NOMINATION OF

Dr. Ch. Raji Reddy
Senior Principal Scientist
CSIR-Indian Institute of Chemical Technology, Hyderabad

FOR

SUN PHARMA RESEARCH AWARD-2021

(PHARMACEUTICAL SCIENCES)

Nominated by:

Dr. S. CHANDRASEKHAR, FNASc, FASc, FNA
Director
CSIR-Indian Institute of Chemical Technology
Hyderabad - 500 607
INDIA

NOMINATION FOR SUN PHARMA RESEARCH AWARD-2021
(Pharmaceutical Sciences)

1. Name : **Dr. CHADA RAJI REDDY**
2. Sex : Male
3. Date of Birth : 5th August, 1973
4. Present position held : Senior Principal Scientist, CSIR-Indian Institute of Chemical Technology, Hyderabad
5. Address for correspondence : Department of Organic Synthesis & Process Chemistry
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6. Qualifications:

Degree/Diploma	University	Year
B. Sc	Osmania University	1994
M. Sc	Osmania University	1997
Ph. D*	Indian Institute of Chemical Technology. (Degree awarded by Osmania University)	2002
Post doc.	University of South Florida, Tampa, FL, USA	2002
Post doc.	University of Mississippi, Oxford, MS, USA	2005

*Title of the Ph.D thesis : *Synthetic Efforts on Anti-cancer Compound Epothilone A and Development of New Reduction Procedures Using Polymethylhydrosiloxane (PMHS)*

Name of the supervisor : Dr. S. Chandrasekhar

7. Area of Research Interest: **Chemical Sciences with emphasis on Organic Synthesis towards Pharmaceutical Chemistry**
(Development of novel processes for APIs and methods for the synthesis of New Chemical Entities towards Drug Discovery).

8. Positions held earlier:

University/Institution	Year(s)	Position held
Sai Life Sciences	2005-2006	Principal Scientist
IICT, Hyderabad	2006-2008	Scientist (QRS)
IICT, Hyderabad	2008-2010	Senior Scientist
IICT, Hyderabad	2010-2015	Principal Scientist
IICT, Hyderabad	2015-todate	Senior Principal Scientist

9. Honours and Awards:

Sl.No	Name of the Award / Distinction / Fellowship / Membership	Awarded for	Awarded by	Year of Award
1.	A P Akademi Young Scientist	Work in Org. Synthesis	A P Akademi	2007
2.	Best Performance Award in CSIR-IICT	Work in Org. Synthesis	CSIR-IICT	2009
3.	Best Presentation Award	Work in Org. Synthesis	A P Akademi	2010
4.	AVRA-Young Scientist Award	Work in Org. Synthesis	AVRA	2011
5.	Visiting Associate Professor	Work in Org. Synthesis	CNRS, France	2011
6.	A P Akademi- Associate Fellow	Work in Org. Synthesis	A P Akademi	2013
7.	Dr A K Singh Memorial Young Scientist Award	Work in Org. Synthesis	CSIR-IICT	2014
8.	Gregynog Organic Synthesis Workshop	Work in Org. Synthesis	RSC	2015
9.	Visiting Associate Professor	Work in Org. Synthesis	IIT-Bombay	2016

10.	CDRI – Drug Research Excellence Award	Work in medicinal chemistry	CSIR-CDRI	2017
11.	CRSI Bronze Medal	Work in Chemical sciences	Chemical Research Society of India (CRSI)	2018
12.	Fellow, Telangana Academy of Sciences	Work in Chemical Sciences	Telangana Academy of Sciences	2019
13.	CSIR-Technology Award	Work in process chemistry	CSIR	2020
14.	NASI – RELIANCE Industries Platinum Jubilee Award	Work in process chemistry	NASI	2020

10. Summary of the Work on which Nomination is based : **Annexure 1**

11. Total No. of Publications : **140**

12. **List of patents** : **10** (6-granted and 4-filed)

1. Srivari Chandrasekhar, **Chada Raji Reddy,** Subbarao Muppidi, Amol D. Patil, Nagender Punna, Ramachandra Reddy D., Raju Adepu, Kiranmai, N., Pridviraj Jaggaraju, Dattahari H Kolgave, Srinivasu Ejjirotu, Ajaykumar Uprety, Srinivasu Bodasu, Damoder Enagandhula, Sanjeev Karekar, Kishore K Palli, Jagadeesh Babu Nanubolu, Prathama S Mainkar, Krishna Mohan Vadrevu. A Process for Preparation of 3 N-(3-((4-Amino-2-butyl-1h-imidazo[4,5-C]quinoline-1-yl)methyl)benzyl)-3,4,5-trihydroxybenzamide, intermediates and derivatives thereof. (Patent Filed: 2021, July).

