



## DEBAYAN SARKAR, Ph.D

### Work Address (Preferred):

Department of Chemistry, National Institute of Technology,  
Rourkela, Odisha, India, Pin- 769 008  
Tel: +91 661 2462667; Cell: +91 7735588382 (Preferred) ; Fax +91 661 2462022  
Email : [sarkard@nitrrkl.ac.in](mailto:sarkard@nitrrkl.ac.in)/ [sarkar\\_debayan@yahoo.co.in](mailto:sarkar_debayan@yahoo.co.in)  
Website : <http://nitrrkl.ac.in/faculty?sarkard>



### Personal Information:

Date of Birth : 7<sup>th</sup> April, 1982  
Sex : Male  
Nationality : Indian  
Age : 37 yrs

### Present status:

**ICMR International Fellow, Prof. Burkhard Koenig Group, University of Regensburg, Germany, Jan 2020- Dec 2020**

**Associate Professor of Organic Chemistry, Department of Chemistry, National Institute of Technology**, Rourkela, Odisha, India, Pin- 769 008, from 02<sup>nd</sup> Feb 2018 - Continuing.

**Mentor**- Startup Contract Research Organisation “CHEMGREEN” under the Foundation of Technology and Business Incubation (FTBI), NIT Rourkela- NOV 2018 onwards

**Assistant Professor of Organic Chemistry**, Department of Chemistry, National Institute of Technology, Rourkela, Odisha, India, Pin- 769 008, *from 17<sup>th</sup> October 2011 to 01<sup>st</sup> Feb 2018*.

**Group Leader** – **Organic Synthesis & Molecular Engineering Research Group**- National Institute of Technology, Rourkela.

### Past Employment:

**DAAD Associate Professor (Academics)**- Dec 2018-Jan 2019 With Prof. Christoph Schneider, University of Leipzig, Germany

**Visiting Senior Assistant Professor**: Dec. 2015 – March 2016, With Prof. Masahiko Yamaguchi, Graduate School Of Pharmaceutical Sciences, Tohoku University, Japan

**( INDO-US Postdoctoral Research Fellow )** with Prof. B M Trost, Department of chemistry, Stanford University, California, USA-94305 ( 2012- 2013)

### Academic Background :

- **Ph. D** (Organic Chemistry): 2011, Jadavpur University, Jadavpur, Kolkata, India.
- **Thesis Title**: “*Synthesis of Biologically Active Natural Products*”

**Institute:** Department of Organic Chemistry, **Indian Association For The Cultivation of Science**, Jadavpur, Kolkata - 700032, India.

**Supervisor:** Professor R.V.Venkateswaran

- **M. Sc.** (Chemical sciences) (specialization in **Organic Chemistry**): 2003 - 2005, Department of Chemistry, University Of North Bengal, West Bengal, India (**First Class**)

- **B. Sc.** (Chemistry (**Honours**), Physics & Mathematics): **2000 - 2003**, University of North Bengal, West Bengal, India.

#### **Awards & Fellowships**

1. **ICMR- DHR Long Term Fellowship to University of Regensburg, Germany, 12 months, Govt. Of India 2019**
2. **DAAD-Research Stay Award 2018, University of Leipzig, Germany**
3. **VIFA International Young Scientist Award 2017**
4. **Tohoku University Visiting Professor – Awarded ( Dec 2017 – June 2018)**
5. **“ Certificate of Appreciation” by Education Expo-FBA- 2017 ( Young Scientist Category)**
6. **Tohoku University, Japan Visiting Professor Award ( December 2015 to March 2016)**
7. **DST-INSA- INSPIRE Faculty Award-2013 in Chemical Sciences**
8. **Board of Research in Nuclear Sciences, Govt. of India - Young Scientist Award- 2014 in Chemical Sciences.**
9. **Department of Science and Technology, Govt. of India -Fast Track Project award for Young Investigators- 2012**
10. **INDO-US RESEARCH FELLOWSHIP Award 2012** in Chemical Sciences, Stanford University, California, US.
11. **Doctoral Research Fellowship:** Qualified with Rank among Top 100 students. National Eligibility Test (NET- December'2004); Council of Scientific and Industrial Research (CSIR), New Delhi, India.
12. **Junior Research Fellowship (CSIR):** September, **2005** - September, **2007**
13. **Senior Research Fellowship (CSIR):** October, **2007** - May **2010**

