

Curriculum Vitae

Dr. Tapan Kumar Jena

DOB: 01-11-1991

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Contact: 8464094296

Indian Institute of Technology Hyderabad (IITH)



Personal Summary:

Motivated, dedicated synthetic organic chemist with good research publications. Good team member and strong open-minded productive collaborator for interdisciplinary tasks. Can work on collaborative as well as independent level research projects with equal ease.

Research Interests:

- ✓ Total Synthesis.
- ✓ Heterocycle/Indenone Synthesis/Medicinal Chemistry.
- ✓ Peptide Synthesis/Nucleotide Chemistry.
- ✓ Development of new synthetic methodologies

Professional Experience:

Reviewer:

Experience in review international chemistry journal paper: *Synthetic communication*

Industrial work experience:

Company: Sai Life Sciences Ltd. Shameerpet, Hyderabad, Telangana.

Area: Multi-step synthesis (Nucleotide Chemistry), Natural product Synthesis, Medicinal Chemistry

Position/Department: Associate Research Scientist, Process Research and Development (PR&D)

Responsibilities: Process optimization, new synthetic route design, process development in kilo-scale, process write-up, weekly report writing, RMC preparation, guiding the M.Sc chemists and delivering the final target compounds in time, trouble shooting, attending the Telecon with clients, making quotation, and chemical/glassware ordering.

Duration: January 2021 to July 2022

Academic Record:

Post-doctoral work:

Area: Indenone Synthesis and their biological studies

Duration: Aug 2020-2nd Jan 2021

Supervisor: Prof. Faiz Ahmed Khan

Institute: Indian Institute of Technology Hyderabad (IITH)

Doctor of Philosophy (PhD):

Area: Organic Chemistry

Duration: Jul-2014 to Jul-2020

Thesis Supervisor: Prof. Faiz Ahmed Khan

Thesis Title: *Ambiphilicity of Methyl Enol Ethers: Access to Dihydrobenzofurans, Tetrahydrobenzofuranone, Thiazolines, Indoles, and Diarylpropane Natural Products.*

Institute: Department of Chemistry, Indian Institute of Technology Hyderabad (IITH), India.

Master of Science (Organic Chemistry):

Duration/Class: 2011-2013, Organic Chemistry (First class, 85%),

University: Khallikote college (Autonomous), Berhampur, Berhampur university, Odisha, (India).

Bachelor of Science (Chemistry, Physics and Math):

Duration/class: 2008-2011, 1st Class Chemistry Hon. with Distinction (68%), **College:**

Science College Hinjilikatu, Odisha, India.

Leadership/Mentoring/Additional Responsibilities During Ph.D.

- Actively engaged as **Teaching Assistant** (TA) for B. Tech over 2 years (2015 & 2016) at the Department of Chemistry, Indian Institute of Technology Hyderabad (IITH), India.
- Actively involved in the co-ordination and assistance of Ph.D (2), M.Sc. project students (5), and summer intern students (2) for conducting reactions, writing scientific journals, thesis, at Indian Institute of Technology Hyderabad (IITH), India.
- Took the responsibility of all project related work (making purchase order of chemicals, instruments, submitting the bills and Utilization Certificate after financial year end in R & D) for the projects DBT, DST-SERB, CSIR grants.

Fellowships & Awards:

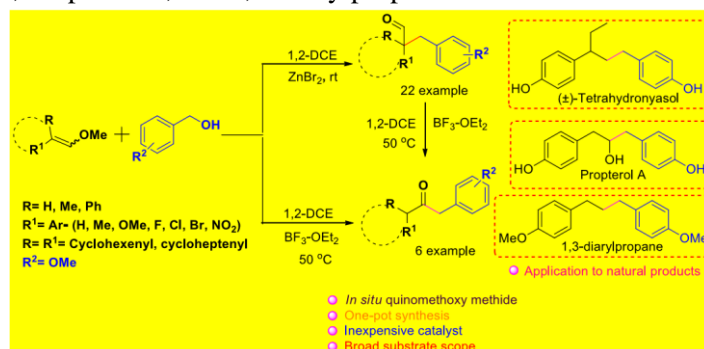
1. Qualified the Graduate Aptitude test in Engineering (GATE), India (**2014**).
2. Junior Research Fellowship (JRF) Award - Graduate Aptitude test in Engineering (GATE), New Delhi, India (**2014**).
3. Senior Research Fellowship (SRF) Award - Graduate Aptitude test in Engineering (GATE), New Delhi, India (**2016**).

