

## *Curriculum Vitae*

*Dr. Nagendra Siddavatam*

Senior Research Scientist (CRO),  
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### PROFESSIONAL EXPERIENCE

- ❖ **2019, December to present: Senior Research Scientist** at Jubilant Biosys Limited, Noida, India.
- ❖ **2018, January to 2019, February: Postdoctoral Fellow**, Indian Institute of Science and Educational Research (IISER), Thiruvananthapuram, India.
- ❖ **2015, July to 2017, July: FAPESP-Postdoctoral Researcher**, Unicamp & USP, Sao Carlos, Brazil, S.A.
- ❖ **2006 Aug – 2009 May** Worked as a Lecturer and Head of the Department in Chemistry at Viswam Degree & P.G.College, Madanapalli, India.
- ❖ **2005 July– 2006 July** Worked as a Lecturer in Chemistry at S.S.R Junior College, Allagadda, India.

### EDUCATIONAL QUALIFICATION

- ❖ **2009 – 2015** **Ph. D., in Organic Chemistry** under the supervision of Eminent Scientist, **Dr. Biswanath Das, FRSC**, Former Chief Scientist, CSIR - Indian Institute of Chemical Technology, Hyderabad, India.  
**THESIS ENTITLED: “Stereoselective synthesis of bioactive natural lactones: E-(+)-cryptofolione, (+)-goniothalamine, herbarumin III and studies towards the synthesis of (Z)-cryptofolione along with development of new synthetic methodologies”.**
- ❖ **2003 – 2005** **M. S (Organic Chemistry)** Sri Krishnadevaraya University, Anantapur, India.
- ❖ **1999 – 2002** **B. S (Chemistry as main subject along with Biochemistry and Botany)** Sri Venkateswara University, Tirupati, India.

## RESEARCH INTERESTS

- **Organic Synthesis / Medicinal Chemistry / Bio-Organic Chemistry.**
- **Asymmetric Synthesis / Asymmetric Catalysis.**
- **Total synthesis of biologically active natural products.**
- **Development of novel synthetic methodologies and evaluation of bioactivity.**

## RESEARCH HIGHLIGHTS & TECHNICAL SKILLS

- Synthesis of lead molecules with potential biological activity by employing modern synthetic procedures.
- Design and execution of multi-step synthetic pathways independently.
- Development of new synthetic methodologies as tools in multi-step organic synthesis.
- Profound efficiency in handling of hygroscopic, air and moisture sensitive reagents and reactions.
- Interpretation of the structure of organic compounds using  $^1\text{H}$  NMR,  $^{13}\text{C}$  NMR, IR, MASS spectroscopic data.
- Excellent team worker, skilled in synthesis of mg-gram scale.
- Expert in the purification and characterization of organic compounds using chromatography and spectroscopic techniques including NMR, MS, and IR spectroscopy.
- Capable of carrying independent and collaborative research.
- Supervisory and mentoring skills towards asymmetric synthesis.
- Able to identify experimental problems and resolve them independently.
- Ability to write scientific reports, and manuscript for publication.
- Working knowledge in most of the chemical databases and basics in computers

## AWARDS AND FELLOWSHIPS

- Qualified **National Eligibility Test** (for Fellowship and Lectureship) conducted by Council of Scientific and Industrial Research and University Grant Commission (CSIR-UGC-India), **Dec-2008.**
- Junior Research Fellowship, awarded by Council of Scientific and Industrial Research (CSIR), New Delhi, India, **2009- 2011.**
- Senior Research Fellowship, awarded by Council of Scientific and Industrial Research (CSIR), New Delhi, India, **2011-2014.**

- FAPESP – Postdoctoral Fellow, one of the Prestigious Fellowship in South America sanctioned by Research Foundation of The State of Sao Paulo (FAPESP), Sao Paulo, Brazil, South America, **2015-17**.

