

Name: Dr. Bibhuti B. Kakoti

Designation: Professor

Department/Centre: Department of Pharmaceutical Sciences

Additional Charge: Chairperson, Centre for Biotechnology and Bioinformatics.

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Education:

1. Bachelor's Degree : B. Pharm. Dibrugarh University
2. Master's Degree : M. Pharm (Specialization in Pharmacology), Jadavpur University
3. Ph.D. : Pharmaceutical Sciences (Jadavpur University)
4. Other : Post Doctoral Studies in University of South Florida(Health),Tampa,USA

Professional Experience:

Areas of Interest/ Specialization: Pharmacology and Toxicology (Screening and Evaluation of Plant/Synthetic Drugs molecules in various therapeutic areas)

Research Projects completed: AICTE (RPS), UGC (MRP) DST (SERB), DRDO LSRB

Projects undergoing: DBT-NE Twinning Project

Other Projects handled as Co-ordinator:

- 1) Bioinformatics Infrastructure Facility (DBT-BIF)
- 2) DBT Electronic Library Consortium (DelCON)
- 3) Institutional Level Biotech Hub (IBT Hub) Facility
- 4) DBT, HRD Project (Strengthening of Biotechnology teaching, training and research in NE Institutions) (Sponsored by DBT, MHRD, Govt. Of India)

Research Publications: 119

Books: 03

Book Chapters: 09

Patents: Applied-01

Administrative Assignments: Chairperson of Centre for Biotechnology and Bioinformatics, Scientist in Charge of the Institutional Animal Ethical Committee(IAEC) of DU, Member of BOS of Pharmaceutical Sciences, Chairman of BOS, BOM, DRC of Centre for Biotechnology and Bioinformatics, Member of the International Advisory Committee, Nodal officer of

DeLCON (A DBT funded Institutional project), Member in different committees viz. CTII (Centre for Technology Innovation and Incubation), Guest house management committee, Red Ribbon Club (RRC), etc.

DBT Nominee to CSIR NEIST, Jorhat for Institutional Biosafety Committee

Member of Technical Committee and other Committees of RMRC-ICMR, Dibrugarh

Reviewer to DRDO Journal and various other Journals of University and Colleges

Collaboration: Collaborative Works with University of South Florida (Health), U.S.A and University of Makelle, Ethiopia (In Progress), RIWATCH, Arunachal Pradesh.

Consultancy projects undertaken:

Research on Public health issues of Ethnic communities of Arunachal Pradesh

Client: RIWATCH, Arunachal Pradesh

Details of consultancy: Awareness amongst Local people regarding health issues, food and food additives, traditional medicine.

Publications (2016-2022):

Sl. No.	Title of the Paper	Details of the Journal	No. of Co-authors
1	Novel butyrylcholinesterase inhibitors through pharmacophore modeling, virtual screening and DFT-based approaches along-with design of bioisosterism-based analogues.	<i>Biomed Pharmacother.</i> 2016 Nov 27 IF- 1.8	Gogoi D, Chaliha AK, Sarma D, Kakoti BB , Buragohain AK

2	3D pharmacophore-based virtual screening, docking and density functional theory approach towards the discovery of novel human epidermal growth factor receptor-2 (HER2) inhibitors.	<i>J Theor Biol.</i> 2016 Dec 21; 411:68-80; IF- 2.2	Gogoi D, Baruah VJ, Chaliha AK, Kakoti BB , Sarma D, Buragohain AK
3	Network Pharmacology-based Virtual Screening of Natural Products from <i>Clerodendrum</i> species towards the Identification of Novel Anti-cancer Therapeutics	<i>Mol. BioSyst.</i> ,2016 IF- 2.8	Barbi Gogoi, Dhrubajyoti Gogoi, Yumnam Silla, Bibhuti Bhusan Kakoti , Brijmohan Singh Bhau
4	Phytochemical analysis and DPPH scavenging activity of <i>Combretum punctatum</i> var.squamosum, an ethnomedicinal Plant of Mizoram	<i>Int.Jour. of Phytomedicine</i> , 2016 IF- 0.4	K. Thanzami, B. B. Kakoti . C. Fakima, H. Lalhlenmawia
5	Phytochemicals, CNS and analgesic activity of Ethyl acetate extract of <i>Casearia vareca</i> Roxb. leaves	<i>Asian Jour. of Chemistry</i> , 2016 IF- 0.4	B. Phukon, B. B. Kakoti , Atul Kumar
6	Invitro anthelmintic activity of <i>Casearia Veraca</i> Roxb.-An	<i>World Jour. Of Pharmacy and Pharm science</i> 2016	B. Phukon, B. B. Kakoti , Atul Kumar