Analytical Skills and Highlights:

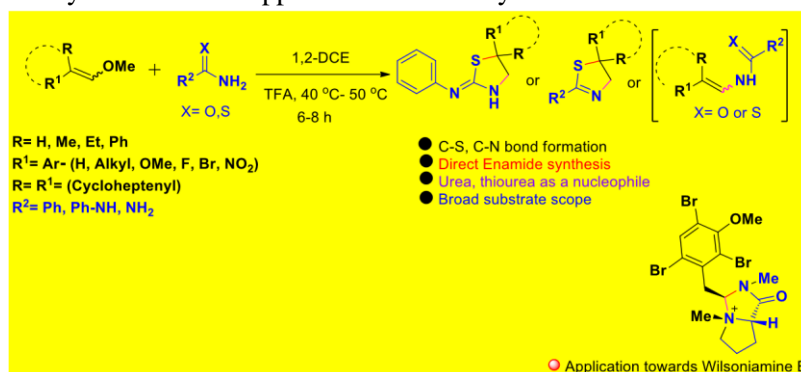
- Experience in conducting air, moisture sensitive reactions even at lower temp (-80 °C).
- Familiarize handling organometallic reagents, cross-coupling reactions, Schlenk-type glassware, ElectraSyn apparatus.
- Experienced in chromatographic purifications (or flash chromatography), crystallization methods, TLC analysis using different charring solutions and spectroscopic techniques as well as solving complex problems related to structure elucidation.
- Skills in interpretation of the spectral results of NMR (COSY, NOESY, HSQC) on BRUKER 400 MHz NMR Spectrometer, HPLC, LC-MS.
- Handled the instruments FTIR, Polarimeter.
- Good working knowledge in most of the chemical databases (SciFinder, Scopus, Web of Science, ChemBio-Draw, and Reaxys).

List of Publications:

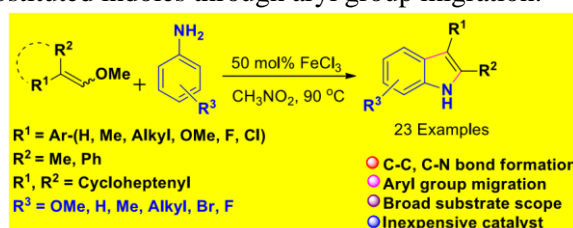
1. **Tapan Kumar Jena, Faiz Ahmed Khan.** *J. Org. Chem.* **2019**, *84*, 21, 14270-14280. Direct α Benylation of Methyl Enol Ethers with Activated Benzyl Alcohols: Its Rearrangement and Access to (\pm)-Tetrahydronyasol, Propterol A, and 1,3-Diarylpropane



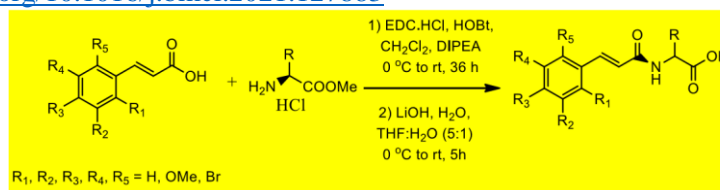
2. **Tapan Kumar Jena, Faiz Ahmed Khan.** *Tetrahedron Lett.* **2020**, *61*, 151675 doi.org/10.1016/j.tetlet.2020.151675. Acid mediated synthesis of thiazolines, thiazoles and enamide derivatives from methyl enol ethers: Application towards synthesis of wilsoniamine B.