#### **Ongoing Research Projects:**

1. Title : Chemical Innovations For Sustainable Future 2020- 2024 ( Principal Investigator), **1.92 Crores**  
Funding Agency : UGC-DAAD, Under Indo-German Higher Education Partnerships, PI

2. Title : Exploring Molecular Intricacy – Developing Facile Catalytic Asymmetric Oxidative Dearomatisation Reactions (CAODRs) 2017- 2020 ( Principal Investigator), 42 Lakhs  
Funding Agency : Department of Science and Technology, PI

3. Title : Injectable Nanocrystalline Hydroxyapatite- Polyanhydride Based Paste for Bone Substitution, 48 Lakhs

Funding Agency : Department of Biotechnology. ( Co- Investigator)

Status : 2017-2020

4. Title : Intramural Project on Organic Farming, 5 Lakhs

Funding Agency : National Institute of Technology Rourkela ( Principal Investigator)

Status : 2018-2019

#### **Completed Research Projects:**

1. Title : Ruthenium catalysed Non-Metathesis Couplings, 35 Lakhs

Funding Agency : Department of Science and Technology – Indian National Science Academy- INSPIRE FACULTY AWARD.  
( Principal Investigator)

Status : 2014-2019

2. Title: Synthesis of Medicinally Important Natural Products employing Cyclopropyl Ring- Cleavage and Oxidative dearomatization reactions, 25 Lakhs

Funding Agency: Department of Science and Technology, Govt. of India ( Fast Track Scheme for Young Scientists)

Status: 2013 – 2016

3. Title : Design of Multipurpose Photo reactor and Photoreactions, 5 Lakhs

Funding Agency : Technical Education Quality Improvement Programme-II, National Institute of Technology, Rourkela, India

Status : 2014-15

4. *Title* : Ruthenium Catalysed Atom-economic Transformations, 17 Lakhs

*Funding Agency* : Board of Research in Nuclear Sciences, Govt. of India (Young Scientist Research Award Scheme)

*Status* : 2014-2017

#### **Courses Taught:**

**Course on “Structural Determination of Organic Compounds” taught for one semester at Graduate School of Pharmaceutical Sciences, Tohoku University, Japan**

- CY 313 Chemistry of Natural products ...Credits- 4 ( Four Semesters)
- CY 317 Spectroscopic Methods of Analysis..Credits – 3 ( One Semester)
- CY 374 Inorganic Chemistry Lab.....Credits – 3 ( One Semester)
- CY-542 Methods in Organic Synthesis.....Credits- 3 ( Three Semester)
- CY- 571 Stereochemistry and Reaction Mechanism...Credits- 6 ( Six Semesters)
- CY-1101 Chemistry.....Credits 3 --- 1 ( One Semester)
- CY- 2701 Structural Determination of Organic Compounds 1 ( One Semester)

#### **Courses and Conferences Organised:**

1. **Coordinator of MHRD GIAN Course on “Photochromic Molecules and Materials for a Sustainable Future” by Prof. Burkhard Koenig Universität Regensburg, Germany on 14th-18th February 2019**
2. **Five Days Training Programme On Organic Farming for Sustainable Agriculture (2nd July to 6th July, 2019)**
3. **National Conference “ Advances in Chemistry with relevance to Industry and Biology”- 10<sup>th</sup>-11<sup>th</sup> January 2014**
4. **Workshop On Recent Trends in Chemical Science and its Industrial and Biological Relevance (RTCSIBR-2018) February 14-18, 201**
5. **Workshop Analytical Techniques in Chemistry Tequip II 06 Apr 2016- 07 Apr 2016**