### SYMPOSIUMS PARTICIPATED

- Participated and presented a poster in the International Symposium on “**Chemistry and Chemical Biology of Natural Products**”, August 2-4, 2012, at CSIR-Indian Institute of Chemical Technology, Hyderabad, India.
- Participated in “**2nd UK-India Med Chem Congress-2013**”, March 22-23, at CSIR-Indian Institute of Chemical Technology, Hyderabad, India.
- Participated in the International Symposium on “**Recent Advances on the Synthesis of Bioactive Natural Metabolites**”, November 12, 2015, at FAPESP Office - Sao Paulo, Brazil.

### LIST OF PUBLICATIONS

#### From Postdoctoral Research:

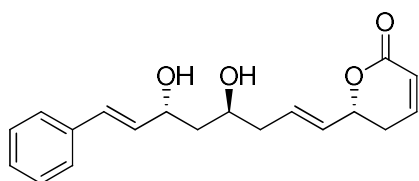
13. Asymmetric Total Synthesis of Rickiols through Unified Approach. **Siddavatam Nagendra** and Rajendar Goreti\* - *To be submitted*
12. Improved and enhanced (*E*)- selectivity in Julia-Kocienski Olefination by the Application of Novel Quaternary Ammonium salts. **Siddavatam Nagendra** and Rajendar Goreti\* - *To be submitted*
11. Asymmetric total synthesis of tricyclic core of Batzelladine alkaloid analogues and their antiprotozoal studies. **Siddavatam Nagendra**, Roberto. G. S. Berlinck and Ronaldo A. Pilli. *Under review*
10. Prêmio Nobel de Química Em 2016: Máquinas Moleculares. Karla S. Feu, Francisco F. de Assis, **Siddavatam Nagendra**, Ronaldo A. Pilli. *Quim. Nova*, **2017**, *40*, 1, 113-123. (Highlighted as **Cover Page Review Article**)

#### From Doctoral Research:

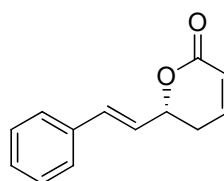
9. *Stereoselective synthesis of the non-lactonic portion of (Z)-cryptofolione and approaches towards its conversion into (Z)-cryptofolione.* **Siddavatam Nagendra**, Vanka Krishna Reddy and Biswanath Das\*. *Helvetica Chimica Acta* **2015**, *98*, 520-526.
8. *Stereoselective total synthesis of (+)-cryptofolione and (+)-goniothalamine.* Biswanath Das, **Siddavatam Nagendra**, Cheruku Ravindra Reddy. *Tetrahedron Asymmetry* **2011**, *22*, 1249-1254.
7. *A simple formal stereoselective synthesis of Herbarumin III.* **Nagendra Siddavatam**, Krishnaiah Martha, Krishna Reddy Vanka and Biswanath Das. *European Journal of Chemistry* **2012**, *3*, 337-339.
6. *Stereoselective total synthesis of passifloricin A.* Cheruku Ravindra Reddy, Boyapati Veeranjanyulu, **Siddavatam Nagendra**, Biswanath Das. *Helvetica Chimica Acta* **2013**, *96*, 505-513.
5. *An Efficient Stereoselective Total Synthesis of Aculeatins A & B.* Biswanath Das, Martha Krishnaiah, **Siddavatam Nagendra** and Cheruku R.Reddy. *Letters in Organic Chemistry* **2011**, *8*, 244-248.

