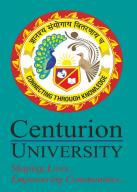


CENTRE FOR DRUG DESIGN





Message from CEO

I am happy to see that the Research Centre is getting ready to publish its R&D

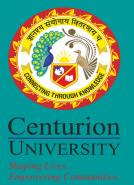


profile, which will highlight its product oriented research capabilities and contributions as well as provide a quick overview of current initiatives. It is a crucial document not only for the institute, but also for industry and research labs to learn about the institution's research capabilities so they can use the university's research services. The knowledge received would which students have also be our advantageous in potentiating them. Additionally, it would aid in spreading the institute's accomplishments in research and development. I'm sure it would help future faculty members as well as the students to understand the institute's research and progress.

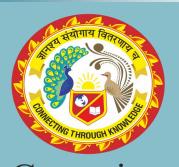
Prof. Gurudutta Pattnaik

Centre Coordinator & CEO, Centre for Drug Design.





Subject Page No. Introduction







CENTRE FOR DRUG DESIGN

he centre for drug design (CDD) was established in 2020 at the university with the goal to discover drugs or formulations to fight against life threatening infectious and non infectious diseases.

The centre consists of a group of enthusiastic and experienced faculty members actively pursuing collaborative research with in academic community as well as with industrial partners both in India and abroad.

The centre comprises of 60 no of faculties from different branches of applied science like Pharmacy, Zoology, Botany, Forensic Science. The members are actively involved in discovery and synthesize of New Chemical Entities (NCEs) through In-silico, in-vitro and in-vivo approach from natural resources to fight against life threatening infectious and non-infectious diseases by doing interdisciplinary research.

AIM

Team enthusiastically utilizes dry lab experimentation with Drug discovery studio using Biovia, Design of experimentation (DOE) and quality by design (QbD) approaches and with wet lab experimentation on microbial technology, medicinal chemistry, molecular biology, in silico approaches, formulation development and characterization (in-vitro and in-vivo) of some novel formulations, Nutraceuticals formulation development in cosmetic.

OBJECTIVE

The centre involves in Technology transfer of their Lab scale formulation to be the Pilot Batches for the industrial application before entering in to the product market and also performing different phases of clinical trials.

Center For Drug Design

		OCH.		
Members:				
Campus	Major	Minor		
Bhubaneswar:	19	09		
Balasore:	08	01		
Rayagada:	04	10		
Balangir:	08	08		
Total:	39	28		

Centre Coordínator & CEO

Prof. Gurudutta Pattnaik

Centre Co-Coordínator

Dr. Himansu Bhusan Samal

Centre Members

Name of the Member
Mr Abhisek Sahu
Mr Abinash Patra
Miss Anima Jena
Mr Anshuman Panda
Mrs Ayushi Pradhan
Mr Bharatbhusan sahu
Mrs Binapani Barik
Mr Binayak Mishra
Mr Biswajit Samantaray
Mr Deepankar Rath
Mr Dharmendra pradhan
Mr Dinesh Kumar Sharma
Ms. Rasmita Dash
Dr. Ashirbad Nanda
Dr. Bhisma Narayan Ratha
Dr. Chandra Sekhar Patro
Dr. Gyanranjan Mahalik
Dr. Nihar Ranjan Kar
Dr. Prafulla Kumar Sahu
Dr. Sagarika Parida
Dr. Santosh Kumar Ranajit
Dr. Saripilli Rajeswari
Dr.Ashish Kumar Sarangi
Dr. Kalpita Bhatta
Mr Durga Prasad Mishra
Mr Gnyana Ranjan Parida
Dr Gopal Krishna Padhy
Mr Haragouri Mishra
Mr Hrudesh Priyadarsan Sahoo
Miss Jayshreemaa Biswal
Mr. Jyotiprakash Guru
K Shyam Sundar Rao
Mrs. Kamini Sethy

Name of the Member
Mr. Ladi Alik Kumar
Miss. Manisha Panda
Miss. Sucharita Babu
Mr. Bikash Ranjan Jena
Mr. Rakesh Meher
Mr. Sukumar Purohit
Mr. Suman Kumar Mekap
Mrs. Annanya Gangopadhyay
Mrs. Rupali Rupasmita Rout
Miss. Pallishree Bhukta
Miss. Rasmita Jena
Mr. Sangram Kishore Routray
Mr. Satish Kanhar
Mr. Shantanu Bhattacharyya
Miss. Shruti Rajwar
Mrs. Shubhashree Das
Miss. Shuvashree Meher
Mr. Shyama Sundar Sahu
Mr. Sidharth parida
Mr. Sujay kumar Parida
Mrs. Swagatika Das
Mr. Swarnajeet Tripathy
Miss. Tamosa Mukherjee
Mrs. Varsha Singh
Mr. Vijaya Kumar meher
Mr. Wishard la Vincent Barreto
Mr. Yashwant Giri
Ms. V. Pravallika

