



Centre/School/Special Centre: School of Natural Resources

Department: Pharmacy

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Personal Webpage Link:

<https://scholar.google.co.in/citations?user=5SkYatEAAAAJ&hl=en>

https://www.researchgate.net/profile/Dilipkumar_Pal

<https://www.scopus.com/authid/detail.uri?authorId=56217602500>

Name: DR DILIPKUMAR PAL

Designation: Associate Professor

Qualifications: M Pharm, Ph D (Pharmacy), FIC, Chartered Chemist, Post Doctorate (Australia)

Area of Interest/Specialization:

- a. Pharmaceutical Chemistry
- b. Synthesis of novel compounds and their biological evaluation
- c. Isolation, structural elucidation, characterization of indigenous plants and their evaluation
- d. Natural polymers, formulation and evaluation

Experience: Teaching and research experiences: total 22 years continuing

Awards and Honors

International: 01

1. “Endeavour Research Fellowship Award-2010” By Dept of Education, Employment and Workplace Relations (DEEWR), Govt of Australia for performing post-doctoral Research in Faculty of Pharmacy, The University of Sydney, AUSTRALIA.

National:11

1. “ISTE Rajalaxmi Memorial Best Technical College Teacher Award-2009” by Indian Society for Technical Education (ISTE), New Delhi, INDIA.
2. “APTI YOUNG PHARMACY TEACHER AWARD-2010” by Association of Pharmaceutical Teachers of India (APTI), Bangalore.
3. “SPER Young Scientist Award-2012” by SPER, at DIPSAR, New Delhi, India.
4. “Best Research Paper Award”-2009 By International Journal Of Pharmacy And Pharmaceutical Sciences, Sagar, M.P., India
5. “Best Research Paper Award- 2010” For “Vol 1 (2) Issues” By “Asian Journal of Experimental Biological Sciences (AJEBS)” New Delhi, India
6. “SPER Best Oral Presentation Award-2012” by SPER at DIPSAR on 23rd June, 2012.

7. "Bankim Chandra Memorial Award-1986" By "Bankim Chandra Memmorial Society, Joypur, West Bengal", INDIA
8. "Young Scientist Award-2013" under DBT sponsored programme by "Columbia College of Pharmacy, Raipur".
9. "SPER Innovative Researcher Award-2016" by SPER at Chandigarh college of Pharmacy, Chandigarh, 4-5 March 2016.
10. Included in World top 2 % scientist (Pharmacy and Pharmacology) in the year 2020, 2021 as assessed by the Sandford University, USA.
11. APTI-Prof. L.V.G Nargund Research Excellence in Pharmaceutical Chemistry for the year 2021 by APTI, Bangalore.

Research Projects

- (a) As Principal Investigator one UGC MRP major research project value Rs 1323800/-is completed on March 2017 in Dept of Pharmaceutical Sciences, Guru Ghasidas Viswavidyalaya, Koni, Bilaspur, C.G. wef April 2013.
- (b) As Co-Investigator SAP Project, UGC value Rs 52 Lakhs (approx.) in Dept of Pharmaceutical Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur, C.G. wef April 2018

International Collaboration/Consultancy (Personal for research and publication):

- a. The University of Sydney, Australia
- b. Institute of Applied Chemistry and Department of Chemistry, Hallym University, Chuncheon 200702, Republic of Korea
- c. Flinders university of South Australia, Bedford Park, 5042 SA, Australia
- d. Department of Chemistry, Myongji University, Yongin, 03674, South Korea

Best Peer Reviewed Publication (Journals)

- a. DilipkumarPal**, In-ho Song, Shrikant Dashrath Warkad, Keum-soo Song, Gyu Seong Yeom, Supriyo Saha, Pramod B. Shinde, Satish Balasaheb Nimse, Indazole-Based Microtubule-Targeting Agents as Potential Candidates for Anticancer Drugs Discovery, *Bioorganic Chemistry*, 2022, 105735 (**Impact factor: 5.275**).
- b.** Supriyo Saha, **Dilipkumar Pal** and Satish Balasaheb Nimse, Combination therapy of Ledipasvir and Itraconazole in the treatment of Covid 19 patients coinfecting with Black fungus: in Silico statement, *Biomed Research International (Hindawi)*, 2022, article id 5904261-10 (**Impact factor: 3.41**).
- c.** Supriyo Saha, **Dilipkumar Pal** and Satish Balasaheb Nimse, Indazole Derivatives Effective against Gastrointestinal Diseases. *Current Topics in Medicinal Chemistry* (Bentham Science) 2022, DOI: [10.2174/1568026621666211209155933](https://doi.org/10.2174/1568026621666211209155933) (**Impact factor: 3.8**).
- d.** Phool Chandra, Neetu Sachhan, **Dilipkumar Pal**, Glycogen Synthase Kinase-3 (GSK-3) Inhibitors as new lead to Treat Breast and Ovarian Cancer Current Drug Target (Bentham Science), 2021, 22 (13) 1548-1554(**Impact factor: 3.465**).

