Dr. Saitanya Kumar Bharadwaj

PERSONAL DATA



PLACE OF BIRTH	Hazarikapara, Sipajhar, Darrang, Assam, India
DATE OF BIRTH	01-01-1981
ADDRESS	Department of Chemistry, Pragjyotish College, Guwahati, Assam
PHONE	+91 9859264499
EMAIL	saitanya@pragjyotishcollege.ac.in, saitanya.iitg@gmail.com

BROAD AREA OF RESEARCH

Organometallic Chemistry and catalysis	SYNTHESIS OF DINUCLEAR METAL COMPLEXES AND CATALYSIS
	Inorganic Synthesis and catalysis; Preparation of heterogeneous catalyst and application

WORK EXPERIENCE

Current - SEPT 2017	 Assistant Professor (II) Department of Chemistry, Pragjyotish College, Guwahati, Assam Research Interest: Synthesis of dinuclear metal complexes for peroxidic epoxidation
	Teaching: Inorganic Chemistry, Spectroscopy, Analytical Chemistry, Chemistry (10+2)
SEPT 2017 -	Assistant Professor (I) Department of Chemistry, Pragjyotish College, Guwahati, Assam
SEPT 2013	Research Interest: Synthesis of dinuclear metal complexes for activation and insertion of carbon dioxide into alkene
	Teaching: Inorganic Chemistry, Quantum Chemistry, Spectroscopy, Analytical Chemistry, Chemistry (10+2).
JULY 2013 -	Assistant Professor (Guest) Department of Chemistry, Dibrugarh University, Assam, 786004
AUG 2012	Research Interest: Solid Acid Catalysis, Homogeneous catalysis
	Teaching: Inorganic Chemistry, Organometallic Chemistry.
AUG 2011 -	Postdoctoral Research Fellow (WillPower) Department of Chemistry, Technical University of Munich, Germany
SEPT 2010	Research Interest: Metal N-heterocyclic Chemistry
AUG 2010 –	Postdoctoral Research Fellow Department of Chemistry, University of Mississippi, USA
MAR 2010	Research Interest: Synthesis of molecule-like nanoparticles

EDUCATION

MAY 2010	Ph.D. in CHEMISTRY from INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI
	Thesis title : Synthesis, Characterization and Studies on their Reactivities of Heteroperoxovanadates (V) and Preparation of Solid Acid Catalyst for Organic Transformation
	Supervisor: Prof. Mihir Kanti Chaudhuri, former VC Tezpur University.
ARP 2004	M.Sc. in CHEMISTRY from GAUHATI UNIVERSITY,
	Specialization: INORGANIC CHEMISTRY
OCT 2001	B.Sc. in CHEMISTRY (Honours) with PHYSICS and MATHEMATICS from Mangaidai College under Gauhati University

DIPLOMA/CERTIFICATE COURSE

2020 – 2019	Diploma in Sanskrit language, Central Sanskrit University
JULY 2001– SEPT 2000	Certificate on Computer Application, Computer Centre, Sipajhar College

SCHOLARSHIPS AND AWARDS

JUN 2003	LS (CSIR)
DEC 2004	JRF (CSIR) (Among top 20% NET qualifying candidates in 2004)
Feb 2005	GATE (MHRD) in Chemical Science
JUN 2007	Winner to Represent IIT Guwahti in PAN IIT Conference, California, USA
May 2009	DST-DFG award to attend meeting with Noble Laureates in Germany
Mar 2010	Erasmus Mundus Willpower Postdoctoral Fellowship
Arp 2010	Elly Lily Company Asia Outstanding Thesis Award
Arp 2018	FAST-SF for Teachers by INSA, IASc, NASI

