

CURRICULUM VITAE

Name: Dr. Biswajit Panda

Date of Birth: 1st January 1984

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h-index = 10



Current Position: (Since 2015)

Assistant Professor,
Department of Chemistry,
City College,
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Kolkata-700009, India

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Educational Qualification:

Post-Doctoral Fellow (2013-2015): Under the supervision of **Prof. T. Y. Luh**, at the Department of Chemistry, **National Taiwan University, Taiwan.**

Area of interest: Synthesis of polycyclopropene based polymeric ladderphanes and synthesis of low disperse polyamides.

Ph.D. (December, 2012): Under the supervision of **Prof. T. K. Sarkar**, at the Department of Chemistry, **Indian Institute of Technology Kharagpur, India.**

Area of interest: Organic and Organometallic Chemistry

Thesis title: Catalysis by Gold Alone and in Combination with Palladium: Methodology Developments and Total Synthesis of Natural Products

Master of Science: (2006, Chemistry): First Class, 83.5 % (3rd rank, Win Merit Cum Means (MCM) Scholarship), **IIT Kharagpur**, West Bengal, India.

Area of interest: Organic and medicinal Chemistry

Thesis title: Towards the Synthesis of Optically Pure Conformationally Restricted Analogues of Nicotine

Bachelor of Science: (2004, Chemistry Honours): First class (1st rank, win Silver medal), Prabhat Kumar College, Contai, Vidyasagar University, W. B., India.

Higher Secondary: First division (1st rank in School), Egra J. L. High School

Secondary: First division (1st rank in School), Lalat High School

Teaching Experiences:

(a)**Under-graduate Level:** College/Univ./Institute/No. of Years/Pass/Hons.:

- (i) IIT Kharagpur/ 3 years (6 semesters)/ B.Tech tutorial
- (ii) City College, Kolkata... 5 years 3 months (Both Hons and Pass)

(b)**Post-graduate Level:** Name of the Univ./Institute.

- (i) IIT Kharagpur/ 2 years (4 semesters)/ M.Sc practical
- (ii) Scottish Church College, 3 years (one semester every year) theory
- (iii) Medinipur College, 1 year, theory

Administrative/Professional Experience:

- (i) Worked as a **member of examination committee** for Calcutta university examination at City College centre (3 years).

(ii) Working as a **member of Marks upload committee** for Calcutta university examination results at City College centre.

(iii) Working as a **member of Admission committee** for college admission at City College centre.(4 years)

(iv) Working as a **member of Research and Development committee** for college admission at City College centre.(2 years)

(v) Worked as **external and internal examiner** for Hons and Pass practical examination under Calcutta University.

(vi) Working as a **member of editorial board** for city college journal.

(vii) Worked as **convener of an international seminar RTMC-2018** held on 10th January 2018 at City College.

(viii) Worked as **member of scientific committee of a national conference “Future India: Science and Technology” FIST-2019** held on 27-28th February 2019 at City College in collaboration with Indian Science Congress Association, Kolkata chapter.

(ix) Worked as **Jt. Convener of registration committee of a national on-line seminar “Covid-19 Pandemic- Challenges and Conquest For Students”** held on 26th June 2020 in collaboration with Department of Zoology, City College.

Members:

(i) Member of **Indian Chemical Society** (Life Member), Membership No.- F/7967 (LM)

(ii) Member of **The Indian Science Congress Association** (Life member) Membership No.-LM35253

- (iii) Associate Editorial Board Member of journal, "**Current Microwave Chemistry**", Bentham Science
- (iv) Associate Editorial Board Member of journal, "**Natural Product Journal**", Bentham Science
- (v) Associate Editorial Board Member of journal, "**Current Catalysis**", Bentham Science
- (vi) Associate Editorial Board Member of journal, "**Letters in Organic Chemistry**", Bentham Science
- (vii) Member of **The Catalysis Society of India**(Life member)
Membership No.-
- (viii) Member of **The Catalysis Society of India**(Life member)
Membership No.-LM1083, dated-28.02.2022
- (ix) Member of **Chemical Research Society of India**(Life member)
- (x) Member of **The Royal Society of Chemistry**
- (xi) Member of **The American Chemical Society**
- (xii) Member of **Chirantan Rasayan Sanstha**(Life member)

Awards and Honors:

*CSIR-UGC NET (June, 2006): Qualified for JRF (CSIR).