#### **Membership of Societies and Organising :**

1. *Nominated as a Core member of International steering Committee of Royal Society of Chemistry, 2016*
2. *Nominated as Core member of Royal Society of Chemistry( Eastern India) 2015-2019*
3. *Member of Royal Society of Chemistry, UK (MRSC)*
4. *Life Member of Chemical Research Society of India*
5. *Organising Secretary of National Conference “ Advances in Chemistry with relevance to Industry and Biology” – January 10-11, 2014- Royal Society Best Poster Prize*
6. *Patron Member Orissa Chemical Society 2019.*
7. *Convenor of Recent Trends in Chemical Science and its Industrial and Biological Relevance (RTCSIBR-2018)" during February 14-18, 2018 at NIT, Rourkela.*
8. *Life Member of Indian Chemical Society*

#### **EDITORIAL SERVICE**

1. Reviewer for Journal of Organic Chemistry - ACS
2. Reviewer for Applied Organometallic Chemistry- wiley
3. Reviewer for Synthetic Communications- Taylor & Francis
4. Bentham Science Ambassador

***Selected as Editor of a book entitled “ Sulphonamides- An Overview ” by NOVA Science Publishers , USA ( To be available by December 31, 2020)***

**INSTITUTIONAL PROGRAMME SUPPORT / CENTRE OF EXCELLENCE**

*Principal Investigator of National Centre of Excellence (COE) in Organic farming – Rs. 1.0 Crore, under progress with Vedanta Limited*

*1. Professor-in-charge of the Foundation For Technology and Business Incubation (FTBI), founded by DST in 2016; 1st July 2020- continue*

*2. Professor-in-charge, Organic Farming Project, NIT Rourkela, Oct 2018-continuing*

*3. Professor-in-Charge, Institute Guest Houses, NIT Rourkela, July 2016- June 2018*

*4. Vice President, Games, Student Activity Centre, NIT Rourkela, July 2014-June 2016*

**LIST OF LABORATORIES DEVELOPED**

*Organic Synthesis and Molecular engineering laboratory*

**Patents**

**Development of Efficient Tribromides as Versatile Fine Dearomatisation Reagents- Filed on June 2019 : Patent Application No. 201931024717**

**Publications:**

<https://scholar.google.co.in/citations?user=tobGYYsAAAAJ&hl=en>

Total Citations= 706, h-index = 11

37. Trapping a Boron-enolate, C1-C10 bond Migration: Concept to Re-ality and Anti-cancer Properties

Sushree Ranjan Sahoo, Debayan Sarkar\* *Organic Letters* (Accepted Article) 2020

36. Gram Scale Synthesis of alpha-cyanoalkylboronic esters via Direct B-B and C-N Bond Cleavage.

Sushree Ranjan Sahoo, Debayan Sarkar\* *Synthetic Communications* (Accepted Article) 2020

35. Copper(I) Catalyzed Synthesis of Selanyl methylene 4-chromanol and aurone Derivatives

Sushree Ranjan Sahoo and Debayan Sarkar\* *Organic and Biomolecular Chemistry* 2020, 18, 4619-4627

34. Direct Synthesis of Regioselective  $\alpha$ -allyl  $\alpha$ -selanyl Ketones and selanyl tetra-hydrofurans

Sushree Ranjan Sahoo, Rajat Kumar Singh and Debayan Sarkar\* ***Tetrahedron Letters* ( Accepted Article) 2020**

