## Dr. Partha Pratim Saikia's biography

#### **Education:**

- 2011 Ph.D. in Chemistry, Dibrugarh University
- 2004 M.Sc. in Chemistry, Gauhati University
- 2002 B.Sc. in Chemistry, Dibrugarh University (Govt. Science College, Jorhat)

## **Professional Experience:**

- 2012-Present Assistant Professor, N.N.Saikia College, Titabar, Jorhat
- 20011 Research Associate, Lecturer, Bishwanath College

## Honors and Awards:

- "The Best Research Paper -2010" by North-East Institute of Science & Technology, Jorhat, India.
- "Most Cited Paper Award" for 2005-2008 & 2006-2009 by Elsevier.
- Junior Research Fellowship (2006-2008) and Senior Research Fellowship (2008-2010) awarded by Council of Scientific and Industrial Research, India on the basis of National Eligibility Test (NET).

### **Research Projects Undertaken**

	Type of Project	Title of the Project	Funding Agency	Duration Year		Total Grant	Status
	,	,	•	From	To		
1	DST- TARE fellowship	Extraction of electrical energy from hydrological cycle through two-dimensional nanofluidic channels	SERB	2021		8,25,000/-	Ongoing
2	Major  (DST Fast Track Project)	In situ generation of cyanide from novel non-tixic source: Application in a few important C-C bond forming reaction and possible extension to the synthesis of bioactive natural products	DST	2013	2016	23 lakhs	Completed

#### **Research Publications**

- 1. Synthesis of salicylic acid phenylethyl ester (SAPE) and its implication in immunomodulatory and anticancer roles
  - Arup Jyoti Das, Monoj Kumar Das, Salam Pradeep Singh, **Partha Pratim Saikia**, Neelu Singh, Johirul Islam, Aftab Ansari, Pronobesh Chattopadhyay, Paulraj Rajamani, Tatsuro Miyaji & Sankar Chandra Deka *Scientific Reports*, **2022**, 12, pp. 1-18.
- 2. Reconstruction of soil components into multifunctional freestanding membranes
  - J Deka, K Saha, T J Konch, R K Gogoi, S Saikia, **Partha P. Saikia**, G K Dutta, K Raidongia *ACS Omega*, **2019**, *4*(1), 1292-99.
- 3. Strategic formulation of grapheme oxide sheets for flexible monoliths and robust polymeric coatings embedded with durable bioinspired wettability A Das, J Deka, A M Rather, B K Bhunia, **Partha P. Saikia**, B B Mandal, K Raidongia, U Manna *ACSApplied Materials & Interface* **2017**, *9*(48), 42354-65
- 4. Structural characterization and surface environment of ZnO nanoflowers D Borah, M K Baruah, **Partha P. Saikia**, K K Senapaty, M Baruah, R Singha *J. Mater. Environ. Sci.* **2016**, *7* (1), pp. 331-36
- 5. Synthesis of ZnO Nanoparticles from Zinc Formate and Their Optical Properties
  - S Boruah, S Mustafiza, D Saikia, H J Saikia, **Partha P. Saikia**, M K Baruah *American Chemical Science Journal* **2016**, *11*(4): 1-10
- 6. Evaluation of pKa Valuesof soil humic acids and their complexation properties
  - S Paul, T Sharma, D Saikia, **Partha P. Saikia**, D. Borah, M K Baruah International Journal of Plant & Soil Science **2015**, 6(4): 218-228
- 7. Ultra-visible and Infrared Spectroscopic Studies of Soil Humic Acids M Kachari, P Belwar, K Dutta, A Sarmah, **Partha P Saikia**, Mrinal K Baruah *International Journal of Plant & Soil Science* **2015**, *6* (4): 194-202
- 8. Effect of nanoparticles on the structural changes of char prepared by non-isothermal treatment of Assam coal (India) in nitrogen atmosphere MK Baruah, **Partha P Saikia**, T Paul, M K Barua, *J. Mater. Environ. Sci.* **2014**, *5* (3), pp. 711-714
- A solvent-free method for the direct synthesis of Cbz-protected β-amino ketones using triphenylphosphine dibromide
   P Buragohain, Partha P Saikia, NC Barua Tetrahedron Letters 2013, 54 (27), 3562-3564
- 10. Synthesis of a novel series of highly functionalized Baylis–Hillman adducts of artemisinin with potent anticancer activity