*CSIR-UGC NET (December, 2006): Qualified for
JRF(UGC) .

*GATE (2006): Qualified, All India Rank: 61

*JAM (2004): Qualified, All India Rank: 87

*MCM SCHOLARSHIP in M.Sc (Merit Cum Means Scholarship)
St

*SILVER MEDAL in B.Sc (For 1st rank in college out of all
students from all Departments)

St
*Bhikhari Mohan award on class XII (For 1st rank in school out of all students
from Science, arts and commerce sections).

*Selected as "Tetrahedron Letters Top 25 Cited Author for 2010-2011", Elsevier, UK.

*Research Works Cited in thirteen different books including in March's
Advanced Organic Chemistry.

* Poem published in Magazine at IIT Kharagpur.

* National Science Council (NSC) fellowship- 2013

* National Taiwan University (NTU) fellowship- 2014

- * Certificate of Recognition as Reviewer from American Chemical Society, 2015
- * Certificate of Recognition as Reviewer from American Chemical Society, 2016
- * Received “**Best Paper Award**” on International Seminar on “Recent Advances in Molecules and Materials [RA2M-2018],” Haldia Institute of Technology, 2018
- * Received “**Oral Presentation Competition, 2nd prize**” on SERB sponsored national Seminar on “The Development of Chemistry House on the Pillar of Periodic Table’, Celebration of 150th anniversary of periodic table.” held on 20th November 2019 at Prabhat Kumar College, Contai, Purba Medinipur, West Bengal.
- * Received “Bharat Gourav Award” from India International Friendship society at New Delhi on 28th March 2019.

Professional Competence:

- About twelve years research experience in the field of Organic Synthesis and organometallic chemistry.
- Expertise in target-oriented multistep organic synthesis.
- Expertise in synthesis, purification and characterization of polymers.
- Proficient in performing low temperature reactions, handling of air and moisture sensitive reagents and reactions.
- Efficient in carrying out organic and organometallic transformations on milligram to multigram scale.
- Familiar to run NMR, IR, HRMS, HPLC, Polarimeter, UV-VIS spectrometers, fluorescence spectrometer, GPC, centrifuge.

Participated Conferences:

1. Nano particals & its applications (UGC) 2006, India.
2. Chemical Research Society of India (Kolkata Chapter) symposium 2006, India.
3. Research Scholar Day (IIT Kharagpur) -2009, 2010, 2011, India.

4. International chemistry year conference (DJSRTC-2011) at IIT Kharagpur, India. (21-23 Oct. 2011)
5. Symposium on Inorganic Chemistry at Interface, IIT Kharagpur-2012, India.
6. International Symposium on Novel Aromatic Compounds (ISNA-15), Taiwan.
7. American Chemical Society Symposium- *ACS on Campus*-2013, NTU, Taiwan.
8. Solar Photo-Voltaic Installation Workshop- UGC Sponsored Seminar, P. K. College, Contai, West Bengal, India (17-18 June 2015).
9. India-Bangladesh Structural Chemistry Conference, IISER Kolkata, West Bengal, India (18-19 September 2015).
10. National Symposium on “Current Perspectives in Chemical Research” held on March 30, 2016 at University of Calcutta.
11. UGC Sponsored National Seminar on “Recent Development in Bio-Active Molecules (RDBAM-2016)” held on 4-5 August, 2016, at Haldia Government College, Haldia, West Bengal, India.
12. UGC Sponsored National Seminar on “Chemistry in Human Life-Current Aspect” held on 9-10 December, 2016 at Gurudas College, Kolkata, West Bengal, India.
13. Advances in Chemical Science and Technology (ACST-2016) - UGC Sponsored Seminar, Jadavpur University & Bankim Sardar College, Jadavpur, West Bengal, India (12-13 December, 2016).
14. UGC Sponsored National Seminar on “Recent Advances in Chemical Science and Application (RACSA-2017)” held on 6-7th January, 2017, at Vidyasagar College for Woman, Kolkata, West Bengal, India.
15. International Symposium on “Facets of Chemistry in Biology (FOCB-II)” held on January 12, 2017 at Department of Chemistry, St. Xavier’s College, Kolkata.