	endemic plant of Assam		
7	Isolation and characterization of the new indigenous <i>Staphylococcus</i> sp. DBOCP06 as a probiotic bacterium from traditionally fermented fish and meat products of Assam state	<i>Egyptian Journal of Basic and Applied Science</i> 2016 IF- 1.6	D. Borah, B. B. Kakoti
8	Preliminary phytochemical screening, <i>in vitro</i> antioxidant activity, total polyphenolic and flavonoid content of <i>Garcinia lanceifolia</i> Roxb. and <i>Citrus maxima</i> (Burm.) Merr	<i>Journal of Applied Pharmaceutical Science</i> Vol. 6 (09), pp. 133-139, September, 2016	Partha Sarathi Bairy, Nilutpal Sharma Bora, Bibhuti Bhusan Kakoti , Aparoop Das, Lalit Mohan Nainwal, Barnali Gogoi
9	Identification of novel human renin inhibitors through a combined approach of pharmacophore modelling, molecular DFT analysis and <i>in silico</i> screening	Computational Biology and Chemistry, 2017 IF- 2.877	Dhruba jyoti Gogoi, Vishwa Jyoti Baruah, Amrita Kashyap Chaliha, Bibhuti B Kakoti , Diganta Sarma, Alak Kumar Buragohain
10	Novel butyryl cholinesterase inhibitors through Pharmacophore modelling, virtual screening and DFT based	Biomedicine and Pharmacotherapy, 2017 IF- 6.529	Dhruba jyoti Gogoi, Vishwa Jyoti Baruah, Amrita Kashyap Chaliha, Bibhuti B Kakoti , Diganta Sarma, Alak Kumar Buragohain.

	approaches along with design of bioisosterism-based analogues		
11	Hepatoprotective potential of <i>Ficus auriculata</i> and <i>Sarcochlamys pulcherrima</i> , two ethnomedicinal plants used by yhemishing community of Assam	World Journal of Pharmaceutical Research, Volume 7, Issue 15, 913-922, 2018 SJIF Impact Factor- 1.228	B.K. Doley , Bibhuti B. Kakoti
12	Isolation of antimicrobial principle from <i>Costusspeciosus</i> (Koen Ex. Ret.) Sm.	National Academy Science Letter Volume 14, Issue 5, 383-387, 2018 DOI: 10.1007/s4009-017-0589-7 IF – 0.416	M. Borkataky, Bibhuti B. Kakoti , L.R. Saikia
13	Hepatoprotective, antioxidant and anticancer activities of <i>Terminalia brownii</i> Fresen leaf extract.	Ethiopion Pharmaceutical Journal: 33,29-38,10/7/2018.	Biruk Sintanyehu, Bibhuti B.Kakoti , G.Periaswami,ManjirS.Kotokey
14	Network pharmacology-based virtual screening of natural products from Clerodendrum species for identification of novel anti-cancer therapeutics.	Mol Biosyst. 2017;13(2):406-416. doi:10.1039/c6mb00807k IF: 3.336	Barbi Gogoi, Dhruba jyoti Gogoi, Yumnam Silla, Bibhuti B Kakoti , Brijmohan Singh Bhau
15	<i>In vitro</i> study of the antioxidant potential of some traditional medicinal plants	Current Trends in Pharmaceutical Research 2019, Vol 6 Issue 2, ISSN: 2319-4820 (Print), 2582-	Bibhuti B. Kakoti , Sudarshana Borah, KabitaMahato, Mritunjay Kumar Gupta, Barnali Gogoi, Nilutpal Sharma Bora, Kangkan Deka

	of Assam and assessment of their total phenolic and flavanoid contents	4783. Departmental Journal	
16	Investigation on <i>Alocasia fornicata</i> (Kunth) Schott as a Novel Source of Bioactive Vegetable Oil	Current Bioactive Compounds. Volume 14, Issue 4, Nov, 2018 DOI: 10.2174/157340721366617070314500 <u>7</u> IF- 1.079	<u>KawlThanzami, Bibhuti B Kakoti, LalduhsangaPachau, Manuranjan Gohain, HauzelLalhlenmawia</u>
17	Ziprasidone-loaded arabic gum modified montmorillonite-tailor-madepectin based gastroretentive composites	International Journal of Biological Macromolecules, 129 (2019) 552–563 IF – 6.953	HridayBera, Yasir Faraz Abbasi, Fong Foong Yoke, Pang Mao Seng, Bibhuti B Kakoti , S.K. Milan Ahmmed, Payal Bhatnagar
18	Physicochemical, Antibacterial and Antioxidant Properties of Fixed and Essential Oils Extracted from the Peels of <i>Citrus macroptera</i> Fruit	Indian Journal of Pharmaceutical Sciences, January-February 2019; 81(1): 82-88 IF: 0.721	G. Manuranjan, P. Lalduhsanga. Lalhlenmawia, Bibhuti B. Kakoti , K.Thanzami
19	Antimicrobial activity of silver nanoparticles synthesised by using microbial biosurfactant produced by a newly isolated <i>Bacillus vallismortis</i> MDU	IET Nanobiotechnology, Volume 13, Issue 9, December 2019, p. 967–973 DOI: 10.1049/iet-nbt.2019.0038 IF: 1.847	<u>Moonjit Das, Debajit Borah, Kaustuvmani Patowary, Mayuri Borah, Ankita Khataniar, Bibhuti B Kakoti,</u>

