

Resume

1. Name and full correspondence address

Prof. Niranjan Panda
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National Institute of Technology Rourkela
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2. Email(s) and contact number(s)

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3. Institution: National Institute of Technology Rourkela

4. Date of Birth: 21.06.1976

5. Academic Qualification (Undergraduate onwards)

	Degree	Year	Subject	University/Institute	%age of Marks
1	B. Sc. (Chem.)	1996	Chem. Hons.	Utkal University	74.6
2	M. Sc. (Chem.)	1998	Org. Chem.	Ravenshaw College, Utkal University	77.7 (secured highest %age of marks)
3	Ph.D.	2006	Organic Synthesis	IIT, Kharagpur	

Thesis Title: Generation and Trapping of Pyridine *o*-Quinodimethanes and Their Functional Analogues: Synthesis of Heterolignans and Conformationally Restricted Analogues of Nicotine.

Guide's Name: Prof. T. K. Sarkar , IIT Kharagpur

6. Work experience (in chronological order)

S.No.	Positions held	Name of the Institute	From	To
4	Professor	NIT Rourkela	Feb. 2020	Till date
3	Asso. Professor	NIT Rourkela	01.07.2008	Feb. 2020
2	Asst. Professor	NIT Rourkela	13.07.2006	30.06.2008
1	Postdoc	Technion-Israel Institute of Technology, Israel With Prof. E. Keinan		

7. Publications

Total No. of Publications: 48

Total No. of citation: 1483, h-index: 18; i10-index: 32 (google scholar)

List of Publications

S. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
48	S. Mohapatra and N. Panda*	Thermally Generated Bromine “Cation Pool-”Mediated Oxidation of Indole to 2-Oxindole	<i>Tetrahedron Lett.</i>	142	155109	2024
47	S. K. Gupta and N. Panda*	Palladium-Catalyzed C3-Carbaldehyde Directed Regioselective C2-Thioarylation of Indoles https://doi.org/10.1002/asia.202400272	<i>Chem. Asian J</i>		e202400272	2024
46	S. Maity and N. Panda,*	Access to 2,3-Unsubstitutedimidazo[2,1-b][1,3]benzothiazole Using Ethylene Glycol as a C2 Precursor and Subsequent Regioselective C3-Functionalization	<i>Chemistryselect</i>	9	e20240020	2024
45	P. G. Dalai, S. Swain, and N. Panda*	DMSO-DCE Triggered Chemodivergent C-Methylenation of Electron-Rich Arenes: An Easy Access to Diarylmethanes	<i>J. Org. Chem.</i>	89	2599	2024
44	K. Palit and N. Panda*	Metal-Free Regioselective Chlorosulfonylation of Indoles by Dimethylsulfoxide and 1,2-Dichloroethane	<i>Eur. J. Org. Chem.</i>	2024	e202400110	2024
43	P. G. Dalai, S. Swain, S. Mohapatra and N. Panda,*	Metal-Free C-H Sulfamidation of 1,4-Naphthoquinone in Water	<i>J. Org. Chem.</i>	88	13760	2023
42	S. K. Gupta and N. Panda*	Weak Chelating Group Directed Palladium-catalyzed C-4 Arylation of Indoles,	<i>J. Org. Chem.</i>	88	4254	2023
41	K. Palit, N. Sepay, and N. Panda*	Arylative Methylation of 2,3-Dihydropyrazines and Pyrazinones Using Dimethyl Sulfoxide as a C1 Source	<i>J. Org. Chem.</i>	88	2931	2023
40	P. G. Dalai, and N. Panda,*	Benzannulation and N-Annulation of β -Ketoenamines for Synthesizing Aniline and Pyridine Derivatives Using DMSO as a Methine Source	<i>Adv. Synth. Catal.</i>	364	3736	2022
39	K. Sahoo, and N. Panda*	Iron(III) Chloride Mediated <i>para</i> -Selective C-H Functionalization: Access to C5-Chloro and C5,C7-Dichloro/Dianisyl Substituted 2-Arylbenzoxazoles	<i>Adv. Synth. Catal.</i>	364	1023	2022
38	P. G. Dalai, K. Palit and N. Panda,*	Generation of Dimethyl Sulfoxide Coordinated Thermally Stable Halogen	<i>Adv. Synth. Catal.</i>	364	1031	2022