16. National Symposium on “Emerging Trends in Chemical Science” held on March 30, 2017 at University of Calcutta.
17. “Current Trends in Nanoscience and Nanotechnology” on 27 April, 2017 at Amity University, Kolkata.
18. Asian Meeting on Metal Oxide Assemblies 2017 (AMMOA-2017) IISER Kolkata, West Bengal, India (9-10 May 2017).
19. SASChem 2017 (An International Seminar) - IISER Kolkata, West Bengal, India (29-30 August 2017).
20. “Analytical Solution for Today’s Science” held on October 12, 2017 at Kolkata, organized by Agilent Technologies.
21. Scientific conference to celebrate 70th anniversary of India-Russia diplomatic relation (1947-2017)- IISER Kolkata, West Bengal, India (26 October 2017).

22. National Level Science Academys’s Lecture Workshop on “ Fundamentals of Chemistry” held on 17th &18th November, 2017 at Bethune College, Kolkata.
23. National Seminar on “Recent Trends in Chemical Science: Issues & Challenges” held on 29th & 30th November, 2017 at Deartment of Chemistry, Surendranath College, Kolkata
24. National Seminar on “Material Chemistry For Better Tomorrow (MCBT 2017) held on November 7, 2017 at Asutosh College, Kolkata.
25. A National Level Seminar on “Nurturing Chemistry: Bonding and Beyond” held on December 5, 2017 at Department of Chemistry, The Bhawanipur Education Society College, Kolkata.
26. International Seminar on “Science: Past, Present & Future” on 12th December, 2017 at Syamsundar College, Burdwan.
27. National Level Science Academys’s Lecture Workshop on “Modern Trends in Chemistry and Physics” held on 17th-19th December, 2017 at Bhairab Ganguly College, West Bengal.
28. International Conference on Chemistry for Human Development (ICCHD-2018) held on 8-10th January, 2018.
29. Workshop on “CHOICED-BASED CREDIT SYSTEM” CBCS in Chemistry held on 24.05.2018 at Gokhale Memorial Girls’ College.
30. Career Advancement Scheme (CAS) held on 10th March, 2018 at Seth Soorajmull Jalan Girls’ College, Kolkata.
31. International Conference on “Facet of Basic Science and Applications (FBSA)”, held

- on February 5-7, 2018 at Bijoy Krishna Girls College, Howrah, W. B, India.
32. Two Days International Conference on “Green Engineering and Sustainable Developments”, held on 20 -21th August, 2018 at Mugberia Gangadhar Mahavidyalaya, W. B, India.
 33. National level Professor Asima Chatterjee Sentenary Seminar (PACCS-2018) on “Recent Inventions in Chemical and Allied Sciences” organized by Professor Asima Chatterjee Foundation, held on 23rd September, 2018 University of Calcutta (Rajabazar Campus) .
 34. National Level Seminar on “Recent Trends in Chemical Sciences” held on October 5-6, 2018 at Surendranath Evening College, Kolkata.
 35. International Seminar on “Recent Advances in Molecules and Materials [RA2M-2018],” held on 2nd & 3rd August, 2018 at Haldia Institute of Technology, Haldia. (Received Best Paper Award).
 36. National Level Symosium on “Life and Works of professor Asima Chatterjee: A Centenary Tribute” held on 29th August, 2018 at Scottish Church College, Kolkata.
 37. National Seminar on “Emerging Frontiers in Material Science” held on 15th-16th February, 2019 at Behala College.
 38. National Seminar on “Modern Research Trends in Chemistry (MRTC-2019)” held on 22nd-23rd February, 2019 at St. Xavier’s College, Kolkata.
 39. National Conference on “Future India: Science and Technology” held on 27th & 28th February, 2019 at City College, Kolkata.
 40. International Conference on “Emerging Technologies for Sustainable Develoment” held on 5th & 6 th March, 2019 at Government College of Engineering and Leather Technology, Kolkata, India.
 41. National Conference on Functional Molecules (NCOFM-2019) held on 30th March, 2019 at University of Calcutta.