4. *The first synthesis of  $\beta$ -amino phosphonates using cyclic sulfamidates.* Biswanath Das, Cheruku Ravindra Reddy, **Siddavatam Nagendra**, Maram Lingaiah. *Tetrahedron Lett.* **2011**, 52, 3496-3498.
3. *Catalyst-free efficient synthesis of polyhydroquinolines using polyethylene glycol as solvent and evaluation of their cytotoxicity.* Humani Paidepala, **Siddavatam Nagendra**, Venkateswarlu Saddanapu, Anthony Addlagatta, Biswanath Das. *Medicinal Chemistry Research* **2014**, 23, 1031-1036.
2. *Organocatalytic efficient synthesis of 14-aryl-14-H-dibenzo (a,j) xanthenes.* Biswanath Das, Humani paidepala and **Siddavatam Nagendra**. *Indian Journal of Heterocyclic Chemistry* **2011**, 21, 09-12.
1. *Friedel-Crafts Reactions of 2-Naphthol with  $\alpha$ -Amido Sulfones and Conversion of the Products with Nucleophiles.* Biswanath Das, Cheruku Ravindra Reddy, Chava Sindhu, Chithaluri Sudhakar and **Siddavatam Nagendra**. *Synthesis* **2010**, 3731-3735.

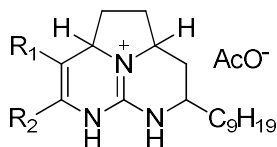
### Targets accomplished solely:



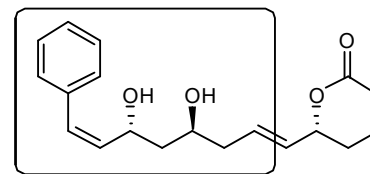
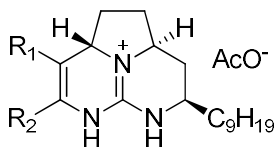
**(+)-Cryptofolione**, *anti* parasitic activity towards *Trypanosoma cruzi*



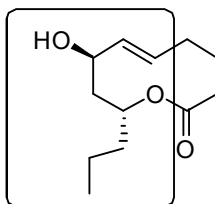
**(+)-Goniothalamine**, cytotoxic activity against different cancer cell lines



**Racemic and Chiral Tricyclic Guanidine analogues of Batzelladine D**, *anti* parasitic activity against *Leishmania* Species and Chagas disease.

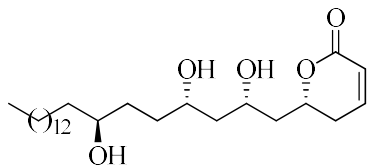


**Non-lactonic Portion of Z-Cryptofolione**,  $G_2$  check point inhibitor and more active than its *E*-isomer

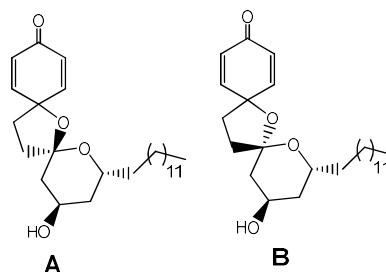


**1, 3-Syn diol fragment of Herbarumin III**, Phytotoxic agent

## Targets accomplished with association:



**Passifloricin A**, *anti* leishmanial and *anti* protozoal activities



**Aculeatins A and B**, *anti* protozoal and *anti* cancer agents

## PERSONAL BIODATA

Nationality : Indian  
Date of Birth : 10-12-1982  
Gender : Male  
Marital Status : Married  
Languages known: English, Telugu and Hindi.  
Skype ID : nagsky51

## REFERENCES

1. Dr. Biswanath Das, FRSC Scientist – G (Retired), CSIR - Indian Institute of Chemical Technology, Hyderabad, India. Email: <a href="mailto:biswanathdas@yahoo.com">biswanathdas@yahoo.com</a>	2. Prof. Ronaldo Aloise Pilli, Department of Chemistry, University of Campinas, (UNICAMP), Campinas, Brazil, South America. Email: <a href="mailto:pilli@iqm.unicamp.br">pilli@iqm.unicamp.br</a>	3. Dr. Rajendar Goreti, School of Chemistry, IISER Thiruvananth, apuram, Thiruvanan thapuram, India. Email: <a href="mailto:rajendar@iisertvm.ac.in">rajendar@iisertvm.ac.in</a>
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