PROJECT COMPLETED AND ONGOING

Nov 2014 -	Role: PRINCIPAL INVESTIGATOR
OCT 2017 Title : Synthesis of novel dinuclear metal complexes for activation dioxide and insertion into alkene	
	Funding Agency: DST-SERB, Govt. of India Amount: INR 7.6 Lakh Status: Completed
DEC 2021 -	Role: PRINCIPAL INVESTIGATOR
NOV 2024	Title: Synthesis of novel dinuclear metal complexes for peroxidic epoxidation
	Funding Agency: DST-SERB, TARE, Govt. of India Amount: INR 18.3 Lakh Status: Ongoing

M.Sc. PROJECT GUIDED

2012 –	Purna Kanta Baruah, Dibrugarh University
2013	Title : Phosphoric acid modified Montmorillonite clay: A new heterogeneous catalyst for nitration of Arenes
	Preeti Saikia, Dibrugarh University Title : Heterogeneous Catalysis for synthesis of Hantzsch Ester
	Plabita Gogoi, Dibrugarh University Title: Synthesis, Characterization and Studies of Reactivity of different Peroxovanadium(V) compounds
2013 – 2024	Aditi Sarma, NIT Sikkim Title: Peroxycarbonate mediated Selective oxidation of Benzyl Alcohol
	Anubhav Parashar, Department of Zoology, Pragjyotish College Title: Nutrition profile of Beel, Fishery and Chalani fish, <i>Labeo rohita:</i> A comparative study

B.SC. PROJECT GUIDED (2013- 2024)

Year	Name of the Student	Project Title
2014	Apurba Taye	Synthesis of Peroxocopper Complexes with 3,5-dimethylpyrazole
2015	Kanchan Chetry	Bio-Chemical Analysis of dry fishes collected from the market, Sonapur
2016	Dimpal Sarmah	Studies on the pKa values of Phosphoric acid supported on different
		Solid Surfaces
2016	Apurba Kalita	Potentiometric titration of Phosphomolybdic acid supported on different
2010		solid surface
2016	Bijitesh Choudhury	Quantitative analysis of protein present in dried fish
2016	Chandan Kalita	Boric Acid Catalyzed Esterificaton of Carboxylic Acid with Butanol
2016	Jyotirmoy Dutta	Synthesis and Characterization of copper compounds with 3,5-
2010	eyeamey Data	dimethylpyrazole
2017	Manash Jyoti Sarma	Synthesis of 3,5-dimethypyrazole and oxidation reaction
2017	Tushar Dev Sarma	Extraction of Silica from Rice straw
2018	Aditi Sarma, Payal	Chemical Analysis of water from Bharalu River and separation of
2010	Ambastha, Sima	Inorganic and Organic pollutant from water
	Ramchiary	norgane and organic political from water
2018	Uddipan Bora	Connectivity index of different biologically active imidazole derivatives.
2022	Chayanika Kalita	Synthesis of Different Cobalt Complexes for oxidation reaction
2022	Jyotiprasad Das	Synthesis of Carbon Quantum Dots (CQD) from Polythene and Silica
LULL	eyeaplacad Dae	from Rice Husk and Impregnation of the CQD into Silica
2022	Manish Jha	Preparation of Cobalt carbonato complex and oxidation of Benzyl
LULL	Manioriona	alcohol
2022	Radhika Mishra &	Designing Ligand Architechture with 3,5-dimethylpyrazole and Synthesis
LULL	Suresh Kr Sah	of copper complexes.
2023	Dibyendu Rakshit	Synthesis of Potassium [carbonato oxodiperoxovanadate(V)] and
2020		Potassium [carbonato(3,5-dimethylpyrazole)oxoperoxovanadate(V)
2023	Mrigakshy	μ -hydroxo and μ -fluoro peroxovanadium complexes and studies their
2020	Chakravarty	reactivities with respect to oxidation of Bromide to Tribromide
2023	Ashif Mustafizur	Isolation, characterization and study of reactivities of peroxovanadium
2020	Rahman	compounds
2023	Gaurav Jyoti Dutta	Synthesis and Chracterization of Citrato-oxovanadate (V) and Citrato-
2020	Callar Oyon Dana	oxoperoxovanadate (V) complexes
2024	Mishmi Dhar	Synthesis and Characterization of Peroxovanadium Complexes and Its
202.		Application
2024	Ankita Das & Jerifa	Synthesis and Characterization of Peroxovanadium (V) complexes
2027	Yesmin	
2024	Henashree Sarma	Synthesis of cis and trans Potassium diaquodioxalatochromate(III)
2024		