- e. VK Gurjar and **Dilipkumar Pal**, Design, in silico studies, and synthesis of new 1,8 naphthyridine-3-carboxylic acid analogues and evaluation of their H1R antagonism effects, *RSC Advances*, 2020, 10 (23), 13907-13921 (**Impact factor: 3.708**).
- f. Suvadeep Mal, Udita Malik, **Dilipkumar Pal** and Abhisek Mishra, Insight γ -Secretase: Structure, Function, and Role in Alzheimer's Disease, *Current Drug Target* (Bentham Science), 2021, 22 (12) 1376-1403 (**Impact factor: 3.465**)
- g. A K Nayak, **Dilipkumar Pal**, K Santra, Swelling and drug release behavior of metformin HCl loaded tamarind polysaccharides –alginate beads, *International J Biological Macromolecules*, 2015, 82, 1023-1027. **impact factor 6.593**).
- h. S B Nimse and **D Pal**, Free Radicals, Natural Antioxidants, and their Reaction Mechanisms, *RSC Advances*, 2015,5 (35), 27986-28006 (**Impact factor: 3.708**).
- i. P Rani, **Dilipkumar Pal**, R R Hegde, and S R Hashim, Leuckart synthesis and pharmacological assessment of novel acetamide derivatives, *Anticancer agent in Medicinal Chemistry*, 2016, 16(7), 898-906.(**I.F. 2.939**).
- j. SB Nimse and **Dilipkumar Pal**, Free Radicals, Natural Antioxidants, and their Reaction Mechanisms, *RSC Advances*, 2015,5 (35), 27986-28006 (**Impact factor: 3.708**).
- k. A Nayak, **Dilipkumar Pal**, “Trigonella foenum-graecum L.seed mucilage-gellan mucoadhesive beads for controlled release of metformin HCl”, *Carbohydrate Polymer*, 2014,107, 31-40 (**Impact factor: 9.381**).
- l. Amit Kumar Nayak and **Dilipkumar Pal**,“Ispaghula mucilage –gellan mucoadhes polysaccharide-gellan mucoadhesive beads for controlled release of metformin HCl, *Carbohydrate Polymer*, 2014, 103, 41-50 (**Impact factor: 9.381**).
- m. P Rani, **Dilipkumar Pal**, Rahul Rama Hegde and Syed R Hashim, “Anticancer, Anti-inflammatory, Analgesic activities of Synthesized 2-(Substituted phenoxy) acetamide derivatives, *Biomed International (Hindawi Publishers)* (**impact factor: 3.41**), 2014, article ID 386473, pp 1-9.
- n. A Nayak, **Dilipkumar Pal** and Kousik Santra, Development of pectinate –ispaghula mucilage mucoadhesive beads of metformin HCl by central composite design,” *International J Biological Macromolecules*, 66, 2014, 203-211(**impact factor: 6.953**).
- o. Amit Kumar Nayak and **Dilipkumar Pal**, “Tamarind seed polysaccharide-gellan mucoadhesive beads for controlled release of metformin HCl, *Carbohydrate Polymer*, 2014, 103, 154-163(**Impact factor: 9.381**).
- p. A Nayak, **Dilipkumar Pal**, “Development of calcium pectinate –tamarind seed polysaccharide mucoadhesive beads containing metformin HCl, *Carbohydrate Polymer*, 2014, 101, 220-230(**Impact factor: 9.381**).
- q. A Nayak, **Dilipkumar Pal** , K Santra, “*Plantago ovata* F mucilage –alginate mucoadhesive beads for controlled release of glibenclamide: Development, Optimization and in vitro-in vivo evaluation”, *Journal of Pharmaceutics*, 2013, 1-11 (**Impact factor: 5.875**).
- r. Amit Kumar Nayak, **Dilipkumar Pal** and Sabinesh Das, “Calcium pectinate-fenugreek seed mucilage mucoadhesive beads for controlled delivery of metformin HCl” , *Carbohydrate Polymer*, 2013, 96, 349-357 (**Impact factor: 9.381**).