33. Revisiting the addition of Insitu Nucleophiles to Allenic Ketones: An Entry Towards Synthesis of Benzodioxins. Sushree Ranjan Sahoo and **Debayan Sarkar\*** **European Journal of Organic Chemistry** 2020, ASAP
32. Stereoselective synthesis of para-quinone monoketals through tri-bromide (TBr) mediated oxidative dearomatization of phenols. Sushree Ranjan Sahoo and Debayan Sarkar\* **Tetrahedron Letters** (ASAP) 2020
31. Stereoselective Synthesis of Spiro-Azacycles Through Tri-bromide Mediated Oxidative Dearomatization. Sushree Ranjan Sahoo and **Debayan Sarkar\*** **European Journal of Organic Chemistry** 2020, 397-401
30. Copper(I) Catalyzed Synthesis of Functionalized *N*-Fused Indolizinone from Substituted Pyridine Homologated-ynones  
Debayan Sarkar<sup>\*,a</sup>, Sushree Ranjan Sahoo **Journal of Organic Chemistry** 2019 ( Just Accepted **DOI:** 10.1021/acs.joc.9b02853)
29. Visible Light Catalysed Selenylative Intramolecular Dearomative Carbo-spirocyclisation (IDCS) of Homologated-ynones. **Debayan Sarkar\*** and Sushree Ranjan Sahoo **European Journal of Organic Chemistry** 2019 ( Accepted Article <https://doi.org/10.1002/ejoc.201901821> )
28. [2+2] Photochemical Cycloaddition in the Synthesis of Natural Products and Related Molecules  
Debayan Sarkar, Nabakumar Bera and Subrata Ghosh **European Journal of Organic Chemistry** 2019 doi/10.1002/ejoc.201901143
27. [Copper\(I\) Catalysed Direct Synthesis of 2-Methylene-4-Chromanols](#) **Debayan Sarkar\*** Sagarika Behera **Tetrahedron Letters** (ASAP) 2019
26. Redox Economic Synthesis of Trisubstituted Piperidones via Ruthenium Catalyzed Atom-economic Couplings of *N*-protected 1,5-Aminoalcohols and Michael Acceptors Barry M Trost\*, **Debayan Sarkar\***, Nabakumar Bera **Advanced Synthesis and Catalysis** 2019, Accepted Article.
25. Ruthenium (VIII) catalysed *ipso*-Dearomative Spiro-etherification and Spiro-amidation of Phenols **Debayan Sarkar\*** and Nilendri Rout **Organic Letters** 2019 **21**, **11**, 4132-4136
24. Hydchloride Promoted Synthesis of Functionalised Isoxazoles and Pyrazoles from Allenic Ketones – First Synthesis of (*Z*)-2-methyl -7H benzo[b]pyrazolo[5,1-d][1,5]oxazocines  
**Debayan Sarkar\*** and Sushree Ranjan Sahoo **European Journal of Organic Chemistry** 2019 , 2035-2049
23. Controlling Stereoselectivity in Tribromide Mediated Oxidative Dearomatisations – Tuning The Synthesis of Selective Spirofurano-naphthalones **Debayan Sarkar \***, Puspendu Kuila, Devasish Sood **2019** Accepted article , **European Journal of Organic Chemistry** 2019 (<http://dx.doi.org/10.1002/ejoc.201900974>)
22. Book Chapter on “ Xyloketal- Unique Benzoxacycles” – in Studies in Natural Product Chemistry (*Elsevier Publishers*) **2018-** **Debayan Sarkar** and Nilendri Rout

21. PTAB Mediated Open Air Synthesis of Sulfonamides, Thiosulfonates and Symmetrical Disulfanes  
**Debayan Sarkar\***, Manoj Kumar Ghosh and Nilendri Rout *Tetrahedron Letters* 2018, 59, 2360-2364
20. Rhodium-catalyzed Insertion Reaction of PhP Group of Pentaphenylcyclopentaphosphine with Acyclic and Cyclic Disulfides. M. Arisawa, K.Sawahata, T. Yamada, **Debayan Sarkar**, M.Yamaguchi *Organic Letters* 2018, 20(4), 938-941
19. Stereoselective Synthesis of Heliannuol G. **Debayan Sarkar\*** and Manoj Kumar Ghosh. *Tetrahedron Letters* 2017, 58, 4336-4339
18. "Atom – Economic Palladium Carbon Catalysed de novo synthesis of Tri- substituted Nicotinonitriles" - **Debayan Sarkar\***, Nilendri Rout, Manoj Kumar Ghosh, SantanabGiri, K. Neue and H. Reuter. *Journal of Organic Chemistry*, 2017, 82, 9012-9022(I.Factor – 4.849)
17. "A Jack of Trio"- Robust One-pot Metal free Oxidative Amination, Azidation and Peroxidation of Phenols. **Debayan Sarkar\***, M.K.Ghosh, Nilendri Rout, PuspenduKuila *New Journal Of Chemistry*, 2017, 41, 3715—3718
16. Facile TMSOI Catalysed Stereoselective Synthesis of 2-Methylene Selanyl-4-Chromanols and Anti-Cancer Activity  
**Debayan Sarkar\***, Sagarika Behera, Sarbani Ashe, Bismita Nayak, Saikat Kumar Seth 2017, *Tetrahedron* 51, 7200-7209
15. Radical-induced expeditious stereoselective synthesis of 2-alkyl 3-allyl trans-2,3-dihydrobenzofurans (TADHBs) **Debayan Sarkar\*** and Susheeranjan Sahoo 2018 *Synthetic Communications* 48, 5, 574-581
14. Story of Heliannuols – A Unique Class of Structurally Diverse Benzoxacycles, Synthesis and Structural Revision. **Debayan Sarkar\***, Manoj Kumar Ghosh 2018 *Current Organic Chemistry* 22, 18-56
13. Phenyl Trimethyl Ammonium Tribromide Mediated Robust One-pot Synthesis of Spiroxacycles– an Economic Route- Stereoselective Synthesis of Spiroxadieneones. **Debayan Sarkar\***, M.K.Ghosh, Nilendri Rout *Organic and Biomolecular Chemistry*, 2016, 14, 7883-7886