		Cation Pools for C-H Halogenation				
37	S. Ojha and N. Panda, *	Pd-Catalyzed desulfitative arylation of olefins by N-methoxysulfonamide,	<i>Org. Biomol. Chem.</i>	20	1292	2022
36	P. Mishra, and N. Panda*	Total Synthesis of AGI-7 and Sescandelin from Enol Esters	<i>Chemselect</i>	7	e20220 1791	2022
35	P. Mishra, N. Sepay, N. Panda*	Access to chromone-3-carboxylic acid via silver mediated coupling of 4-hydroxy coumarin and enol ester,	<i>Tetrahedron Lett.</i>	75	153206	2021
34	S. Ojha and N. Panda,*	N-Methoxy arenesulfonamide as a Sulfonyl Equivalent For Palladium-Catalyzed Sulfenylation of Arenes Through C-H Activation	<i>Asian J. Org. Chem.</i>	10	1665	2021
33	S. Maity, S. K. Gupta, and N.n Panda*	Iron(II)-catalyzed Oxidative Coupling of Vicinal Diols and 2-Amino-1,4-naphthoquinone for the Synthesis of Pyrrolonaphthoquinones and Furanonaphthoquinones	<i>Asian J. Org. Chem.</i>	10	3355	2021
32	K. Sahoo, P. Pradhan and N. Panda, *	Access to C4-arylated benzoxazoles from 2-amidophenol through C-H activation	<i>Org. Biomol. Chem.</i>	18	1820	2020
31	S. Ojha and N. Panda,*	Palladium-catalyzed <i>ortho</i> -benzoylation of sulfonamides through C-H activation: Expedient synthesis of cyclic <i>N</i> -sulfonyl ketimines	<i>Adv. Synth. Catal.</i>	362	571	2020
30	N. Panda,* and S. A. Yadav	Ni-catalyzed deacylative oxosulfonamidation of vinyl acetate	<i>Asian J. Org. Chem</i>	8	266	2019
29	N. Panda,* and K. Sahoo	Niranjan Panda,* and Kanchanbala Sahoo, Synthesis of 4-alkenyl benzoxazoles via Pd-catalyzed <i>ortho</i> C-H functionalization of 2-amidophenols	<i>Adv. Synth. Catal.</i>	361	617	2019
28	N. Panda* and S. Ojha	Facile Synthesis of Pyrazoles by Iron-catalyzed Cyclization of Hydrazone and 1,2-diol under Ligand-free Conditions,	<i>J. Organometallic Chem.</i>	861	244	2018
27	N. Panda,* I. Mattan, S. Ojha, C.S. Purohit	Synthesis of medium-sized (6-7-6) ring compounds by iron-catalyzed dehydrogenative C-H activation/annulation,	<i>Org. Biomol. Chem.</i>	16	7861	2018
26	N. Panda* and I. Mattan	One-pot two-step synthesis of 3-iodo-4-aryloxy coumarins and their Pd/C-catalyzed annulation to coumestans,	<i>RSC Adv.</i>	8	7716	2018
25	N. Panda,* S.A. Yadav	Palladium-Catalyzed Oxamidation of Alkenes: A New Approach to Benzoxazolidines,	<i>Tetrahedron</i>	74	1497	2018

24	S. Panda, A. Jadav, N. Panda and S. Mohapatra*	A novel carbon quantum dot-based fluorescent nanosensor for selective detection of flumioxazin in real samples	<i>New J. Chem.</i>	42	2074	2018
23	N. Panda* and D. K. Nayak,	Facile Synthesis of 3(2H)-Furanones	<i>Monatsh. Chem.</i>	149	1093	2018
22	D. K. Nayak, N. Panda*	Synthesis of 2-Aryl Benzoxazoles from Aldoximes	<i>MOJ Bioorg. Org. Chem.</i>	1	32	2017