RESEARCH PUBLICATIONS WITH CITATION

YEAF	R TITLE	CITATION
2023	On Topological Index of Naturally Occurring Zeolite Material [4, n] S K Bharadwaj, S Acharjee Advances in Topology and Their Interdisciplinary Applications, 229-244	
2021	Bayesian Modeling Coherenced Green Synthesis of NiO Nanoparticles using <i>Camellia</i> sinensis for Efficient Antimicrobial Activity C Kalita, R D Sarkar, V Verma, S K Bharadwaj, M C Kalita, P K Boruah, P Saikia BioNanoScience 11, 825-837	30
2020	Solvent-free esterification of substituted benzoic acids with alcohols using modified montmorillonite K10 as solid acid catalyst C Kalita, S K Bharadwaj, P Saikia Int. J. Sci. Tech. Res 9, 658-661	3
2018	Facile Access to Cyclopentadienes via Catalytic Intramolecular Palladium-Ene Reaction of 2, 4-Pentadienyl Acetates S K Bharadwaj, S K Bankar, S S V Ramasastry Synlett 29 (19), 2456-2460	9
2017	Phosphoric acid modified titania: a new Heterogeneous catalyst for Hantzsch reaction S K Bharadwaj, C Kalita Prag Consilience 2 (1), 217-222	
2017	Surfactant free synthesis of gold nanoparticles within meso-channels of non-functionalized SBA-15 for its promising catalytic activity A T Miah, S K Bharadwaj, P Saikia Powder Technology 315, 147-156	30
2017	A small insulinomimetic molecule also improves insulin sensitivity in diabetic mice S Mukherjee, M Chattopadhyay, S Bhattacharya, S Dasgupta, S Hussain, PLoS One 12 (1), e0169809	24
2016	Peroxovanadates and Its Bio-Mimicking Relation with Vanadium Haloperoxidases P Saikia, S K Bharadwaj, AT Miah Emerging Research on Bioinspired Materials Engineering, 197-219	1
2014	O-Arylation with nitroarenes: metal-catalyzed and metal-free methodologies M Mondal, S K Bharadwaj, U Bora New Journal of Chemistry 39 (1), 31-37	32
2014	Phosphoric acid modified Montmorillonite clay: a new heterogeneous catalyst for nitration of arenes S K Bharadwaj, P K Boruah, P K Gogoi Catalysis Communications 57, 124-128	34
2014	An efficient and reusable vanadium based catalytic system for room temperature oxidation of alcohols to aldehydes and ketones G Sarmah, S K Bharadwaj, A Dewan, A Gogoi, U Bora Tetrahedron Letters 55 (36), 5029-5032	28
2014	Insulin Mimetic Active Comprising Oxodiperoxo Vanadates and a Pharmaceutical Composition Obtained Thereof M K Chaudhuri, S Hussain, S Bharadwaj, U B Sinha, D Talukdar, US Patent App. 14/007,506	1
2013	The development of phosphinoamine–Pd (II)–imidazole complexes: implications in room- temperature Suzuki–Miyaura cross-coupling reaction G Borah, D Boruah, G Sarmah, S K Bharadwaj, U Bora Applied Organometallic Chemistry 27 (12), 688-694	16

