Catalysed Carbene Insertion Reaction
4	Prianshu Das	Aza Diles-Alder Reaction in Total Synthesis

Completed (2024)

1	Parag Mondal	Exploring the Therapeutic potential of Coumarin and Its Derivative: A journey into Drugs Developemnts and Pharmaceutical Applications.
2	Ranit Das Kabiraj	Synthesis of Coumarin
3	Saikat Halder	Biological Application of Coumarin

Completed (2023)

1	Pritam Dey	Reactions of Benzyne And Its Applications to the Natural Product Synthesis
2	Jahidul Islam	Transition Metal Catalyzed Reactions Involving Arynes: An Overview
3	Atindria Saha	Diels-Alder Reaction: Application to the Natural product Synthesis
4	Akshay Kumar Das	Synthetic methods of Benzyne
5.	Sambit Banerjee	Intramolecular and Intermolecular Ene Reaction of Aryne

Completed (2021)

1	Srikanta Mondal	Biodegradable Polymers and It's Role in Drug Deliver

ADMINISTRATIVE EXPERIENCE

June, 2026 – Present	**Assistant Registrar** (Acting), Murshidabad Maharaja Krishnanath University, Berhampore
June, 2026 – Present	**Nodal Officer**, e-samarth portal, Murshidabad Maharaja Krishnanath University, Berhampore
June, 2026 – Present	Covenor, Funds procurement committee for furniture of Murshidabad Maharaja Krishnanath University, Berhampore
Mar, 2026 – Present	Head Examiner UG Examination, Murshidabad Maharaja Krishnanath University, Berhampore
Mar, 2026 – May 2026	Head Examiner of UG practical Examination
Mar, 2026 – Present	Covenor, West Bengal Health Scheme, Murshidabad Maharaja Krishnanath University, Berhampore

June, 2022– Present	Member, Board of Studies (**UG and PG**) of Murshidabad Maharaja Krishnanath University, Berhampore
Mar, 2023 – Mar, 2025	Head of the Department, Krishnath College, Berhampore, Murshidabad
May, 2024– Present	Member, Banglar Uchasikha Portal Committee, Murshidabad Maharaja Krishnanath University, Berhampore
May, 2024– Present	Member, Welfare of backward Caste and Tribes, Murshidabad Maharaja Krishnanath University, Berhampore

PROGRAMMES ORGANIZER/ COORDINATOR

Name of the Programme	Role	Sponsored By	Date
Celebration of Raja Krishnath Day	Secretory	Murshidabad Maharaja Krishnanath University	5-01-2026
Emerging Trends in Chemical and Biological Sciences	Secretory	Krishnath College & Indian Photobiology Society	10-12- 2024

DECLARATION

I hereby declare that all information furnished in this CV is true and correct to the best of my knowledge.

Place: Murshidabad, India (**Dr. Tapan Kumar Pradhan**)

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