12. PhSeBr Mediated Hydroxylative Oxidative Dearomatization of Naphthols– An Open Air Facile One-Pot Synthesis of Ketols. **Debayan Sarkar**\* M.K.Ghosh, Nilendri Rout, *RSC Advances*, 2016, **6**, 26886.

11. Synergistic interactions of surfactant blends in aqueous medium are reciprocated in non-polar medium with improved efficacy as a nano-reactor. SoumikBardhan, Kaushik Kundu, BarnaliKar, Gulmi Chakraborty, Dibbendu Ghosh, **Debayan Sarkar**Sajal Das, SanjibSenapati, Swapan Kumar Saha and Bidyut K Paul **2016**, *RSC Advances*, **6**, 55104-55116

10. Unprecedented C-Methylation at 2- Position of 2-carboxy-4-chromanones – A Case Study with Corey-Chaykovsky Reagent. S. Ghosh, **D.Sarkar**, M.K.Ghosh, I.Chakraborty *Synlett*2014, **25**, 2649-2653

9. Biomimetic type approach to the tricyclic core of xyloketal. Application to a short, stereocontrolled synthesis of alboatrin and first synthesis of xyloketal G. **Debayan Sarkar** andRamanathapuram V. Venkateswaran\* *Tetrahedron* 2011, **67**, 4559-4568

8. Synthesis of bruguierolA employing ring closing metathesis. **Debayan Sarkar** and Ramanathapuram V. Venkateswaran\* *Tetrahedron Letters*, 2011, **52**, 3232 - 3233

7. Insight into supramolecular self assembly directed by weak interactions in acetophenone derivatives : crystal structures and Hirshfield surface analyses. Saikat Kumar Seth, **Debayan Sarkar**, Amalesh Roy and TanushreeKar\* *CrystEngComm*, 2011, **13**, 6728-6741

6. Use of  $\pi$  -  $\pi$  forces to steer the assembly of chromone derivatives into hydrogen bonded supramolecular layers: crystal structures and Hirshfield surface analyses.Saikat Kumar Seth, **Debayan Sarkar** and TanushreeKar\* *CrystEngComm*, 2011, **13**, 4528 - 4535

5. On the Possibility of Tuning Molecular Edges to direct supramolecular self- assembly in coumarin derivatives through cooperative weak forces: crystallographic and Hirshfield surface analyses.Saikat Kumar Seth, **Debayan Sarkar**, AtisDipankar Jana and TanushreeKar\* *Crystal Growth & Design*, 2011, **11**, 4837-4849

4. Expeditious synthesis of helianane and C-10 halogenated heliananes employing ring-closing metathesis. Subir Sabui, Subroto Ghosh, **Debayan Sarkar**, Ramanathapuram V. Venkateswaran\* *Tetrahedron Letters*, 2009, 50, 4683-4684

3. A biomimetic type expedient approach to the tricyclic core of xyloketal. Application to a short, stereocontrolled synthesis of alboatrin and a remarkable *epi* to natural isomerisation. **Debayan Sarkar**, Subroto Ghosh, Ramanathapuram V. Venkateswaran\* *Tetrahedron Letters*, 2009, 50, 1431- 1434

2. Facile Aromatic Claisen Rearrangement Catalysed by Tin(IV) Chloride. **Debayan Sarkar**, Ramanathapuram V. Venkateswaran\* *Synlett*, 2008, 05, 653- 654

1. Total synthesis of alboatrin, a phytotoxic metabolite from *verticillium alboatrum*. Bidyut Biswas, **Debayan Sarkar**, Ramanathapuram V. Venkateswaran\* *Tetrahedron*, 2008, 64, 3212-3216.