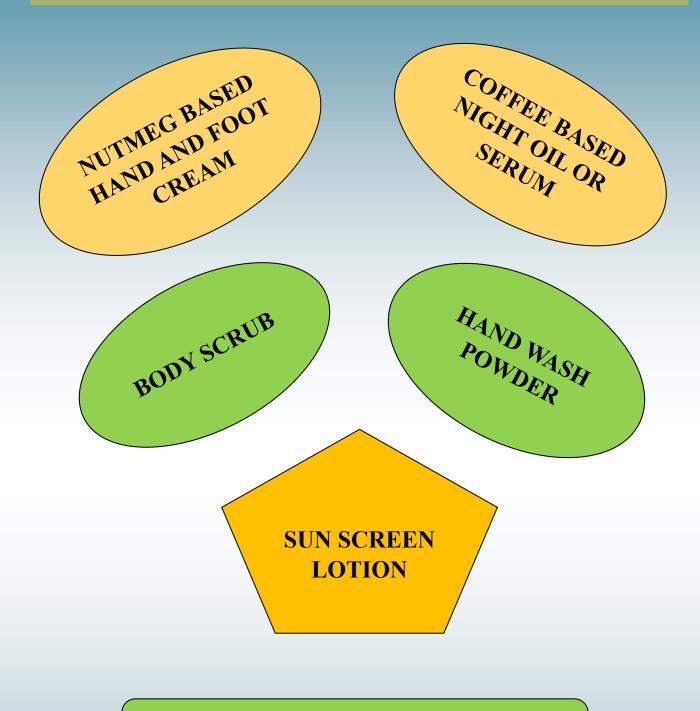
PRODUCT DETAILS

We have formulated two formulations i.e. Day Cream and Cleansing Gel. Both formulations are based on herbal ingredients. For these formulations we have extracted the ingredients from different plants and their parts. Also the extraction process was performed using our own facilities. Both formulations were prepared in our pharmaceutics laboratories and tested on our staffs for spread ability, oiliness, smoothness after applications, vanishing, soothing properties. The feedback from all were satisfactory.

On a large scale our formulations will be prepared by Ganesha cosmetics and will be marketed by Naturals. Currently we have got order for 5000 units and we are very much confident that our products will be very much successful in the market. As of now, we are working on two more formulations and very much closer to reach our desired results. Some more products are also in pipeline.



PRODUCTS IN PIPELINE...



ANTI PIGMENTATION SERUM

PRODUCT DVELOPMENT TEAM







DOE & QBD TEAM



TEAM BIOVIA











RESEARCH/ BOOK PUBLICATION/ DETAILS

Publication Details 1st January 2022 to till date

Total Numbers of Publication (2022-23):

Campus	Journal Published	Book Pub- lished	Book Chapter Published	Patent Pub- lished
Bhubaneswar:	40	22	08	22
Balasore:	20	06	00	26
Rayagada:	16	00	16	10
Balangir:	14	01	03	07
Total	90	29	27	65

SOME SELECTED PUBLICATION DETAILS

- Satapathy SR, Sahoo RN. Conventional treatments and non-PEGylated liposome encapsulated doxorubicin for visceral leishmaniasis: A scoping review. Asian Pacific Journal of Tropical Medicine. 2022 Jul 1;15(7):293.(IF-3.041)
- Ghose D, Swain S, Patra CN, Jena BR, Rao ME. Advancement and Applications of Platelet-Inspired Nanoparticles: A Paradigm for Cancer Targeting. Current Pharmaceutical Biotechnology. 2022.(IF-2.829)
- Nandi S, Nanda A, Sahoo RN, Swain R, Mallick S. Formulation and administration of ramipril prodrug for improving bioactivity significantly: In vitro and in vivo correlation. Journal of Drug Delivery Science and Technology. 2022 Jul 16:103597. (IF-5.062)
- Dash R, Sahoo RN, Si SC, Mallick S. Effect of eutectic formulation on photodegradation kinetics of ornidazole in aqueous state: predicted interaction and molecular binding in docking studies. Chemical Papers. 2022 May;76(5):2823-32. (IF-2.146)

- De S, Aamna B, Sahu R, Parida S, Behera SK, Dan AK. Seeking heterocyclic scaffolds as antivirals against dengue virus. European Journal of Medicinal Chemistry. 2022 Jul 3:114576.(IF-7.088)
- 6. Dan AK, Biswal B, Das M, Parida S, Parhi PK, Das D. Aqueous and Chemical Extraction of Saponin of Acacia concinna (Willd.) Dc.: An effective Bio-surfactant Solution to Extract Silk Fibroin from Muga silk cocoons. Journal of Molecular Liquids. 2022 Jun 6:119547.(IF-6.165)
- Aamna B, Kumar Dan A, Sahu R, Behera SK, Parida S. Deciphering the signaling mechanisms of β-arrestin1 and β-arrestin2 in regulation of cancer cell cycle and metastasis. Journal of Cellular Physiology. (IF-6.384)
- Nandi S, Ojha A, Nanda A, Sahoo RN, Swain R, Pattnaik KP, Mallick S. Vildagliptin plasticized hydrogel film in the control of ocular inflammation after topical application: study of hydration and erosion behaviour. Zeitschrift f
 ür Physikalische Chemie. 2022 Feb 1;236(2):275-90.(IF-4.315)
- Pasala PK, Shaik RA, Rudrapal M, Sahoo RK, Alaidarous MA, Khairnar SJ, Bendale AR, Walode SG. Cerebroprotective Effect of Aloe Emodin: In Silico and In Vivo Studies. Saudi J. Biol. Sci. 2022; 29(7): 998-1005. (IF: 4.219)
- Rudrapal M, Celik I, Ansari MA, Yadav R, Sharma T, Sahoo RK, Bendale AR, Zothantluanga JH, Chetia D, Walode SG. Identification of bioactive molecules from Triphala (Ayurvedic herbal formulation) as potential inhibitors of SARS-CoV-2 main protease (Mpro) through computational investigations. J. King Saud Univ. Sci. 2022 (34):101826. (IF: 4.011)
- Rudrapal M, Prajapati SK, Kesharwani P, Deb PK, Khan J, Mohamed Ismail R, Kankate RS, Sahoo RK, Khairnar SJ. Protective Effects of Diets Rich in Polyphenols in Cigarette Smoke (CS)-Induced Oxidative Damages and Associated Health Implications. *Antioxidants* 2022; *11* (7): 1217. (IF: 7.675)
- 12. Gangopadhyay A, Saha R, Bose A, Sahoo RN, Nandi S, Swain R, Paul M, Biswas S, Mohapatra R. Effect of annealing time on the applicability of potato starch as an excipient for the fast disintegrating propranolol hydrochloride tablet. Journal of Drug Delivery Science and Technology. 2022 Jan 1;67:103002. (IF-5.062)
- Gangopadhyay A, Anindya Bose, Sudhansu Sekhar Rout, Rajaram Mahapatra 2022, Application of dual modified corn starch as a polymer for colon targeted direct compressible budesonide tablet, Journal of Drug Delivery Science and Technology, 74, 103556, Page No: 1 -8 (IF-5.062)