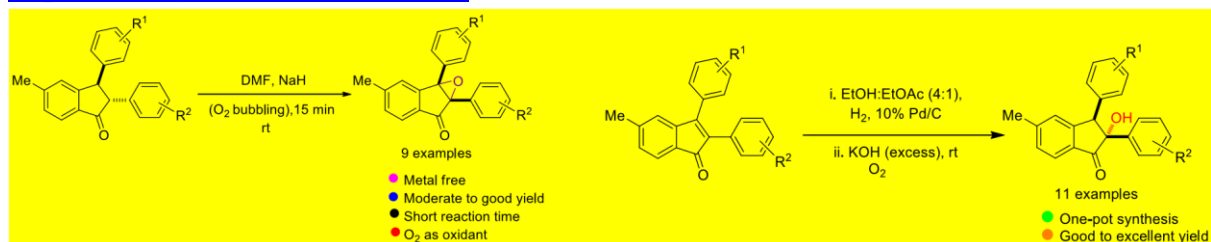
3. **Tapan Kumar Jena, Faiz Ahmed Khan.** *Tetrahedron Lett.* **2020**, *61*, 152583. DOI: <https://doi.org/10.1016/j.tetlet.2020.152583>. $FeCl_3$ catalyzed intermolecular reaction between enol ethers and anilines: Access to 2,3-substituted indoles through aryl group migration.



4. Shivaji Narayan Khadake^a, Shaik Karamathulla^a, **Tapan Kumar Jena^a**, Mohan Monisha^b, Nikhil Kumar Tuti^b, Roy Anindya^{*.b}, **Faiz Ahmed Khan^{*.a}**. Synthesis and antibacterial activities of marine natural product Ianthelliformisamines and Subereamine synthetic analogues. *Biorg.Med.Chem.Lett.* **2021**, 127883. doi.org/10.1016/j.bmcl.2021.127883



- Sarwat Asma Ziya Ahmad, **Tapan Kumar Jena**, **Faiz Ahmed Khan***. Alkyl Enol Ethers: Development in Intermolecular Organic Transformation (Review Article), *Chem. Asian J.* **2021**, <https://doi.org/10.1002/asia.202100277>.
- Tapan Kumar Jena**, **Faiz Ahmed Khan**. Concise Synthesis of Phenolic Diarylpropane Natural products. (Under review)
- Rollania Negi, **Tapan Kumar Jena**,^a Jyoti, [Nikhil Kumar Tuti](#),^b [Roy Anindya](#),^b **Faiz Ahmed Khan***^a Solvent Controlled Synthesis of 2,3-Diarylepoxy Indenone, α -Hydroxy Diarylindanones, and their evaluation as inhibitors of DNA alkylation repair. *Org. Biomol. Chem.*, 2022, 20, 5820-5835 <https://doi.org/10.1039/D2OB00595F>



Poster/Oral Presentations:

- A poster presentation entitled as “Acid promoted synthesis of dihydrobenzofuran derivatives from enol ethers and phenols” **Tapan Kumar Jena** presented in **Chemistry In-House Symposium 2018, March 10, 2018** at Indian Institute of Technology Hyderabad.
- An oral presentation entitled as “Direct α -Benzylation of Methyl Enol Ethers with Activated Benzyl Alcohols: Its rearrangement and Access to (\pm)-Tetrahydronyasol, Propterol A and 1,3Diarylpropane” **Tapan Kumar Jena** presented in **Emerging Trend In Chemical Science (ETCS)-2020, Feb 13, 2020** at Gauhati University, Assam, India.

Personal Information and Address:

Date of Birth: 1st Nov. 1991

Sex: Male

Nationality: Indian

Village: Sunamohi, Kullagada

Dist.: Ganjam, State: Odisha,

India, Pin: 761106.

Linguistic Abilities: English, Hindi, Telugu, Odia

Reference:

Prof. Faiz Ahmed Khan

Professor

Department of Chemistry

Indian Institute of Technology

Hyderabad (IITH), Kandi

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