YEAR	TITLE	CITATION
2013	$VO(acac)_2$: An Efficient Catalyst for the Oxidation of Aldehydes to the Corresponding Acids in the Presence of Aqueous H_2O_2 D Talukdar, K Sharma, S K Bharadwaj, A J Thakur Synlett, 963-966	42
2012	VO ₂ F (dmpz) ₂ : a new catalyst for selective oxidation of organic sulfides to sulfoxides with H ₂ O ₂ S Hussain, D Talukdar, S K Bharadwaj, M K Chaudhuri Tetrahedron Letters 53 (48), 6512-6515	71
2011	Insulin mimetic active comprising oxodiperoxo vanadates and a pharamaceutical omposition obtained thereof S K Bharadwaj, S Bhattacharya, S Bhattacharya, S Bhattacharya, WO Patent App. PCT/IN2011/000,386	
2009	Chemoselective sulfoxidation by H ₂ O ₂ or HNO3 using acid Phosphate Impregnated Titania catalyst S K Bharadwaj, S N Sharma, S Hussain, M K Chaudhuri Tetrahedron Letters 50 (27), 3767-3771	19
2009	Borax-Catalyzed and pH-Controlled Selective Oxidation of Organic Sulfides by H ₂ O ₂ : An Environmentally Clean Protocol S Hussain, S K Bharadwaj, R Pandey, M K Chaudhuri European Journal of Organic Chemistry 2009 (20), 3319-3322	50
2008	Al(H ₂ PO ₄) ₃ : An Efficient and Effective Solid Acid Catalyst for Transesterification of β- keto Esters Under Solvent Free Condition P Goswami, S K Bharadwaj Catalysis letters 124, 100-104	16
2008	Acid phosphate-impregnated titania-catalyzed nitration of aromatic compounds with nitric acid S K Bharadwaj, S Hussain, M Kar, M K Chaudhuri Applied Catalysis A: General 343 (1-2), 62-67	29
2008	Al (H2PO4) 3: An efficient catalyst for nitration of organic compounds with nitric acid S K Bharadwaj, S Hussain, M Kar, M K Chaudhuri Catalysis Communications 9 (5), 919-923	35
2007	Borax as an Efficient Metal-Free Catalyst for Hetero-Michael Reactions in Aquous Medium S Hussain, S K Bharadwaj, M K Chaudhuri, H Kalita European Journal of Organic Chemistry, 2, 374-378	56

ORIENTATION / REFRESHER COURSE

2018	106 th Orientation Programme, 1 st June – 28 th June 2018, The University of Burdwan, West Bengal
2022	Refresher Course on Managing online classes & co-creating MOOCs 10.0, Ramanujam College, Delhi University.

SEMINAR/WORKSHOP/STC/FDP/WEBINAR/SYMPOSIUM/CONFERENCE ATTENDED

SEMINAR

- 2019 "Potential of edible insects in North East India" Dept of Biotechnology, GU, 30th March
- 2019 Lecture Series: Material Science, GUIST, Gauhati University, 29th March
- 2012 Emerging Trends in Chemical Science, Gauhati. University, 30th & 31st March
- 2007 Techniche, Indian Institute of Technology Guwahati, India, 7th 9th September
- 2007 PAN IIT 2007 Global Conference held at Santa Clara, California, USA, 6th 8th July
- 2007 National Symposium on Chemistry, NSC-9, Delhi University, Delhi, India, 1st 4th February

NATIONAL/REGIONAL WORKSHOP

- 2019 Green, Sustainable and Evolving Sciences, Cotton University, 28th & 29th June
- 2019 "Intellectual Property Rights", Pragjyotish College, 19th June 2019
- 2019 "UGCBCS in Chemistry", Gauhati university, 13th June
- 2017 Research Based Pedagogical Tools (RBPT) (Level 1), organized by Tezpur University in association with IISER Pune, British Council, in collaboration with DBT, Newton Bhaba Fund, MHRD, Tezpur University, 27th 30th January
- 2017 Research Based Pedagogical Tools (RBPT) (Level 2), organized by IISER, Pune in association with British Council in collaboration with DBT, Newton Bhaba Fund, MHRD, 1st 4th March
- 2017 Regional STEM Workshop on Research Based Pedagogical Tools, Lakhimpur Girls' College, North Lakhimpur, 3rd 5th August
- 2015 Petroleum and Polymer Technology, St. Anthony College, Shilong, 22nd & 23rd September
- 2007 National Workshop on Green Chemistry & Practices, Cotton College, 1st 4th April