List of Publications

(i) Independent Publications (May, 2015-present)

1. Organocatalitic C-H Bond Functionalizations for the Synthesis of Heterocycles , *Current Organocatalysis*, **2023**, just accepted.
(DOI: [10.2174/2213337210666230213120833](https://doi.org/10.2174/2213337210666230213120833))
ISSN: 2213-3372 (print); 2213-3380 (web)
2. Use of Gold Nanoparticles in the Synthesis of Heterocyclic Compounds, *Letters*

in Organic Chemistry **2023**, 20 (1), 18-27.
ISSN: 1570-1786 (print); 1875-6255 (web)

Impact factor: 0.73

3. The Recent Developments and Applications of Photoremovable Protecting Groups in Organic Chemistry, *Current Chinese Chemistry*, 2022, 2(2), 13.
4. Progress in Catalytic Decarboxylative Oxidative C-H Alkynylation, *Current Catalysis*, 2022, 11(1), 2-15.
5. DMF as CO Surrogate in Carbonylation Reactions: Principles and Application to the Synthesis of Heterocycles, *Catalysts* **2021**, 11(12), 1531;
Impact Factor: 4.501, **ISSN:** 2073-4344
6. Synthetic Methods for the Preparation of Conformationally Restricted Analogues of Nicotine, *Molecules* **2021**, 26(24), 7544
ISSN: 1420-3049
Impact factor: 4.927
7. Sonogashira coupling of arenediazonium salts: discovery and developments, *Arkivoc*, 2021, part ix 177-199.
ISSN:1551-7004
Impact factor: 1.253
8. Joy and Challenges of Alkynylation of Arenes and Heteroarenes through Double C HFunctionalizations, **Panda, B.**, *Asian J. Org. Chem.* **2020**, 9, 492-507.
ISSN: 2193-5815
Impact factor: 3.130
9. Total Synthesis of Xyloketal and Related Natural Product Alboatrin: Strategies and Tactics, **Panda, B.**, *ChemistrySelect* **2019**, 4, 9143–9164.

ISSN:2365-6549
Impact factor: 1.72
10. Total Synthesis of Bruguerols: Strategies and tactics, **Panda, B.**, *Arkivoc*, **2019**, i, 293-303.

ISSN:1551-7004
Impact factor: 1.253
11. Small-Ring Metathesis: Delights and Difficulties, **Panda, B.**, *Asian J. Org. Chem.* **2018**, 7, 2386–2396.

ISSN:2193-5815
Impact factor: 3.130
12. Bioactivity of Marine Natural Product Xyloketal, Panda, B* and Gooyee, A. K., *Letters in Organic Chemistry*, 2021, 18(7), 507-512 .
ISSN: 1570-1786 (print); 1875-6255 (web)
Impact factor: 0.73
13. Microwave-Assisted Homogeneous Gold Catalyzed Organic Transformations, **Panda, B.** *Current Microwave Chemistry*, 2020, 7 (3), 166-182.