- 14. Swain R, Nandi S, Sahoo RN, Swain SS, Mohapatra S, Mallick S. Bentonite clay incorporated topical film formulation for delivery of trimetazidine: Control of ocular pressure and in vitroin vivo correlation. Journal of Drug Delivery Science and Technology. 2022 Jan 1;67:102956. (IF-5.062)
- 15. Sahoo RN, Satapathy BS, Ray J, Dash R, Mallick S. Celecoxib crystallized from hydrophilic polymeric solutions showed modified crystalline behavior with an improved dissolution profile. ASSAY and Drug Development Technologies. 2021 May 1;19(4):237-45. (IF-2.471)
- 16. Satapathy SR, Sahoo RN, Pattnaik KP, Panigrahi L, Mallick S. Developmental biology of Corona vaccine: lipid nanoparticle mRNA-encapsulation, a safe approach. Minerva Biotechnology and Biomolecular Research. 2021:166-73.(IF-2.024)
- Mohanty D, Gilani SJ, Zafar A, Imam SS, Kumar LA, Ahmed MM, Jahangir MA, Bakshi V, Ahmad W, Eltayib EM. Formulation and Optimization of Alogliptin-Loaded Polymeric Nanoparticles: In Vitro to In Vivo Assessment. Molecules. 2022 Jul 13;27(14):4470.(IF-4.927)
- Satapathy SR, Sahoo RN, Nandi S, Satapathy B, Panigrahi L, Mallick S. 3D printing in managing supply disruptions related to COVID-19 pandemic: Food and Drug Administration's current thinking on regulation. Minerva Biotechnology and Biomolecular Research. 2021:43-50. (IF-2.024)
- Pramanik A, Sahoo RN, Nandi S, Nanda A, Mallick S. Characterization of Hydration Behaviour and Modeling of Film Formulation. Acta Chimica Slovenica. 2021 Mar 20;68 (1):159-69.(IF-1.735)
- Sahoo RN, Satapathy BS, Mallick S. Improved dissolution of ibuprofen after crystallization from polymeric solution: Correlation with crystal parameter. Journal of the Serbian Chemical Society. 2021 Jun 29;86(6):571-84. (IF-1.100)
- Nanda A, Das S, Sahoo RN, Nandi S, Swain R, Pattanaik S, Das D, Mallick S. Aspirin hydrogel ocular film for topical delivery and ophthalmic anti-inflammation. Journal of the Serbian Chemical Society. 2022(00):19-.(IF-1.100)
- Sahoo RN, Satapathy BS, Mallick S. Improved dissolution of ibuprofen after crystallization from polymeric solution: Correlation with crystal parameter. Journal of the Serbian Chemical Society. 2021 Jun 29;86(6):571-84. (IF-1.100)
- 23. Routray SB, Patra CN, Swain S, Jena BR. Analytical quality by design based systematic development and optimization of a sensitive bioanalytical method for estimation cinacalcet

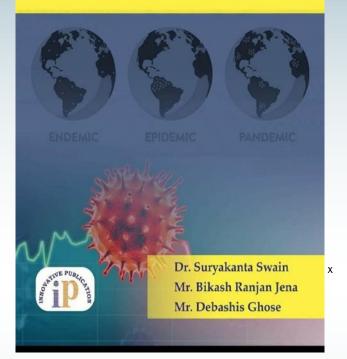
HCl in rabbit serum. Journal of Pharmacy & Bioallied Sciences. 2021 Oct;13(4):360.(IF-1.482)

- 24. Kanhupriya Behera, Ushashee Mandal, Monalisa Panda, Milan Mohapatra, Swagat Kumar Mallick, Somanath Routray, Sagarika Parida, and *Gyanranjan Mahalik. Ethnobotany and folk medicines used by the local healers of Bhadrak, Odisha, India. Egyptian Journal of Botany. 2021 Aug 1;61(2):375-89.IF: 0.99
- 25. Pallavi Jali, Ipsita Priyadarsini Samal, Sameer Jena, and *Gyanranjan Mahalik. Morphological and biochemical responses of Macrotyloma uniflorum (Lam.) Verdc. to allelopathic effects of Mikania micrantha Kunth extracts. Heliyon. 2021 Aug 1;7(8): e07822. IF: 3.92
- 26. Soumyaranjan Behera and *Gyanranjan Mahalik. A Survey on the Ethnomedicinal plants and antimicrobial activity of Tridax procumbens L. Research Journal of Pharmacy and Technology. 2022 Jan 25;15(1):219-23. IF: 0.68
- Srinivas Acharya, Deepak Kumar Patra, *Gyanranjan Mahalik, and Pradipta Kumar Mohapatra. Quantitative Ecological Study of Rhizophoraceae Mangroves of Bhitarkanika Wildlife Sanctuary Regions of Odisha Coast, India. Proceedings of the National Academy of Sciences, India Section B: Biological Sciences. 2021 Dec; 91 (4):897-908. IF: 1.40
- Mandal, Ushashee, B. Jyotirmayee, and *Gyanranjan Mahalik. Traditional plants utilized for the viral disease treatment. Plant Science Today. 2022 Apr 1;9(2):386-98. IF: 0.83
- B. Jyotirmayee and *Gyanranjan Mahalik. A review on selected pharmacological activities of Curcuma longa L. International Journal of Food Properties. 2022 Dec 31;25(1):1377-98. IF: 3.43
- 30. R.K. Mohapatra, R. Tiwari, A.K. Sarangi, R. Khandia, G. Saikumar, K. Dhama, Twin combination of Omicron and Delta variants triggering a tsunami wave of ever high surges in COVID-19 cases: A challenging global threat with a special focus on the Indian subcontinent, J. Med. Virol. 94 (5) (2022) 1761–1765. (IF: 20.6)
- R.K. Mohapatra, A.K. Sarangi, V. Kandi, M. Azam, R. Tiwari, K. Dhama, Omicron (B.1.1.529 variant of SARS-CoV-2); an emerging threat: Current global scenario, J. Med. Virol. 94 (5) (2022) 1780–1783. (IF: 20.6)
- 32. R.K. Mohapatra, R. Tiwari, A.K. Sarangi, M.R. Islam, C. Chakraborty, K. Dhama, Omicron (B.1.1.529) variant of SARS-CoV-2: concerns, challenges, and recent