#### Patents:

1. Patent on “Development of Efficient Tribromides as Versatile Fine Oxidative Dearomatisation Reagents” – on process of filling

Nilendri Rout, Barnali Roy, Puspendu Kuila, Sushreerajan Sahoo Sagarika Behera, Dr. Debayan Sarkar 2019

#### Administrative Positions:

1. *PIC- Guest Houses NIT Rourkela (2016-2019)*
2. *Vice-President – Student Activity Centre NIT Rourkela (2014-16)*
3. *Core Committee Member – CCMN- For M.Sc Admissions 2015*

#### Selected List of papers presented in conferences & Symposia

21. Invited to **NOST-OCC** Goa 6<sup>th</sup>-9<sup>th</sup> August 2018 GOA
20. Paper Presentation on “**Asymmetric Dearomatisation**” at International Conference on Organometallic Chemistry, Florence, Italy, 15<sup>th</sup>-20<sup>th</sup> July 2018.
19. Invited Speaker at **Institute of Chemistry, University of Rennes**, 10<sup>th</sup>-14<sup>th</sup> July 2018.
18. Invited Talk at **Rajabazar Science College, Kolkata, August 2017**
17. Oral Presentation at National Conference at **IIEST 2017- August**



16. Invited Lecture in " *International Conference in Chemistry For Human Health (ICCHD) 2017*, 8-10 January 2018 at HIT Kolkata on 100th Birth Centenary of Prof. Asima Chatterjee

15. Solving Molecular Complexity Using Oxidative Dearomatization & Metal Catalysed Atom economic Transformations- **Invited Lecture** 23<sup>rd</sup> September 2016 at Dr. Reddy's Institute of Life Sciences, Hyderabad

**14. Invited Lecture:** Indian Institute of Engineers – on World's standard day- 14<sup>th</sup> October 2015

13. Solving Molecular Complexity Using Oxidative Dearomatization & Metal Catalysed Atom economic Transformations- **Invited Lecture** 23<sup>rd</sup> September 2016 at Dr. Reddy's Institute of Life Sciences, Hyderabad

12. **Invited Lecture:** Indian Institute of Engineers – on World's standard day- 14<sup>th</sup> October 2015.

11. **Invited Lecture** in " *Science Academics Lecture workshop on Organic and Inorganic Self Assembly*" *Department of Chemistry, KIIT University, Bhubhaneswar*, 22nd February 2015.

10. **Invited Lecture** in " National Symposium on Chemistry and its interface with other Scientific Disciplines " , organized by Chemistry Dept. - Sitananda College and *Royal Society of Chemistry (Eastern India section)- 12th December 2014*

9. **Exploring Molecular Intricacy- Ruthenium Catalysis and Oxidative Dearomatisation - Challenges in Organic Chemistry- ISACS 2014- 7th- 10th August, Shanghai, China**

8. *Towards Natural Product Synthesis-Ruthenium Catalysed Non-Metathesis Couplings and Oxidative Dearomatisation-Oral Presentation- NIT Hamirpur- 29-30 May 2014*

7. *Exploring Molecular Complexity- Application to Natural Product Synthesis ; Invited Lecture- NIT-Raipur, Recent Trends in Heterocyclic Compounds and Material Science*, 26-30 May 2014

6. *Efficient Transformations towards biologically Important Natural Products; Indo-US Research Conclave, March 15-17, 2013, Pune, India.*

5. *The Benzoxacyclic Saga - High excitement and Entrigues; Trost Group Seminar Talk, 19th December 2012, Stanford University, California, US.*

4. *'Acid catalysis'-A simple but versatile synthesis in Organic synthesis; National Seminar on " A journey through Recent Developments in Chemistry" ( March 1-2, 2012), A.B.N.S (Govt. College & University Of North Bengal)*