ISSN: 2213-3364 (Online), 2213-3356 (Print)

Impact factor: NA

14. Synthesis and characterization of solid-phase super acid catalysts and their application for isomerization of *n*-alkanes, Dhar, A.; Dutta, A.; Sharma, P.; **Panda, B.** Roy, S., *Chem. Eng. Commun.* **2017**, *204*, 1341-1356.

ISSN: Print 0098- 6445 Online ISSN: 1563-5201)

Impact factor: 1.282

15. Iron Catalysis: Rust-Free Future, **Panda, B.**, *Chemistry & Biology Interface*, **2019**, *9,6*, 273-276

ISSN: 2249 – 4820

Impact factor: NA

16. Towards the template synthesis of conjugated pyrrole based oligo-heteroaryls, **Panda, B.**, *J. Indian Chem. Soc.*, **2020**, *97*, 2287-2290.

ISSN Number: 0019 4522

Impact factor: 0.3

17. Synthetic Studies Directed Towards (-)-Chrysanthone A: Facile Synthesis of a Tricyclic Lactone Intermediate, **Panda, B.**, *J. Indian Chem. Soc.*, **2019**, *96*, 231-239.

ISSN Number: 0019 4522

Impact factor: 0.3

18. Methoxymethylation and benzyloxymethylation of aryl bromides, **Panda, B.**, *J. Indian Chem. Soc.*, **2018**, *95*, 981-985.

ISSN Number: 0019 4522

Impact factor: 0.3

19. Gold Catalysts with Highly Electronegative Counter Ions: An Investigative Overview, *Communique* **2019**, *12*, 1.

ISSN Number: 09738584

Impact factor: NA

20. Happiness through the Eye of a Chemist, **Panda, B.**, *International Journal of HIT Transaction on ECCN*, **2018**, *4 (2A)*, 15-19

ISSN Number: 09736875

Impact factor: NA

21. Love through the Eye of a Chemist, **Panda, B.** *Communique*, September **2018**, *11(1)*, 9-18.

ISSN Number: 09738584

Impact factor: NA

22. Happiness: A Chemist View, **Panda, B.** *Communique* **2017**, *10*, 51-56

ISSN Number: 09738584

Impact factor: NA

23. Cerium(III) Chloride Mediated Addition of Grignard Reagents to chloro- Azaphthalide ; 2-(4,6-Dichloro-2-hydroxymethyl-pyridin-3-yl)-propan-2-ol(gem-dimethyl alcohol), **Panda, B., A. Chemist, ChemSpider SyntheticPages, 2008**, 266, <http://cssp.chemspider.com/266>, DOI: 10.1039/SP266
ISSN: 0193-6484

Impact factor: NA

24. Guareschi cyclo-coupling of acetoacetate and cyanoacetamide; 3-cyano-2,6-dihydroxy-4-methylpyridine, **Panda, B., A. Chemist, ChemSpider SyntheticPages, 2008**, 267, <http://cssp.chemspider.com/Article.aspx?id=267> ,DOI: 10.1039/SP267
ISSN: 0193-6484

Impact factor: NA

(ii) Post-Doctoral Publications (with Professor Tien-Yau Luh, NTU, Taiwan)

25. Stereospecific Synthesis of Poly(methylene-E-vinylene) by Ring Opening Metathesis Polymerization (ROMP) of Substituted Cyclopropene Using Grubbs Catalysts, Peng, J-J; **Panda, Biswajit**; Satyanarayana, K; Yang, H-R; Huang, S-L; Huang, M; Chen, C-H; Lai, G; Lai, Y-Y; Luh, T-Y, *Macromolecules* **2019**, *52*, 7749-7755.

ISSN: Print 0024-9297, Web 1520-5835

Impact factor: 5.918

(iii) Doctoral Publications (with Professor Tarun K. Sarkar, IITKGP)

26. Gold Catalysis: Regio- and Stereoselective Total Synthesis of Xyloketal D and Gand Related Natural Product Alboatrin, **Panda, B.**; Sarkar, T. K., *J. Org. Chem.* **2013**, *78*, 2413–2421.