	6 strain		
20	A Comprehensive Review on Preclinical Diabetic Models	Current Diabetes Reviews; Bentham Science, Volume:16, Issue:2, 2020 Pp: 104-116 DOI: 10.2174/1573399815666190510112035 . IF:2.087	<u>Anshul Shakya</u> , <u>Sushil Kumar Chaudary</u> , <u>Debapriya Garabadu</u> , <u>Hans Raj Bhat</u> , Bibhuti B Kakoti , <u>Surajit Kumar Ghosh</u>
21	Physicochemical Evaluation, GC-MS and Antibacterial Activity of Essential Oil of the Fruit Peels of <i>Citrus macroptera</i> Montr. of Meghalaya North East India	World Journal of Pharmaceutical and Life Sciences, Vol5, Issue-1:2019;P-1-8. IF- 1.228	S. Bhutia, T. Uriah, J. P. Mohanty, P. Pal, Bibhuti B. Kakoti
22	Phytochemical screening, anti-oxidant and anti-inflammatory activities of ethyl acetate extract of <i>Combretum punctatum</i> var. <i>squamosum</i>	Indian Journal of Natural Products and Resources, 2020, Impact Factor: 0.462 H-index: 25	K. Thanzami, V.L. Thatpuii Pachau, C. Lalremruati and Bibhuti B. Kakoti
23	Pharmacological evaluation of methanolic extract of <i>Zanthoxylum oxyphyllum</i> edgew. with special reference to anti-inflammatory and analgesic activity	International Journal of Applied Biology and Pharmaceutical Technology, Volume-8, Issue-4, Oct-Dec-2017	Sunita Munda and Bibhuti B. Kakoti

24	Phytochemical analysis and antibacterial evaluation against selected gram strains by <i>Oroxylum indicum</i> (L.) Kurz stem bark extract, a folklore medicine of Sikkim Himalaya	Journal of Pharmacognosy and Phytochemistry, 2020, Impact Factor: RJIF 5.52	Bizal Rai, Sonam Bhutia, Prosanta Pal and Bibhuti B. Kakoti
25	<i>In vitro</i> antioxidant and anti-inflammatory activities of the chloroform extract of <i>Combretum punctatum</i> var squamosum	Science Vision, Volume 19(3), p 100–108,2019 https://doi.org/10.33493/scivis.19.03.04 ,ISSN (print): 0975-6175	K. Thanzami, Bibhuti B. Kakoti , C. Lalremruati
26	Ethno-medicinal claims, phytochemistry and pharmacological properties of <i>Mandragora autumnalis</i> bertol.: A review	Research Journal of Life Sciences, Bioinformatics, Pharmaceutical and Chemical Sciences; 2019 Issue 5(6) P:71-77DOI: 10.26479/2019.0506.05.	Sonam Bhutia, Bibhuti B Kakoti
27	An Optimized Herbal Formula Reverses the Hepatotoxicity Induced by Acetaminophen	Journal of Young Pharmacists, 2022; 14(1):56-61 Original Article doi: 10.5530/jyp.2022.14.11 Published on: February 2022	Manjir Sarma Kataki, Bibhuti B Kakoti
28	Therapeutic drug repositioning with special emphasis on neurodegenerative	Frontiers in Pharmacology DOI: 10.3389/fphar.2	Bibhuti B Kakoti , Rajashri Bezbaruah

	diseases: Threats and issues	<u>022.1007315</u>	
29	Histological findings of Lasia spinosa extract in Arthritic Model	Asian Journal of Biological and Life Sciences DOI: <u>10.5530/ajbls.2022.11.70</u> September 2022	Mrityunjay Kumar, Bibhuti B Kakoti , Sudarshana Borah, Innocent Sutnga
30	Adenoviral vector based vaccine platform for COVID-19: Current status	Vaccines, 2023, 11, 432 https://doi.org/103390/vaccines/11020432	Vivek P. Chavda, Rajashri Bezbaruah, Bibhuti B Bhusan