- s. **Dilipkumar Pal**, M Gupta and U K Mazumder, “Fractionation of Stigmasterol derivative and study of the effects of petroleum ether extract of aerial parts of *Celsia coromandeliane* Vahl on Onset of Puberty and Ovarian Steroidogenesis in immature mice”, *Pharmaceutical Biology*, 2011, 1-7 (**Impact factor: 2.971**).
- t. **Dilipkumar Pal** and A Nayak, Novel tamarind seed polysaccharide-alginate mucoadhesive microspheres for oral gliclazide delivery: *in vitro-in vivo* evaluation, *Drug Delivery*, 2012, 125-131. (**Impact factor: 6.01**).
- u. **D Pal** and Amit Nayak, “Development, and Optimization of Gliclazide Loaded Alginate-Methyl Cellulose Mucoadhesive Microcapsules”, *AAPScience Tech*, 2011, 12(4), 1431-1441. (**Impact factor: 3.246**)
- v. M.Gupta, U.K. Mazumder, **Dilipkumar Pal** and S. Bhattacharya, “Onset of Puberty and Ovarian Steroidogenesis Following Administration of Methanolic Extract of *Cuscuta reflexa* Roxb Stem and *Corchorus olitorius* Linn. Seed in Mice”, *J. Ethnopharmacol*, 2003, 89(1), pp 55-59 (**Impact factor: 4.36**).

Recent Books/Book Chapters/Monographs etc.

1. **Dilipkumar Pal**, Phool Chandra and Neetu Sachan, Sesame Seed in controlling human Health and nutrition, in Nuts and Seeds in Health and Disease Prevention, Editors: Preedy VR, Watson RR, Patel V; ISBN no: 2e (9780128185537) pp 183-207. Elsevier: USA, London, 2020.
2. **Dilipkumar Pal**, Souvik Mukherjee, Tamarind (*Tamarindus indica*) Seeds in Health and nutrition, in Nuts and Seeds in Health and Disease Prevention, Editors: Preedy VR, Watson RR, Patel V; ISBN no: 2e (9780128185537), pp 171- 182. Elsevier: USA, London, 2020.
3. C C Kandar and **Dilipkumar Pal**, Current status of pyrazole moiety in drug discovery (Synthetic vs Natural) in “Pyrazole preparation and uses”, Editor: Dr Dilipkumar Pal, ISBN Number: 978-1-53618-250-7. NOVA Science, USA, 2020.
4. **Dilipkumar Pal**, Souvik Mukherjee, O M Panda, S S Nanda and Dong Kee Yi, Pyrazole moiety as a source of natural products in “Pyrazole preparation and uses”, Editor: Dr Dilipkumar Pal, ISBN Number: 978-1-53618-250-7. NOVA Science, USA, 2020.
5. V K Gurjar, **Dilipkumar Pal** and A D Patel, Recent advances in chemistry and synthesis of pyrazole derivatives as potential promising antimicrobial agents in “Pyrazole preparation and uses”, Editor Dilipkumar Pal, ISBN Number: 978-1-53618-250-7. NOVA Science, USA, 2020.
6. Supriyo Saha and **Dilipkumar Pal**, Role of pyrazole ring in neurological drug discovery in “Pyrazole preparation and uses”, Editor: Dr Dilipkumar Pal, ISBN Number: 978-1-53618-250-7. NOVA Science, USA, 2020.
7. Supriyo Saha and **Dilipkumar Pal**, Pyrazole and its derivatives, preparation, SAR and uses as antioxidative agent in “Pyrazole preparation and uses”, Editor: Dr Dilipkumar Pal, USA, ISBN Number: 978-1-53618-250-7. NOVA Science, USA, 2020.
8. Ashish D Patel, V K Gurjar and **Dilipkumar Pal**, Development in chemistry and synthesis of pyrazole derivatives as potential anticancer agents in “Pyrazole preparation and uses”, Editor: Dr Dilipkumar Pal, ISBN Number: 978-1-53618-250-7. NOVA Science, USA, 2020.
9. **Dilipkumar Pal**, Suvadeep Mal and Souvik Mukherjee, Pyrazole and pyrazole derivatives: a versatile platform in anti-convulsive drug discovery in “Pyrazole preparation and uses”, Editor: Dr Dilipkumar Pal, ISBN Number: 978-1-53618-250-7. NOVA Science, USA, 2020.
10. N Sachan, P Chandra and **Dilipkumar Pal**, Scaffold of pyrazole derivatives for enzyme inhibition in “Pyrazole preparation and uses”, Editor: Dr Dilipkumar Pal, ISBN Number: 978-1-53618-250-7. NOVA Science, USA, 2020.