FACULTY DEVELOPMENT/TRAINING/ORIENTATION PROGRAMME

- 2024 "Climate Change: An Interdisciplinary Perspective" Cotton University, Guwahati, 19th -24th August
- 2024 "NEP 2020 Orientation and Sanitization Programme" MMTTC, Gauhati University, 24th January to 2nd February 2024.
- 2019 Chemistry Indian National Olympiad, Gauhati University, 14th and 15th November
- 2019 Resource Person at training program on Chromatography, Arya Vidyapeeth College, 19th 25th September
- 2014 "Instructional Objectives- Teaching Science as Science" Organized by ICFAI University Tripura on 5th December

WEBINAR

- 2020 Green and Sustainable Chemistry, Department of Chemistry, Rajib Gandhi University, Arunachal Pradesh, 17th & 18th December
- 2020 Frontier in Chemistry: from Fundamentals to Application, Department of Chemistry, Presidency University, 15th, 26th & 28th September
- 2020 Online Teaching Management Tool, Assam Science and Technology University, 28th & 29th August
- 2020 New Education Policy, 2020, Centre for Rural Resource Management Darrang, 18th August
- 2020 History and Biology of the Corona viruses and Reflections on a Post- COVID World, St. Joseph's College (Autonomous), Bengaluru, 11th July
- 2020 Awareness Programme on use of online e-resources, Pragjyotish College, Guwahati, 15th July
- 2020 From Minerals to Futuristic Functional Materials, St. Joseph's College (Autonomous), Bengaluru, 10th July

AS ORGANISERS OF TALK / WORKSHOPS / EVENT

- 2022 Joint Co-ordinator, National Symposium on Chemical Sciencesfor Sustainability" 24th November
- 2022 Moderator, National Webinar, "NanoScience: Big world of Small Things" 26th April
- 2022 Assistant Coordinator, Webinar on "NEP 2022: A brief discussion emphasizing Higher Education Sector" 8th January
- 2021 Joint Coordinators, "Webinar on occasion of World Environmental Day" 5th June
- 2017 Departmental Educational tour to Shillong
- 2017 Talk on "Developing a Scientific Temper" delivered by Prof. R. C. Deka, Tezpur University
- 2016 Joint Coordinator, 15th Chemistry Olympiad
- 2016 Talk on "Origin and Quantum" delivered by Dr. Debajyoti Mahanta, Gauhati University

EXTENSION ACTIVITIES

- ✓ District Academic Coordinator, National Children's Science Congress, 2020-24
- ✓ Evaluator, District level Hackathon Event, 2nd August 2024
- Evaluator, Bigyan Anusandhan: Children's Science Congress" under Rashtriya Avishkar Abhiyan, 15th March 2024
- ✓ Judge of Science Fair, Pandu College, 28th February, 2024
- ✓ Editorial board member, "Wall magazine Psi" 2014-2024
- Member in organizing "Showcase of Chemistry" and Quiz competitions for students on National Science Day, 2016-2019
- ✓ Chief Judge of Science Exhibition, Pandu Adarsh High School, 28th November, 2018
- ✓ Article published in "Chemical Education" Published by Assam Chemical Society 2015-2016
- Regularly publishing scientific articles in various magazine
- ✓ Evaluator, District level Children Science Congress, Guwahati, 18th September 2016
- Evaluator, District level Children Science Congress, Guwahati, 24th September 2017
- ✓ Article Published in College Magazine "Pragjyotishia" 2014-2015
- ✓ Editorial board member, Pragjyotish College Science Society Wall Magazine, 2014