21	N. Panda,* S. A. Yadav, S. Giri	Palladium-Catalyzed Oxidative Sulfamidation: A Stereoselective Synthesis for Enesulfonamides	<i>Adv. Synth. Catal.</i>	359	654	2017
20	N. Panda,* P. Mishra, I. Mattan	Synthesis of Isocoumarins via Silver(I)-mediated Annulation of Enol-esters	<i>J. Org. Chem.</i>	81	1047	2016
19	N. Panda,* I. Mattan, D. K. Nayak	Synthesis of Dibenzofurans via C-H Activation of ortho-Iodo Diarylethers	<i>J. Org. Chem.</i>	80	6590	2015
18	N. Panda,* A. K. Jena	Cu/Fe-Catalyzed Carbon-Carbon and Carbon-Heteroatom Cross-Coupling Reactions	<i>Org. Chem. Curr. Res.</i>	4	1	2015
17	N. Panda,* and R. Mothkuri	Synthesis of Substituted Oxazoles from Enamides	<i>New J. Chem.</i>	35	5727	2014
16	N. Panda, R. Mothkuri and D. K. Nayak	Copper-Catalyzed Regioselective Synthesis of <i>N</i> -aryl Amides from Aldoximes and Aryl Halides	<i>Euro. J. Org. Chem.</i>		1602	2014
15	N. Panda,* R. Mothkuri, A. Pal, A.R. Paital	Copper -catalyzed Synthesis of α -Naphthols from Enol Esters	<i>Adv. Synth. Catal.</i>	355	2809	2013
14	N. Panda,* A. K. Jena	Fe-catalyzed one-pot Synthesis of 1,3- and 1,3,5-substituted pyrazoles from hydrazones and vicinal diols"	<i>J. Org. Chem.</i>	77	9401	2012
13	N. Panda,* M. Raghavender	Stereoselective synthesis of enamides by Pd-catalyzed hydroamidation of electron deficient terminal alkynes	<i>J. Org. Chem.</i>	77	9407	2012
12	N. Panda,* A. K. Jena, M. Raghavender,	Stereoselective synthesis of enamides by palladium catalyzed coupling of amides with electron deficient olefins	<i>ACS catalysis</i>	2	539	2012
11	N. Panda,* A. K. Jena, S. Mohapatra,*	Heterogeneous magnetic catalyst for S-arylation reactions	<i>Applied Catalysis A: General</i>	433-434	258	2012
10	N. Panda,* A. K. Jena, S. Mohapatra	Ligand-Free Fe-Cu Co-catalyzed Cross-coupling of Phenyl Acetylene with Aryl Halides	<i>Chemistry Letters</i>	40	956	2011
9	N. Panda,* A. K. Jena, S. Mohapatra, S. R. Rout	Copper Ferrite Nanoparticle Mediated N-Arylation of Heterocycles: A Ligand Free Reaction	<i>Tetrahedron Letters</i>	52	1924	2011
8	N. Panda,* S. Karmakar, A. K. Jena,	Synthesis and antibacterial activity of some novel pyrazolopyridine derivatives Chemistry of Heterocyclic compounds	<i>Chem. Heterocyclic Comp</i>	46	1500	2011
7	N. Panda,* H	Decolourization of Methyl	<i>J. Hazard.</i>	185	359	2010