3. *A simplified approach towards the development of 2,5-dihydro-1-benzoxepin and Synthesis of Radulanins; National seminar on ' International Year of Chemistry: Chemistry in our lives.( March 15-17, 2011), University of Burdwan.*

2. *Synthesis of bioactive natural products; ISOC on “ Organic Chemistry’ Trends in 21<sup>st</sup> Century,”* 10<sup>th</sup>-12<sup>th</sup> December, 2009, **Indian Association For The Cultivation Of Science, Jadavpur, India.**

1. *Biomimetic type expedient synthesis of Alboatrin & xyloketal G; Fourth J-Nost Conference ,* 6<sup>th</sup>-9<sup>th</sup> December, 2008, **Madurai Kamaraj University and NOST , India**

#### REFERENCES

<p><b>Prof. R.V.Venkateswaran</b> (<i>Thesis Supervisor</i> )</p> <p>Department of Organic Chemistry , Indian Association for the Cultivation of Science, 2A&amp;B, Raja S. C. Mullick Road, Jadavpur, Kolkata – 700032, India. Phone no - +919831078573 <b>E-Mail:</b> <a href="mailto:drvenkatesh46@gmail.com">drvenkatesh46@gmail.com</a></p>	<p><b>Prof. Barry M Trost ( Post-Doc Supervisor)</b></p> <p>Department of Chemistry, Lorey-Lokey Bldg, 337 Campus Drive, Stanford University, CA, USA-94305-5080 <b>E-Mail:</b> <a href="mailto:bmtrost@stanford.edu">bmtrost@stanford.edu</a> Phone no: +1650-723-3385</p>
<p><b>Prof. Subrata Ghosh, JC Bose Fellow, FNA, FNASc</b></p> <p>Department of Organic Chemistry , Indian Association for the Cultivation of Science, 2A&amp;B, Raja S. C. Mullick Road, Jadavpur, Kolkata – 700032, India. Phone no - +91 33 24734971 EXT – 402 <b>E-Mail:</b> <a href="mailto:ocsg@iacs.res.in">ocsg@iacs.res.in</a></p>	<p><b>Prof. Burkhard Koenig ( Post-Doc Supervisor)</b></p> <p>Institut fuer Organische Chemie Universitaet Regensburg D-93040 Regensburg GERMANY <b>E-Mail:</b> <a href="mailto:burkhard.koenig@chemie.uni-regensburg.de">burkhard.koenig@chemie.uni-regensburg.de</a></p>
<p><b>Prof. Dr. Christoph Schneider</b> Institut für Organische Chemie Universität Leipzig Johannisallee 29 D-04103 Leipzig Tel. :Int. + 341-9736559 Fax : Int. + 341-9736599 E-mail: <a href="mailto:schneider@chemie.uni-leipzig.de">schneider@chemie.uni-leipzig.de</a> Internet: <a href="http://www.uni-leipzig.de/~akschnei">http://www.uni-leipzig.de/~akschnei</a></p>	<p><b>Prof. RupamDinda</b> Head of The Department, Department of Chemistry , National Institute of Technology Rourkela Odisha- 769008 <b>E-Mail:</b> <a href="mailto:rupamdinda@nitrkl.ac.in">rupamdinda@nitrkl.ac.in</a></p>
<p><b>Prof. Masanori Shigeno</b> Associate Professor, Ph. D. Department of Biophysical Chemistry Graduate School of Pharmaceutical Sciences TOHOKU University Aoba, Sendai 980-8578 Japan mail: <a href="mailto:masanori.shigeno.e5@tohoku.ac.jp">masanori.shigeno.e5@tohoku.ac.jp</a> TEL 81-22-795-5917 FAX 81-22-795-5917</p>	<p><b>Prof. Animesh Biswas</b> Director National Institute of Technology Rourkela Odisha India-769008 <b>Email:</b> <a href="mailto:abiswas@nitrkl.ac.in/director@nitrkl.ac.in">abiswas@nitrkl.ac.in/director@nitrkl.ac.in</a></p>

\*\*\*\*\*END\*\*\*\*\*