CONTRIBUTION TO MANAGEMENT OF PRAGJYOTISH COLLEGE

- ✓ Coordinator, Intellectual Property Right Cell, 2022-2024
- ✓ Member, Pragjyotish College Research Council, 2022-2024
- ✓ Convener, Admission Committee, 2023-2024
- ✓ Editor of "PRAG CONSILIENCE", 2021-2022
- ✓ Member of Research and Development Cell, 2021-2022
- ✓ Member of Innovation and Incubation Centre, 2021-2024
- ✓ Member TDC 1st Semester Examination Committee, 2016
- ✓ Assistant Convener, Career Counseling Cell, 2016
- ✓ Member, Website Monitoring Committee, 2018-2019
- ✓ Member of AQAR (2010-2015) Verification Committee, 2018
- ✓ Member, Media and Publicity Cell, 2018-2019
- ✓ Secretary, Pragjyotish College Research Council, 2018-2019
- ✓ Polling Officer, Pragjyotish College Student Union Election, 2014-2019, 2021-2024
- ✓ Member, Editorial Board, Prag Newsletter, 2018-2019
- ✓ Member, Project Monitoring Committee, RUSA, 2018-2019
- ✓ Member, Online Admission Technical Committee, 2017-2018
- ✓ Assistant Editor of "PRAG CONSILIENCE", 2016-2021.
- ✓ Joint Convener, Pragjyotish College Research Council, 2017-2018
- ✓ Members of the college team of youth festival of the University, 2016
- ✓ Member of editorial board of "PRAG CONSILIENCE", 2015-2016
- ✓ Member of editorial board of "Pragjyotishiya", 2015-2016

- ✓ Member of TDC 5th Semester Examination committee, 2015
- ✓ Member of TDC 1st Semester Examination Committee, 2016
- ✓ Member of "Teachers' day celebration Committee", 2015
- ✓ Member of the College IQAC, 2014-2017.
- ✓ Member of "Exam form verification committee", 2014-2016
- ✓ Member, IQAC core committee, 2015-2016
- ✓ Member of HS Final Examination, 2014

PROFESSIONAL SERVICES AND ACTIVITIES

- ✓ Member, Committee of Curriculum and Syllabus, Gauhati University, 2023-2024
- External Examiner, B.Sc. 4th Semester Practical Examination, H.G. College, 8, 9, 16 & 20 September, 2022
- ✓ External Examiner, 1st Semester PGDAC examination, Dept. of Chemistry, GU, 24th & 25th February 2022
- ✓ Invigilator Duties, TDC 3rd Semester Examination, Pragjyotish College, 2nd & 16th March, 2021
- ✓ External Examiner, B.Sc. 3rd Semester Practical Examination, Guwahati College, 20th January, 2020
- ✓ External Examiner, B.Sc. 4th Semester Practical Examination, Guwahati College, 24th & 25th June, 2019
- ✓ External Examiner, B.Sc. 3rd Semester Practical Examination, Royal Global University, 04th December, 2019
- ✓ Question Paper Setter, Polytechnic Admission Test, DTE, Govt. of Assam, 2019
- ✓ External Examiner, B.Sc. 3rd Semester Practical Examination, Handique Girls College, 22nd January, 2019
- ✓ External Examiner, B.Sc. 1st Semester Practical Examination, Royal Global University, 10th December, 2018
- ✓ External Examiner, M.Sc. 1st Sem Practical Exam, Royal Global University, 17th & 18th December, 2018
- ✓ External Examiner, B.Sc. 6th Semester Practical Examination, Pandu College, 28th April, 2018
- ✓ External Examiner, B.Sc. 2nd Semester Practical Examination, Pub Kamrup College, 28th April, 2018
- ✓ External Examiner, B.S. 8th and 4th Semester Practical Examination, GUIST, 16th & 18th June 2016

LIFE MEMBER OF SOCIETIES/BODIES

- ✓ Assam Bramin Samaj (Reg. No. RSZ/238/B/61/2004-05) since 2017
- Assam Sahitya Sabha since 2018
- ✓ International Red-Cross Society, since 2021
- ✓ Assam Chemical Society since 2015
- ✓ Purnananda Memorial Museum (Reg. No. 4719/95-96), since 2014

Self-verification done for above information...

Bharadwaj

(Updated on 30th September 2024)