ISSN: 0022-3263

Impact factor: 4.805

27. Gold and palladium combined for the Sonogashira-type cross-coupling of arenediazonium salts, **Panda, B.**; Sarkar, T. K., *Chem. Commun.* **2010**, *46*, 3131- 3133.

ISSN: 1359-7345

Impact factor: 6.290

28. Gold-Catalyzed Benzannulation of Electronically Rich/Rich and Deficient/ Deficient Oxoalkynes with Alkynes, **Panda, B.**; Sarkar, T. K., *Synthesis*, **2013**, *45*,1227–1234.

ISSN: 0039-7881

Impact factor: 2.722

29. Gold and Palladium Combined for the Sonogashira Coupling of Aryl and Heteroaryl Halides, **Panda, B.**; Sarkar, T. K., *Synthesis*, **2013**, *45*, 0817–0829.**ISSN:** 0039-7881

Impact factor: 2.722

30. An approach to highly functionalized quinolines and isoquinolines via a gold- catalyzed benzannulation, **Panda, B.**; Bhadra, J.; Sarkar, T. K., *Synlett*. **2011**, 689-693. **ISSN:** 0936-5214 (print) , 1437-2096(online)

Impact factor: 2.369

31. On the catalytic duo PdCl₂(PPh₃)₂/AuCl(PPh₃) that cannot effect a Sonogashira-type reaction: a correction, **Panda, B.**; Sarkar, T. K., *Tetrahedron Lett.* **2010**, *51*, 301-303. (**Top 25 Most Cited Article 2010-2011**)

ISSN: 0040-4039

Impact factor: 2.125

32. A domino Michael-Dieckmann-Peterson approach to the synthesis of substituted hydroxyquinolines and hydroxyisoquinolines, **Panda, B.**; Basak, S.; Hazra, A.; Sarkar, T. K. , *J. Chem. Res.* **2010**, *34*, 109-113.

ISSN: 1747-5198

Impact factor: 0.668

33. A one-pot tandem oxidation-reduction protocol for the synthesis of cyclic ethers from their diols, **Panda, B.**; Sarkar, T. K., *Tetrahedron Lett.* **2008**, *49*, 6701-6703. **ISSN:** 0040-4039

Impact factor: 2.125

BOOK Publications:

a. Full

Book:

i. "Gold Catalysis and in Synergy with Palladium"... Author
Dr.Biswajit Panda**ISBN** 9789353009007

b. Book Chapter

- i. Organometallic Chemistry: Volume 44, Editors: Nathan J Patmore, Paul I P Elliott, "Homogeneous gold catalysis under microwave irradiation: a greener approach" 2022, page- 68-91, Print **ISBN-** 978-1-83916-689-1, Publisher- **Royal Society of Chemistry**
- ii. "Thorpe-Ingold effect assisted Strained Ring Synthesis" 2022, page-34-42, book-Modern Approaches in Chemical and Biological Sciences, ISBN-978-967-2819-06-6, Publisher-Lincoln University of College, Malaysia
- iii. Proceeding of the International Conference on

“Emerging Technologies for Sustainable Development (ICETSD-19)” , Title: Gold Catalyzed Benzannulation of Pyridine-containing Oxoalkynes: Mechanistic Investigations, Page-68-72.....

Dr. Biswajit Panda **ISBN** 9788182111462.

- iv. Synthetic Studies Directed Towards Synthesis of Xyloketal A , book-Recent trends in CHEMICAL SCIENCE: few relevant issues, ISBN : 978-81-921084-1-4, KISHALOY PRAKASHAN

v.

“The [3+2] Annulation Reactions of Allylsilanes: Discovery and Developments”, 2022, page-41-60, book name “Recent Trends in Chemistry Research”, **ISBN** 978-93-92145-05-6, publisher – Techno World