updates, J. Med. Virol. 94 (6) (2022) 2336–2342. (IF: 20.6)

- 33. R.K. Mohapatra, V. Kandi, A.K. Sarangi, S. Verma, H.S. Tuli, S. Chakraborty, C. Chakraborty, K. Dhama, The recently emerged BA.4 and BA.5 lineages of Omicron and their global health concerns amid the ongoing wave of COVID-19 pandemic, Int. J. Surg. 103 (2022), 106698. (IF: 13.4)
- 34. R.K. Mohapatra, H.S. Tuli, A.K. Sarangi, S. Chakraborty, D. Chandran, C. Chakraborty, K. Dhama, Unexpected sudden rise of human monkeypox cases in multiple nonendemic countries amid COVID-19 pandemic and salient counteracting strategies: Another potential global threat?, Int. J. Surg. 103 (2022), 106705. (IF: 13.4)
- R.K. Mohapatra, H.S. Tuli, A.K. Sarangi, S. Chakraborty, D. Chandran, C. Chakraborty, K. Dhama, Emerging novel sub-lineage BA.2.75: The next dominant omicron variant?, Int. J. Surg. 104 (2022), 106835. (IF: 13.4)
- 36. Ranjan Kumar Mohapatra, Ashish K. Sarangi, Venkataramana Kandi, Sandip Chakraborty, Deepak Chandran, Mahmoud Alagawany, Kuldeep Dhama, Chiranjib Chakraborty, Recent re-emergence of Marburg virus disease in an African country Ghana after Guinea amid the ongoing COVID-19 pandemic: another global threat? Current knowledge and strategies to tackle this highly deadly disease having feasible pandemic potential Correspondence, Int. J. Surg. (2022) (IF: 13.4)
- 37. Ranjan K. Mohapatra, Ashish K. Sarangi, Sandip Chakraborty, Hardeep Singh Tuli, Manojit Bhattacharya, Chiranjib Chakraborty, Wanpen Chaicumpa, Kuldeep Dhama, NeoCoronavirus (NeoCoV) and its possible future global health threats – Current knowledge and counteracting prospects – Correspondence, Int. J. Surg. 106 (2022), 106922. (IF: 13.4)
- Ranjan K. Mohapatra, Snehasish Mishra, Venkataramana Kandi, Ashish K. Sarangi, Kuldeep Dhama, Monkeypox plays a similar role like SARS-CoV-2; intensive animal screening is crucial after the first human-to-dog transmission report – Correspondence, Int. J. Surg. 106 (2022), 106925. (IF: 13.4)

Pandemic Corona Virus vs. Epidemic, and Endemic Virus Diseases: Present, Past, and Future Directions





Advancement and Applications of Platelet-Inspired Nanoparticles: A Paradigm for Cancer Targeting

(E-pub Ahead of Print) Published on: 06 July, 2022 Author(s): Debashish Ghose, Suryakanta Swain*, Chinam Niranjan Patra, Bikash Ranjan Jena and Muddana Eswara

Affiliation

 School of Pharmacy and Life Sciences, Centurion University of Technology and Management, Bhubaneswar-751009, Odisha, India

Chemistry is a science that deals whith the composition structure and properties of substances, the and with the transformation that they undergo. Analytical chemistry is a branch of chemistry involved with the analysis of chemistal bubbiances. It concompasts the property and practice of all means used here in a broad sense to include identifying substances called qualitative analysis, attermining the concentration or amount of substances. Called quantitative analysis, and determining the structure of substances. Pharmaceutical analysis (plays a very vital role in the Quality Assurance and quality control of Bulk Drugs. Here we discussed about illaprazole and Domperidone validation by using RP-HPLC methods.





Ladi Alik Kumar, M.Pharm working as an Asst Professor at Centurion University of Technology and Management, Odisha, India, also continuing my Ph.D. at Centurion university of technology and Management. My research area is Nanotechnologybased drug delivery system.