- A Goswami, **Partha P Saikia**, B Saikia, NC Barua, AK Saxena, N Suri, M. Sharma *Tetrahedron Letters* **2013**, *54* (32), 4221-4224
- 11. Pd (o)-nanoparticles stabilized by tripodal phosphine based ligands and their catalytic activities on carbon carbon bond formation reactions
  - BJ Borah, K Saikia, **Partha P Saikia**, NC Barua, DK Dutta *Catalysis Today* **2012**, *198* (1), 174-183
- 12. Dinitroaliphatics as linkers: application in the synthesis of novel artemisinin carba-dimer
  - A Goswami, **Partha P Saikia**, B Saikia, NC Barua *Molecular diversity* **2011**, *15* (3), 707-712
- 13. An improved stereoselective total synthesis of (R)-rugulactone A Goswami, **Partha P Saikia**, B Saikia, D Chaturvedi, NC Barua *Tetrahedron Letters* **2011**, *52* (40), 5133-5135
- 14. Synthesis of a novel series of 1, 2, 3-triazole-containing artemisinin dimers with potent anticancer activity involving Huisgen 1, 3-dipolar cycloaddition reaction
  - B Saikia, **Partha P Saikia**, A Goswami, NC Barua, AK Saxena, N Suri *Synthesis*, **2011**, 3173-3179
- 15. Stabilization of Cu (0)-nanoparticles into the nanopores of modified montmorillonite: An implication on the catalytic approach for "Click" reaction between azides and terminal alkynes
  - BJ Borah, D Dutta, **PP Saikia**, NC Barua, DK Dutta *Green Chemistry* **2011**, *13* (12), 3453-3460
- 16. Bio-transformation of artemisinin using soil microbe: Direct C-acetoxylation of artemisinin at C-9 by Penicillium simplissimum.
  - A Goswami, **Partha P Saikia**, N C Barua, M Bordoloi, A Yadav, T C Bora, B K Gogoi, A K Saxena, N Suri, M Sharma. *Bioorg. Med. Chem. Lett.* **2010**, *20*, 359-361.
- 17. Artemisinin and its derivatives: a novel class of anti-malarial and anti-cancer agents.
  - D Chaturvedi, A Goswami, **Partha P Saikia**, N C Barua, P G Rao. *Chem. Soc.* Rev. **2010**, *39*, 435-454.
  - (Among top ten most accessed papers of Chem Soc Rev, February, 2010.)
- 18. An Efficient Synthesis of Taxotere Side Chain.
  - T J Devi, **Partha P Saikia**, N C Barua. Lett. Org. Chem. **2009**, 6, 616-618.
- 19. An efficient and stereoselective route to 1-deoxy-5-hydroxy sphingosine analogues.

**Partha P Saikia**, G Baishya, A Goswami, N C Barua *Tetrahedron Lett.* **2008**, 49, 6508-6511.

20. An efficient reduction protocol for the synthesis of β-hydroxycarbamates from

β-nitro alcohols in one pot: a facile synthesis of (–)-β-conhydrine.

Partha P Saikia, G Baishya, A Goswami, N C Barua. Tetrahedron Lett. 2008, 49, 6508-6511.

(Highlighted in Organic Chemistry Portal, September 2009.)

- 21. Lithium amino borohydride, **Partha P Saikia** *Synlett* (Spotlight), **2007**, 995-996.
- 22. Catalytic asymmetric Henry reaction.

J Boruwa, N Gogoi, **Partha P Saikia,** N C Barua. *Tetrahedron: Asymmetry* **2006**, 17, 3315-3326.

(Most cited paper award for 2005-2008 & 2006-2009 by Elsevier.)

# Articles/Chapters published in Books

Sl.	Title with page numbers	Book Title, editor &	ISSN/ISBN no.
No.		publisher	
1	Natural Polyphenols and	Chemistry of phenolic	978-161761-335-7
	Applications with Special	compounds: state of	
	Emphasis on C-	the art, Nova Science	
	Prenylated Flavonoids,	Publisher, USA, 2011	
	pp. 223-238.		

### Patent Filed

- 1. 1, 2, 3-triazole containing artemisinin compounds and process for preparation thereof
  - B Saikia, NC Barua, **Partha P Saikia**, A Goswami, PG Rao, AK Saxena, N Suri 2015 US Patent 9,006,467
- 2. Series of artemisinin derivatives and process for preparation thereof G Baishya, NC Barua, A Goswami, **Partha P Saikia**, PG Rao, AK Saxena, N Suri, M. Sharma 2014 US Patent 8,841,466
- 3. A New series of Artemisinin Derivative with Potent Anticancer Activities. G. Baishya, N. C. Barua, A. Goswami, **Partha P Saikia**, P. G. Rao, A. K. Saxena, N. Suri, M Sharma. Filed in India, NF No. 0145 NF2009/IN.