	Sahoo, S. Mohapatra	Orange	Mater.			
6	S Mohapatra,* N. <u>Panda,</u> Pramanik	Boronic acid functionalized superparamagnetic iron oxide nanoparticle as a novel tool for adsorption of sugar	Materials Science and Engineering: C	29	2254	2009
5	T. K. Sarkar,* A. Hazra, P. Gangopadhyay, <u>N. Panda</u> , Z. Slanina, C.-C. Lin, H.-T. Chen,	Synthesis of the necine bases (\pm)-macronecine and (\pm)-supinidine via an aza-ene reaction and allylsilane induced ring closure,	<i>Tetrahedron</i>	61	1155	2005
4	T. K. Sarkar, N. Panda, S. Basak	A Sequential Pummerer-Diels-Alder Route for the Generation and Trapping of Furo[3,4-c]pyridines: Synthesis of Heterocyclic Analogues of 1-Arylnaphthalene Lignans	<i>J. Org. Chem.</i>	68	6919	2003
3	H.-K. Fun,* A. Usman, I. A. Razak, S. Chantraprom, T. K. Sarkar, S. Basak, <u>N. Panda</u>	Dimethyl 1,3-dichloro-8-phenyl-5-phenylsulfanylisouquinoline-6,7-dicarboxylate	<i>Acta Cryst.</i>	E58	0215	2002
2	Usman, T. K. Sarkar, <u>N.</u> <u>Panda</u> , H.-K. Fun,*	Methyl (1 SR,8 RS,10 SR)-3,5-dichloro-1-(4-methoxyphenyl)-8-(phenylthio)-11-oxa-4-azatricyclo[6.2.1.0] ^{2,7} undeca-2,4,6-triene-10-carboxylate	<i>Acta Cryst.</i>	E58,	01402.	2002
1	T. K. Sarkar,* S. Basak, <u>N. Panda</u>	A Pummerer-based generation and trapping of furo[3,4-c]pyridines: an approach to nitrogen containing heterocyclic analogues of 1-arylnaphthalene lignans	<i>Tetrahedro nLett.</i>	43	1341	2002

Ph.D. Awarded as PI

Sl. No.	Name of the student	Thesis Title	Year of Award	Current position of the student
1	Ashis Kumar Jena	Cu/Fe-Catalyzed C-C, C-N and C-S Cross-Coupling Reactions: Synthesis of Biologically Important Heterocycles	2015	Asst. Professor at Maharaja Sriram Chandra Bhanjadeo University (Erstwhile North Orissa University) Odisha, Odisha
2	Raghavender Mothkuri	Generation of Enamides and Enol Esters: Their Application in Oxazole and α -Naphthol Synthesis	2015	Scientist, Natco Pharma Hyderabad
3	Dinesh Kumar	C-N and C-O Bond Formation	2018	Lecturer, in Odisha state

	Nayak	Reactions: Synthesis of N-Aryl Amides, Benzoxazoles and 3(2H)-Furanones		college.
4	Irshad Mattan	Hypervalent iodine-mediated synthesis of ortho-iododiaryl ether and subsequent annulation to biologically potent heterocycles	2018	Research Scientist - Jubilant Biosys Limited
5	Sushree Arpitabala Yadav	Synthesis of Enesulfonamides and Benzoxazolidines Through Transition-metal Catalyzed C-N Bond Formation	2019	Post-doctoral Fellow at IIT Bombay
6	Priyadarshini Mishra	Enol ester: A Versatile Synthetic Equivalent for Isocoumarin and Chromone Synthesis	2022	Postdoctoral fellow at IIT Kanpur
7	Subhadra Ojha	Transition Metal-Catalyzed C-C and CHeteroatom Bond Formation through Radical Process	2023	Post-doctoral Fellow at IIT Gandhinagar
8	Kanchanbala Sahoo	Transition Metal-Promoted Synthesis of Remotely Functionalized 2-Aryl Benzoxazoles from 2-Amidophenol through C-H Functionalization	2023	Post-doc at IISER Berhampur
9	Pallaba Ganjan Dalai	Thermally Stable Cation-Pools in C-X (X = Halogen) and C-C Bond Formation	2024	NIT Rourkela

List of Sponsored Projects implemented/continuing (As PI)