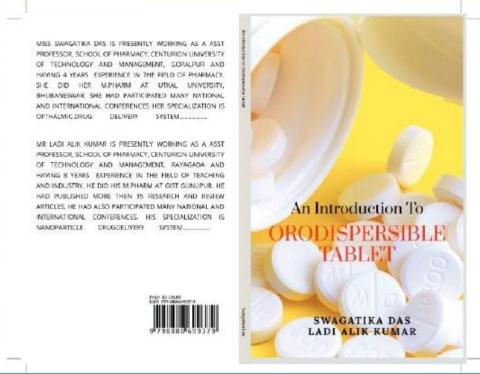
Ladi Alik Kumar Gurudutta Pattnaik Chanra Sekhar Patro

Development and Validation of RP-HPLC Methods

Similtaneous Estimation of RP-HPLC methods in Illaprazole and Domperidone







Chandanshive

Nagsen

Dr. Nihar Ranjan Kar, Mrs. Snehal Nag Mr. Haragouri Mishra, Ms. Neha Goel



A Text Book of Pharmacology

> Dr. Nihar Ranjan Kar Mrs. Snehal Nagsen Chandanshive Mr. Haragouri Mishra Ms. Neha Goel

х

PHARMACOLOGY

RONMENTAL SCIENCE, ENGINEERING

EMERGING ENVIRONMENTAL A ONS OF

SEEMA NARA SMRITI SINGH

NOVA

Chapter 6. Future Prospects towards Cata Defense against Microbial Pathogens Usin Nanozymes

C. D. S. L. N. Tulasi, D. Manikantha, Rajesh / Bokinala and Kalyani Chepuri

Institute of Science and Technology, Jawał Nehru Technological University Hyderabad Kukatpally, Hyderabad

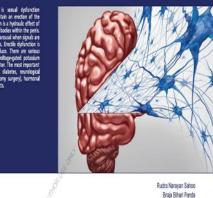
Chapter 7. The Role of Metallic Nanopartic Maximizing Crop Production

Divya Yadav¹, Santosh Bhukal¹, and Shafila Guru Jambheshwar University of Science Technology, Hisar, India

²Mehr Chand Mahajan DAV College for Won Chandigarh, India

Chapter 8. Biomedical Applications of Nanozymes

Bikash Ranjan Jena and Gurudutta Pattnail School of Pharmacy and Life Sciences, Cen University of Technology and Management Bhubaneswar, Odisha, India



Braja Bihari Panda Subrata Mallick

Formulation and Evaluation of Sildenafil Citrate Oral Jelly

Oral Jelly formulation of Sildenafil Citrate



udra Naravan Sahoo, M Pharm, Assistant profi Autority of a gen Sandy, in Hann, Autority and at Centurion University of Technology and Management, Bhubaneswar, Odisha, India, Continuing Ph.D. at Siksha'D' Anusanshan (Deemed

to be Uni

trug Delivery Systems.

be University), Bhubaneswar, India, My research rea of interest is Formulation and Development, and

CHAPTER-5.pdf a

5

Artificial intelligence (AI), robotics and computational fluid dynamics

Bikash Ranja Jena^{1*}, Suryakanta Swain², Debashish Ghose³, Chinam Niranja Patra³, Muddana Eswara Bhanoji Rao School of Pharmacy and Life Sciences, Centurion University of Technology and Management, Jatni, Khurda-752050, Odisha, India ²Department of Pharmacy, School of Health Sciences, The Assam Kaziranga University, Jorhat-785006, Assam, India ³Department of Pharmaceutics, Roland Institute of Pharmaceutical Sciences, Berhampur-760010, Odisha, India ⁴Calcutta Institute of Pharmaceutical Technology and AHS, Banitabla, Uluberia, Howrah-711316, West Bengal, India

5.1 Artificial intelligence

5.1.1 General overview

 \leftarrow

Chapter

Recent Advancements in Phyto **Component Based Nanocarriers** for Improved Treatment of Brain Disorders

Bhabani Sankar Satapathy, Snigdha Pattnaik, Sangram Keshari Biswal, Biswabhusan Biswal, Pralaya Kumar Sahoo, Himansu Bhusan Samal and Binapani Barik

Abstract

Effective treatment of brain disorders remains a tough task in medical science. Age-old brain disorders like Parkinson's (PD) and Alzheimer's (AD) are yet to be managed effectively in spite of fabulous scientific progress over the last decades. Presently available treatment strategies have been found insufficient to tackle the out bursting cases of AD and PD. Indeed, presence of blood-brain barrier (BBB) highly hijacks success of conventional drug therapy. In this regard, phyto bioactive compo-nents delivered through nanocarrier (NCs) systems hold ray of hope in improving treatment benefits in brain disorders. Several NCs including polymeric nanoparticles, nanoliposomes, micelles, dendrimers have now being heavily researched to effectively deliver the phyto active components to brain tissue. NCs owing to their structural and physiological uniqueness have now been evolved with great potential for the treat-ment of brain disorders. Functionalization of brain specific ligands on the surface of NCs further makes them target specific, which might significantly improve bioavail-ability or reduce the off-target adverse effects. This chapter primarily focuses on recent advancements in phyto component loaded NCs employed for the treatment of brain disorders. The chapter especially covers existing impediments of phyto component based NCs for Parkinson and Alzheimer's diseas

Bio-Wealth of Odisha, India

Dr. Gyanranjan Mahalik

Copyrighted Material

The book covers traditional uses of selected plants for the treatment of various

ailments, diversity of macrophytes, and

some freshwater fish resources of Odisha.

The best part of the book is that it will be

helpful to the youngsters to get benefits in beauty care by using the herbal remedies.

INDIGENOUS TRADITIONAL KNOWLEDGE &



INDIGENOUS TRADITIONAL KNOWLEDGE & ETHNOPHARMACOLOGY

Sundar S. Mety Santwana Samilita Dash Binod Sardar Gurudutta Pattnaik Sanjeet Kumar



c. Gynamajan Maballik, is presently working as Assistant Professor, parameters of Botany, School of Applied Sciences, Centarion twessity of Technology and Management. He was awarded with Co-TRF for carrying on this M. Pali Research work and RGNF Elawahip in Science by Union Grans Commission (UGC) in 2014, undertable the Ph.D Programme ut Udal University, Bituhaneswar, Mahalik has published a good number of research papers in peer elewed journals of national and international reput. He is currently releved journals of national and international reput. He is currently releved journals of national and and a sciences.