11. **Dilipkumar Pal** and Khusboo Raj, Pyrazole and its derivatives as anti-diabetic agents in “Pyrazole preparation and uses”, Editor: Dr Dilipkumar Pal, ISBN Number: 978-1-53618-250-7. NOVA Science, USA, 2020.
12. Supriyo Saha and **Dilipkumar Pal**, Elicitor Signal Transduction Leading to the Production of Plant Secondary Metabolites, in Dilipkumar Pal and Amit Kumar Nayak (Editors), Bioactive Natural Products for Pharmaceutical Applications, ISBN Number: E-Book ISBN no:978-3-030-54027-2; Hardcover ISBN no 978-3-030-54026-5. Springer Nature, Singapore, 2020.
13. Amit Kumar Nayak, Md Saquib Hasnain, Amal Kumar Dhara and **Dilipkumar Pal**, Plant Polysaccharides in Pharmaceutical Applications in Dilipkumar Pal and Amit Kumar Nayak (Editors), Bioactive Natural Products for Pharmaceutical Applications, ISBN Number: E-Book ISBN no:978-3-030-54027-2; Hardcover ISBN no 978-3-030-54026-5. SPRINGER NATURE, Singapore, 2020.
14. Vinod Kumar Gurjar and **Dilipkumar Pal**, Natural compounds extracted from medicinal plants and their immunomodulatory activities in Dilipkumar Pal and Amit Kumar Nayak (Editors), Bioactive Natural Products for Pharmaceutical Applications, ISBN Number: E-Book ISBN no:978-3-030-54027-2; Hardcover ISBN no 978-3-030-54026-5. SPRINGER NATURE, Singapore, 2020.
15. **Dilipkumar Pal** and Khushboo Raj, Biological Activities of Marine Products and Nutritional Importance in Dilipkumar Pal and Amit Kumar Nayak (Editors), Bioactive Natural Products for Pharmaceutical Applications, ISBN Number: E-Book ISBN no:978-3-030-54027-2; Hardcover ISBN no 978-3-030-54026-5. SPRINGER NATURE, Singapore, 2020.
16. Suvadeep Mal and **Dilipkumar Pal**, Tannins and Polyphenols Extracted from Natural Plants and Their Versatile Application in Dilipkumar Pal and Amit Kumar Nayak (Editors), Bioactive Natural Products for Pharmaceutical Applications, ISBN Number: E-Book ISBN no:978-3-030-54027-2; Hardcover ISBN no 978-3-030-54026-5. SPRINGER NATURE, Singapore, 2020.
17. Neetu Sachan, **Dilipkumar Pal** and Phool Chandra, Piperine: Sources, properties, applications, and biotechnological production in Dilipkumar Pal and Amit Kumar Nayak (Editors), Bioactive Natural Products for Pharmaceutical Applications, ISBN Number: E-Book ISBN no:978-3-030-54027-2; Hardcover ISBN no 978-3-030-54026-5. SPRINGER NATURE, Singapore, 2020.
18. Om Prakash Panda, Sitansu Sekhar Nanda, Dong Kee Yi, **Dilipkumar Pal** and Souvik Mukherjee, Protein and Enzymes Isolated from Plant Sources and Their Utilization in Pharmaceutical Field in Dilipkumar Pal and Amit Kumar Nayak (Editors), Bioactive Natural Products for Pharmaceutical Applications, ISBN Number: E-Book ISBN no:978-3-030-54027-2; Hardcover ISBN no 978-3-030-54026-5. SPRINGER NATURE, Singapore, 2020.
19. Supriyo Saha and **Dilipkumar Pal**, Ionically Gelled Chitosan for Drug Delivery” in “Ionically Gelled Biopolysaccharide Based Systems in Drug Delivery”, edited by AK Nayak, MS Hasnain, D Pal, ISBN-13: 978-9811622700, Hardcover ISBN 978-981-16-2270-0 under series Gels Horizons: From Science to Smart Materials, pp: 71-92. Springer, 2021.
20. **Dilipkumar Pal** and Khushboo Raj, Biological macromolecules acting on central nervous system in Amit Kumar Nayak, Amal Kumar Dhara and Dilipkumar Pal (Editors) in biological macromolecules: bioactivity and biomedical Applications, Elsevier Paperback ISBN: 9780323857598, 2021. Page: 219-226. Elsevier, 2021.
21. **Dilipkumar Pal** and Supriyo Saha, Biological macromolecules acting on gastrointestinal systems, in biological macromolecules acting on central nervous system in Amit Kumar Nayak, Amal Kumar Dhara and Dilipkumar Pal (Editors) in biological macromolecules: bioactivity and biomedical Applications, Elsevier **Paperback ISBN: 9780323857598**, 2021, Page: 289-302. Elsevier.