1. **Project Title:** Generation and Trapping of Furo[3,4-c]pyrazoles: Synthesis of Biologically Potent Heterocyclic Analogues. Ref: SR/FTP/CS-101/2006 Dt. 27.08.2007
2. **Project Title:** Magnetic Nanoparticle Mediated Cross-coupling Reactions: Synthesis of Biologically Potent Molecules. Reference: SR-S1/OC-60/2011 Dt. 30.04.2012
3. **Project Title:** Iron-catalyzed cross-coupling reactions: An expedite synthesis of Heterocycles Reference: 2012/37C/3/BRNS Dt. 28-May- 2012
4. **Project Title:** Development and reactions of stereoselective enamids and enol-esters Reference: SB/S1/OC-21/2014 Dt. 31-10-2014
5. **Project Title:** Transition-Metal Catalyzed C-H activation and functionalization: Synthesis of Heterocycles. Reference: : 02(0278)/16/EMR-11 dated 6.12.2016
6. **Project Title:** Reusable Transition Metal Catalyst mediated C-C and C-heteroatom Bond Formation through C(sp²)-H Activation Reaction Reference: EMR/2017/002827 dated 14, Nov. 2018
7. **Project Title:** Synthesis of remotely C-H functionalized heterocycles for photo-physical applications Reference: 02(0444/21/EMR-II) dated 08.06.2021 (continuing)

8. **Project Title:** "Cation Pool" Mediated carbon-carbon and carbon-heteroatom bond formation.
Reference: CRG/2023/000857 dated 16.03.2024 (continuing)

List of Sponsored Projects implemented/continuing (As co-PI)

- 1) **Project Title:** Development of functionalized ferrite nanoparticles for targeted Tumor Therapy.
Reference: BT/PR11548/NNT/28/420/2008 (completed)
- 2) **Project Title:** Analysis of role of MTP18-dependent mitophagy in oral carcinogenesis and its targeting to activate m. Reference: 202112HLC01RP07021-BRNS (continuing)

Member of professional Society

Life member: Orissa Chemical Society (OCS) and
Chemical Research Society of India (CRSI)
Indian Chemical Society (ICS)

Member of Board of Studies, VSSUT, Burla

Administrative Responsibility taken at NIT Rourkela

1. Dean (Student Welfare), (2024-)
2. Chief Warden (2021-2024)
3. PIC, Institute Seminar (2017-2019)
4. Head, Department of Chemistry (2013-2016)
5. Warden M. Vusveswaray Hall of Residence (2010-2013)

Honors and awards

Awarded for securing highest marks in M.Sc., 1998

National conferences attended - More than 20

International conferences attended-6

Invited Talks delivered

1. Transition metal catalyzed Cross-Coupling Reactions: Synthesis of pyrazoles and oxazoles, Ravenshaw University, Cuttack, 2012.
2. Copper Ferrite: A Greener Catalyst for Cross-coupling Reactions at Nilasaila College, 2013.
3. Synthetic Applications of Enamides and Enol-esters, at Berhampur University, 2015.
4. Synthesis and reactivity of Enamides and Enol-esters, at BARC, Mumbai, 2015.
5. Synthetic Applications of Enamides and Enol-esters, at Berhampur University, 2015.
6. Transition metal catalyzed Cross-Coupling Reactions: Application to pyrazole and oxazole synthesis, at Municipal College, Rourkela, 2017.
7. Enamides and Enol-esters in Organic Synthesis, at Manipal University, 2017.
8. Synthesis Reactivity of Enamides and Enol-esters, at Calcutta University, 2018.
9. Synthesis and Reactivity of Enamides and Enol-esters, at IIT Kharagpur, 2019.
10. Cu/Fe-based catalysts for Cross-coupling Reactions, at Centurian University, Bolangir, 2020.
11. Transition metal mediated C-C and C-heteroatom bond formation: An approach to access newer heterocycles, at Department of Chemistry, Ravenshaw University, 2022.
12. Synthesis of substituted N-heterocycles through site-selective C-H Functionalization, at North Eastern Hill University (NEHU), Shillong, 2023.
13. Synthesis of site-selective functionalized N-heterocycles through C-H Functionalization: A sustainable approach, IIT Indore, 2023.

Teaching interest

1. Pericyclic reactions
2. Methods in Organic synthesis
3. Name Reactions and Rearrangements
4. Organic Spectroscopy