9 4 756355 4022671

Copyrighted Material

PATENT PUBLISHED

Sl No	Title of the Patent	Name of the Coun- try	Application No.
1	A Novel Nanocellulose and lignosulphate based adhesive coacervate composition and preparation method thereof	Indian Patent Publi- cation	2022410490 43
2	Drug Releasing Polyelectrolyte Coating	Indian Patent Publi- cation	2022310474 94
3	A method, system and apparatus for cancerimmunotherapybasedon nanomedicines	Indian Patent Publi- cation	2022410509 42
4	Nanoengineered Polymeric Biomaterials For Targeted Drug Deliverysystem For Synergistic Brain-Targeting Delivery Method There Of	Indian Patent Publi- cation	2022410512 02
5	Submicron nanoscale doped or undopedsilver nanopaticles	Indian Patent Publi- cation	2022410517 96
6	The effect of gravuty and centrifugal force on plant development and fruit produc- ion	Indian Patent Publi- cation	2022410493 25
7	A Novel Nanocrystal/Silver Difunctional Compsite Nanomaterial For Cancer Treat- ment And Method Thereof	Indian Patent Publi- cation	2022310541 39
8	Artificial Intelligence based approach to study the impact of topical nano adjuvasnts for eradication of skin cancer	Indian Patent Publi- cation	2022110536 20
9	Machine learning based study to analyse the efficacy of existing drugs along skew- ing of irrelevant tuples	Indian Patent Publi- cation	2022410511 78
10	Making And Administering Dietary Supplements Comprising Photochemical For- mulations	Indian Patent Publi- cation	2022310525 17
11	Artificial intelligence based techniques to analyse the impact of nanoparticles in improving hair follicles	Indian Patent Publi- cation	2022310550 96
12	Nano-Drug Delivery System of Anti-Cancer drug and Method thereof	Indian Patent Publi- cation	2022410655 23
13	Artificial Intelligence Based Approach To Predict The Role Of Nanoparticles In Targeting Ventricular Fibrillations	Indian Patent Publi- cation	2022410632 89
14	An Artificial Intelligence Based 3D Printed Medicines For Effective Treatment Of Patients And Method Thereof	Indian Patent	2022410640 85
15	Advanced Nano Phyto formulations based targeted drug delivery	Indian Patent Publi- cation	2022410648 89
16	Novel nano formulations-based drugs for enhanced bioavailability	Indian Patent	2022410655 49
17	An Artificial Intelligence And Machine Learning Based Drug Delivery System For Preparing Microemulsions With Enhanced Bioavailability And Method Thereof	Indian Patent Publi- cation	2022110681 66
18	Formulation and characterisation of transdermal patches of amlodipine besylate using olive oil as the natural permeation enhancer	Indian Patent Publi- cation	2022410549 73A
19	Machine Learning Based Approach To Predict The Impact Of Anti-Microbial Re- sistance For Animal Production	Indian Patent Publi- cation	2022410644 54
20	Artificial Intelligence Based Aproach to early prediction of Natural coma based on Brain mapping Techiniques	Indian patent Publi- cation	2022410655 36
21	Systematic Approach to Analyze the Importance of Nanoparticles for Providing Treatment Through Interventional Cardiology	Indian patent Publi- cation	2022310644 53
22	A novel techno-friendly method to improve processability in tablet manufacturing of efavirenz from spherical crystalization	Indian patent Publi- cation	2021210511 68A
23	Designing A Framework for Identifying The Impact of Combinational Therapy for Treating Melanoma with Traditional Chemotherapy And Targeted Delivery Of Drug	Indian Patent Publi- cation	2022410602 12
	Magnetic spinel ferrite nanoparticle (SFNPs) for targeted drug delivery of cytotoxic drugs in disease management	Indian Patent	2022410652 50
25	Pharmaceutical Composition Comprising Amlodipine For Retinal Transsynaptic Neuronal Protection And Methods Thereof	Indian patent Publi- cation	2022310636 10