22. **Dilipkumar Pal** and Supriyo Saha, Medicinal assessment of dandelion for preventive digestive disorders, in Herbs, Spices, and Medicinal Plants for Human Gastrointestinal Disorders: Health Benefits and Safety, Megh R Goyal and Durgesh Nandini Chauhan (Editors) ISBN: Hard ISBN: 9781774637142, Pub date: Nov 2021. Apple Academic Press, USA, 2021.
23. **Dilipkumar Pal** and Khusboo Raj, Role of lipid soluble bioactive substance from avocado for inhibition of prostate and other cancers, in Therapeutic Platform of Bioactive Lipids: Focus on Cancer, Apple Academic Press, USA, 2022.
24. **Dilipkumar Pal** and Supriyo Saha, Role of lysophosphatidic acid on cancer in Therapeutic Platform of Bioactive Lipids: Focus on Cancer, Apple Academic Press, USA, 2022.
25. Udit Malik, Suvadeep Mal, Suman Das, **Dilipkumar Pal**, Sphingoside-1 Phosphate in Therapeutic Platform of Bioactive Lipids: Focus on Cancer, Apple Academic Press, USA, 2022.
26. AK Nayak, H Bera, MS Hasnain, A De, **Dilipkumar Pal**, A Samanta, Gellan gum-based nanomaterials in drug delivery applications Biopolymer-Based Nanomaterials in Drug Delivery and Biomedical Applications, 1st Edition, May 2022, Editors: Hriday Bera Chowdhury Mobaswar Hossain Sudipta Saha, Paperback ISBN: 9780128208748, eBook ISBN: 9780128208755, Imprint: Academic Press, ELSEVIER, 2022.
27. **Dilipkumar Pal** and Khushboo Raj, Properties of plant polysaccharides used as pharmaceutical excipients in Amit Kumar Nayak, MS Hasnain and Dilipkumar Pal (Editors) in Plant Polysaccharides as Pharmaceutical Excipients, Elsevier, 2022, ELSEVIER, 2022.
28. **Dilipkumar Pal** and Pooja Sahu, Plant polysaccharides used as emulsifier in pharmaceutical formulation in Amit Kumar Nayak, MS Hasnain and Dilipkumar Pal (Editors) in Plant Polysaccharides as Pharmaceutical Excipients. ELSEVIER, 2022.
29. **Dilipkumar Pal** and Supriyo Saha, Plant polysaccharides used as pharmaceutical hydrogels in Amit Kumar Nayak, MS Hasnain and Dilipkumar Pal (Editors) in Plant Polysaccharides as Pharmaceutical Excipients, ELSEVIER, 2022.

Research Supervision: Total Ph D guided: 08
M Pharm Guided: 41

Administrative Responsibilities

1. **In charge Principal** since 6th April 2006 to 5th Sept 2006 in Seemanta Institute of Pharmaceutical Sciences, Jharpokharia, Orissa.
2. **Principal-cum-Secretary** since 6th September 2006 to 8th September 2009 in Seemanta Institute of Pharmaceutical Sciences, Jharpokharia, Mayurbhanj, Orissa.
3. **Nodal Officer, Industry Interface Cell**, Guru Ghasidas Vishwavidyalaya, Bilaspur, C.G. since 2016.

Additional Information

*** Total Research Papers published: 186, International: 121, National: 65**

***Citations index**

h-index: 49; i10 index: 111; Total citations: 7609

***Post-Doctoral research experience:** at Faculty of Pharmacy, The University of Sydney, Australia

*** PATENTS Information:** Granted: 01, Published: 01

1. Indian Patent Granted

Inventers Name: Dilipkumar Pal and V K Gurjar

Patent Number: 388144 Date of Grant: 31/01/2022

*** Abstract\ Proceeding: Total No-116;** International: 60, National: 56

***Presentation of Abstracts and participation** in different conferences: **Total no 34.**

***Invited speech** Delivered: 07

*** Participation in international conferences:** 02

***Reviewer** of scientific journals: 27

***Editorial Board Member of Scientific Journals:** 29

***Resource Person and Scientific Co-Ordinator:** 10 seminars and conferences

***Member of different prestigious professional organization:** 12