Book Chapters (2022-2023):

1. Nanotechnology Applications in Natural Nanoclays Production and Application for Better Sustainability

February 2022

DOI: 10.1002/9781119650294.ch10

In book: Sustainable Nanotechnology, Published by John Wiley & Sons Inc. USA

Manjir Sarma Katak, **Bibhuti B Kakoti**, Kangkan Deka, Ananya Rajkumari

2. Role of Eco-friendly Nanotechnology for Green and Clean Technology

February 2022

DOI: 10.1002/9781119650294.ch14

In book: Sustainable Nanotechnology, Published by John Wiley & Sons Inc. USA

Bibhuti B. Kakoti, Kangkan Deka, Manjirsarma Katak.

3. Calamus Leptospadix: An Ethnomedicinal Antidiabetic Plant of Assam

Paperback – 1 January 2022

Sudarshana Borah, **Bibhuti B Kakoti**, PriyankaShankarishan

4. Multifunctional Nanocarrier Systems Targeting Brain Tumour: A Review

Nanocarriers for drug-targeting brain tumors,

ISBN 9780323907736. June 2022, Elsevier Publication

Bibhuti Bhusan Kakoti, Kangkan Deka, Rajashri Bezbaruah, Ngurzampuii Sailo

Projects (from 2017 – 2022):

Sl. No.	Name Of the Investigator	Title of Project	Duration (in months)	Sanctioned Amount (in Lakhs)	Funding Agency	Year
1	Dr. B.B. Kakoti	Assessment of anti-urolithiatic and anti-diabetic properties of biosurfactant produced by indigenous/native biosurfactant producing bacterial strains isolated from different petroleum-hydrocarbon	2 years	Rs. 1980000/-	DST-SERB	2019 (completed)

On Going Projects (Major / Minor)

Sl. No.	Name of the Faculty	Title of the Projects	Duration (in months)	Sanctioned Amount (INR in Lakhs)	Funded by
1	Dr. B.B. Kakoti	“Development of anti-diabetic drug through activation of AMPK signaling pathway based on berberine” (Awarded, 2018-19)	3 years	Rs 92,73,480/-	DBT-NE twinning Project
2	Dr. B.B. Kakoti	“Development of Solid Lipid Nanoencapsulated Herbal Essential Oil for Improved Topical Mosquito Repellancy” (As Co-PI)	3 years	Rs.36.54,680/-	DRDO-LSRB

Ph.D Scholars guided(2017-2023):

Sl. No.	Name	Topic	Status (On-going /Completed)
1	Mr.Nazim Hussain	Evaluation of anti cancer and antidiabetic activities of the extract of <i>C.dichotoma</i> .Forst	Completed
2	Mr.Zothampaia	Phytochemical and Pharmacological evaluation of traditionally used plant <i>Dillenia pentagyna</i> Roxb	Completed
3	Ms.P.C.Lalawmpuii	Phytochemical Investigation and Biological evaluation of <i>Helicia nilagirica</i> Bedd.	Completed
4	Ms K Thanzami	Phytochemical and Pharmacological evaluation of bioactive compounds from extracts of <i>Lonicera macrantha</i> (d.Long)spreng., an ethnomedicinal plant of Mizoram	Completed
5	Mr.Manjir Sarma Kataki	Study of indigenous plants for the development of Hepatoprotective herbal formulation and improvement of bioavailability through <i>in vivo</i> and <i>in vitro</i> expt.	Completed
6	Mr.Banoranjan Phukan	Phytochemical and Pharmacological evaluation of some ethnomedicinal plants of Brahmaputra valley of Assam	Completed
7	Mr.Bichitra Doley	Phytochemical and	Completed

		Pharmacological studies on some Ethnomedicinal plants used by Mising Tribes of Assam	
8	Ms. Munmi Borkotoki	Studies on the Antimicrobial, Hepatoprotective Activity and Soil Rhizosphere Population of Certain Ethnomedicinal Plants of Dibrugarh	Completed
9.	Dr.Munjit Das, Post Doctoral Fellow (Under DST-SERB)	Assessment of anti-urolithiatic and anti-diabetic properties of biosurfactant produced by indigenous/native biosurfactant producing bacterial strains isolated from different petroleum-hydrocarbon contaminated soil samples of Assam and their metal nanoparticles: An <i>in vitro</i> - <i>in vivo</i> approach	Completed

At present 09 numbers of registered Research Scholars are continuing their Research work.