PATENT PUBLISHED

Sl No	Title of the Patent	Name of the Coun- try	Application No.
26	Artificial intelligence and Machine Learning in cultivation of microbial strains	Indan Patent Publi- cation	2022310633 26
	Cloud based technique integrated with artificial inteligence to predict the heart disease in advance and avoiding the sudden and massive heart attacks	Indan Patent Publi- cation	2022110658 98
	Pharmaceutical composition comprising acetazolamide for retinal protection and methods thereof	Indian Patent Publi- cation	2022310717 43
29	A Formulation Based On Pyridine Derivative And Preparation Method Thereof	Indian Patent	2022410590 48
30	Pharmaceutical Nanotechnology For Intravenous Administration	Indian Patent	2022310609 39
	An Artificial Intelligence And Iotbased System For Regenerative Medicinefor The Treatment Of Life Threatening Diseases And Method Thereof	Indian Patent	2022410633 44
32	Anti-Aging Nano Formulations and Nano-cosmetic composition	Indian Patent	2022410590 47
33	A sensor based on Photochemical and Electrochemical aspects having microfluidic and green chemistry applications	Indian Patent	2022410589 86
34	A Composite nanomaterial having multifunctional nuclear shell structure drug carrier material and method thereof	Indian Patent	2022410606 16
	Modeling And Analysis Of Data Trading In Financial Organisation Based On Blockchain Market In Iot Networks	Canadian Copyright	1197892
36	A Biomimetic nanoparticle for synergistic anti-infective therapy	Indian Patent Office	2022410724 02
37	A stimuli responsive bionanomaterial for extended drug release and method thereof	Indian Patent Office	2022410714 29
38	Machine Learning Based Technique To Analyze The Pros And Cons Of In-Situ Gel Formation Containing Aloe Vera Extract	Indian Patent Office	2022410732 79
39	A Machine Learning Based Integrated Iot Healthcare Systemfor Cancer Care With Wsn Modules And Method Thereof	Indian Patent	2022310231 68
40	A System Provided With Next-Generation Computing Technology For Precision Medicine And Method Thereof	Indian Patent	2022310621 39
41	An Artificial Intelligence And Machine Learning-Based Surveillance Systems To Monitor Real Time Crop Growth And Method Thereof	Indian Patent	2022310627 15
42	An Artificial Intelligence And Machine Learning Based System In Cultivation Of Microbial Strains And Method Thereof	Indian Patent	2022310633 26
43	An Iot Based Image Processing System For Medical Applications	Indian Patent	2022310635 16
	A Critical Appraisal Of Artificial Intelligence Based Retina Scan For The Determi- nation Of Cardiovascular Pathology In A Patient And Method Thereof	Indian Patent	2022310649 85
	A Method For Advanced Tumor Recognition Based On Iot And Ai Image Pro- cessing	Indian Patent	2022310681 93
46	Application Of Nanorobotics In High-Density Pharmaceutical Assay Process	Indian Patent	2022310692 69
47	Nano-Based Drug Delivery Systems: Recent Developments And Future Prospects	Indian Patent	2022310735 69 A
	Effective heart disease prediction using hybrid artificial neural networks techiques	Indian Patent	2022410239 09
	An artificial intelligence based approach to look for abnormalities in heart anatomy using imaging modalities.	Indian Patent	2022410261 05
50	A methodology to analyse the images of kidney captured using medical modalities for anomaly detection with algorithms of machine learning	Indian Patent	2022410714 02
	Systematic approach for analyzing the importance of nectin-4 as soluble biomarkers for the detection of cancer	Indian Patent	2022410698 47
	Design Of Chitosan Nanoparticle Coated Mini-Implants For Dental Issues And Analysis Of Their Properties	Indian Patent	2022410712 87
53	The detection of varied EEG pattern signal for chronic migraine patients	Interllectual proper- ty India	2022110751 89
54	A System and Composition for treating and preventing oxalate related conditions		20 2022 100 602

Skill Course Offered:

- Planned to offer an paid internship program entitled Techniques of Phytoextraction and its *in-vivo* activity.
- Currently offering Drug designing by using Biovia Discovery studio, handled by Dr. Kalpita Bhatta.

Project Sanctioned:

Name of PI	Funding agency	Funding amount	Status	
Dr. Kalpita Bhatta	SEED Money project, CUTM	3 lakhs.	Sanctioned	
Dr. Gyanran- jan Mahalik	SEED Money project, CUTM	1.3 lakhs.	Sanctioned	
Dr. Ashirbad Nanda Mr. Satish Kanhar	CO –PI from CCRAS- Ministry of Ayush	118 lakhs	Sanctioned	
Revenue Collected:				

Revenue Generation Details from IEC (2022-23)			
Agency	Year	Amount	
Lyka Labs Ltd. Gujarat.	Aug 2022	40,000/-	
Indira IVF Hospital, Rajasthan	Jan 2023	47,200/-	
Morningsite Healthcare Ltd. Park Leicester, UK.	Feb 2023	70,000/-	
Total		1,57,000/-	

Extended RC (Drug Clinical Research Organization)

Proposed Members

- Dr. Ashirbad Nanda
- Mr. Suman Kumar Mekap
- Miss. Sucharita Babu
- Mrs. Rupali Rupasmita Rout

<u>Plan of Work</u>

- Have to add more members (15 maximum)
- Have to contact some related field organizations for more idea about the function of the CRO.
- To make the RC lively

RECOGNITION AND AWARDS



RECOGNITION AND AWARDS

TULASI WOMEN'S COLLEGE Kendrapara, Odisha

(Affiliated to Ramadevi Women's University, Bhubaneswar, Odisha)

Certificate of Appreciation

rtificate is pre or, Department of Botany IN OF HERBAL DRUGS : TRADITIONAL METHODS TO MODERN APP by Department of Botany in collabortion with IQAC. Tulasi Women's Ca





men

Х





CERTIFICATION CATE

or rechnology

Block & Tehsil Child

Dr. B. P. Bhar

School of Pharmac Blockson all the Sciences and the set of the sciences and the sciences and the set of the se

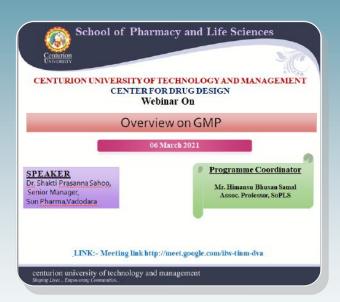
th E^faculty Development Program of the statuty of the statuty

School of Pharmack & Life Sciences & International Sciences & Scie

Randon

Prot.J.

WEBINAR/ EXPERT TALK ORGANISED









Mr Abinash Rout

Batch) Jr. Production Officer.

(Alumni:- 2016-2020

INTAS Pharmaceutical,

Dehradun, Uttarakhand

In Association With **Center For Drug Design** Organizing an

ALUMNI TALK ON

CENTURION UNIVERSITY OF

School of Pharmacy & Life Sciences

Prospects & Opportunities at Pharma Industry on Solid Orals

05/07/2022 (11.00am Onwards)

Venue: MD Building, 5th Floor, Smart Class Room



SEMINAR / WEBINAR/ EXPERT TALK ORGANISED





Webinar On

Zoom meet link:

Programme Coordinator

Mr. Himansu Bhusan Samal

Assoc. Professor, SoPLS

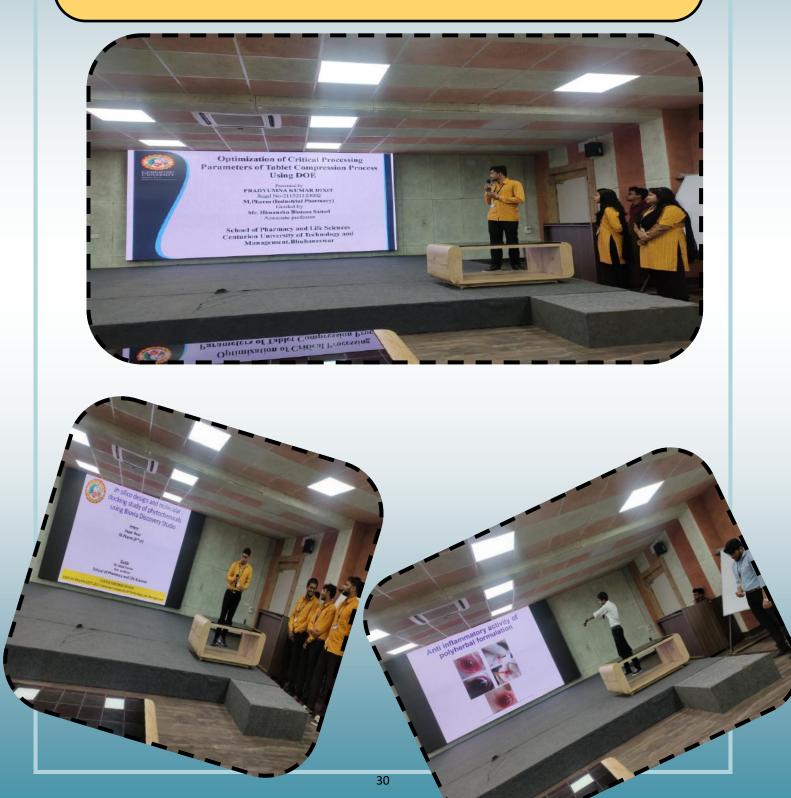


AMUUNAL this on Current Challenges and Strategies in harma centical Drug Delivery 2023 GPS Map Camer: National Seminar 2023 Centurion University, Rayagada Campus, Odisha, 765001 Lat 19.136935° Long 83.414215° Google 21/01/23 11:42 AM GMT +05:30

SUMMER INTERNSHIP PROJECTS- 2022

Focused Area:

- PAT & Prescription handling
- QBD & DOE
- Drug Discovery using Biovia



SUMMER INTERNSHIP PROJECTS



PRE CLINICAL STUDIES





CLINICAL TRIAL DETAILS

FORM CT-02

(See rules 8, 9, 10 and 14)

GRANT OF REGISTRATION OF ETHICS COMMITTEE RELATING TO CLINICAL TRIAL OR BIOAVAILABILITY AND BIOEQUIVALNENCE STUDY

Registration No. ECR/349/Indt/OD/2021

The Central Licencing Authority hereby registers and permits CUTM-Independent Ethics Committee , Centurion University Of Technology And Management AT- Ramachandrapur, PO- Jatni Khordha Bhubaneswar Khordha Orissa - 752050 Contact No.: 674 2596228 Fax No.: 674-2596229 to perform duties of ethics committee as specified in the New Drugs and Clinical Trials Rules, 2019.

2. The ethics committee shall observe the conditions of registration specified in Chapter III of the New Drugs and Clinical Trials Rules, 2019 and the Drugs and Cosmetics Act, 1940.

Place : New Delhi Date : 29-JUL-2021 VENUGOPAL GIRDHARILAL SOMANI

Central Licencing Authority Stamp

EC DOSSIER DOCUMENTS

PROJECT TITLE:- A RANDOMIZED, PARALLEL-GROUP, MULTI-CENTER, ACTIVE-CONTROLLED, COMPARATIVE, PHASE-III STUDY TO EVALUATE EFFICACY AND SAFETY OF TOFACITINIB OINTMENT 2% W/W IN SUBJECTS WITH MILD-TO-MODERATE ATOPIC DERMATITIS,

PROTOCOL N	0	LL/CT/PHASE-III/03/2021
VERSION		Version 1.0
DATE OF REL	EASING VERSION	30-September-2021

CUTM-INDEPENDENT ETHICS COMMITTEE CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT RAMACHANDRAPUR, JATNI, ODISHA 752050

INVESTIGATOR

DR .SUMANTA DAS

SPONSOR	CRO	SMO
LYKA LABS, LIMITED 4801/B & 4802/A, GIDC INDUSTRIAL ESTATE, ANKLESHWAR - 393 002, GUJARAT STATE, INDIA	INQUEST BIOPHARM PVT. LTD.616, GANESH GLORY,NR, BSNL OFFICE, JAGATPUR-CHENPUR ROAD, OFF S.G. HIGHWAY, JAGATPUR, AHMEDABAD – 382481, GUJARAT, INDIA.	CLINSTINCT CLINICAL RESEARCH PLOT NO-17,LEFT LANE- 4,JAGAMARA,KHANDAG IRI, BHUBANESWAR,ODISH A-751030

COLLABARATIONS

COLLABORATIONS within CUTM

- Collaboration with CENTER FOR PHYTO PHARMA for development of formulation of two naturally derived cosmetic formulations (Day cream and miscellar based gentle cleansing gel) on Spicy Board project.
- Collaboration with Centre for Phyto Pharma one more project is going to apply to spicy Board very soon.

COLLABORATIONS outside CUTM

- Collaboration with Hospital for Conducting Clinical trials
- Proposed to collaborate with other CROs to Conduct BA-BE studies.