2. Srivari Chandrasekhar, Prathama S Mainkar, **Chada Raji Reddy**, Sistla Ramakrishna, Andugulapati Sai Balagi, Kuncha Madhusudana, Muppidi Mohan Venkata Subbarao, Tirunavalli Satya Krishna. *HDAC inhibitors for Idiopathic pulmonary fibrosis* (Application Number: 202011038497).

3. **Raji Reddy, Ch.**.;Amol D. Patil,; Subbarao, M.; Nagender, P.; Ramachandra Reddy, D.; Singh, Ajay; Prathama Mainkar; Chandrasekhar, S.; Rajamannar, T. *A Process For Preparation of 3,6-Dichlorocyano Pyrazine, 3,6-Dioxopiperazine Derivatives and Production Of Favipiravir Thereof* (Application Number: 202011024682 filed on 12th June, 2020).

4. **Raji Reddy, Ch.**.;Amol D. Patil,; Subbarao, M.; Srinivas, B.; Sukumar, G.; Chandrasekhar, S.; Rajamannar, T. *Process For The Preparation Of Gamma Amino Butyric Acids And Analogs Thereof* (Application Number: 202011006475 and filing date is 14th February, 2020).

5. Chandrasekhar, S.; Shiva Krishna, A.; **Raji Reddy, Ch.**; Sudhakar, G.; Kumaraguru, T.; Srihari, P.; Mainkar, P. S.; Rajesh, N. and Subhash Ghosh, Chemo-Enzymatic Process For The Preparation of Eribulin Intermediates (Patent Filed: No. 0019NF2019).

6. **Raji Reddy, Ch.**; Srigiridhar, K.; Santosh, K.; Babu, B. N.; Nagasenkar, A.; Anuradha, S. *C5, C6 Substituted And/Or Fused Oxindoles As Anti-Cancer Agents And Process For Preparation Thereof* US 2018/0127365 A1, **2018**.

7. Chandrasekhar, S.; Mainkar, P. S.; **Raji Reddy, Ch.**; Srigiridhar, K.; Pavan Kumar, T.; Subbarao M. M. V.; Somesh, S;; Ashok, J.; Premkumar, A. *Indole (sulfomyl) N-hydroxy benzamide derivatives as selective HDAC inhibitors* WO **2019**/102488 A1 and IN201711042426-A.

8. **Raji Reddy, Ch.**; Srigiridhar, K.; Santosh, K.; Babu, B. N.; Nagasenkar, A.; Anuradha, S. *C5, C6 Substituted And/Or Fused Oxindoles As Anti-Cancer Agents And Process For Preparation Thereof* IN201611037409, **2016.**

9. Chandrasekhar, S.; Pavan Kumar, T.; Mainkar, P. S.; **Raji Reddy, Ch.**; *Oxyimido Triazoles and Oxime Ethers from Hydroxylamine Derivatives* (Indian Patent - 201611002388, **2016**).

10. AVERY, Mitchell, A.; CHITTIBOYINA, Amar, Gopal; **CHADA, Raji, Reddy**; KACHE, Rajashaker; JUNG, Jae, Chul., NOVEL Protecting Reagents, Protecting Groups And Methods Of Forming And Using The Same, (WO/2005/100329 A1)

13. **List of Publications** : **Annexure 2**

14. List of Invited Lectures : **Annexure 3**

15. List of Ph. D.s guided/Working and other information : **22** (completed); **12** (working) **(Annexure 4**)

16. Ongoing and completed Research Projects:

– As Project Leader

Govt. Funded Projects:

(a). DST-SERB Project: Morita-Baylis-Hillman adducts of acetylenic aldehydes: Handy π-Activated Alcohols for Organic Synthesis (Principal Investigator): 2012-2015 (Rs. 45 Lakhs – completed)

(b). Ministry of Earth Sciences – Drugs from Sea: Synthesis of Marine Natural Products: Iriomoteolide-3a, Cladospolide-D, Barrenazine A & B and their analogues (Principal Investigator): 2012-2017 (Rs. 71.5 lakhs - completed)
(c). Indo-French Joint Laboratory Project for sustainable chemistry (as team member)
(d). DBT-BIRAC_CSIR-IICT_GVK Project: As a co-investigator 2013-2015 (20 lakhs to IICT).
(e). CSIR 12th Five Year plan Project: NICE-P as a Nodal Officer: 2012-2017
(f). CSIR 12th Five Year Plan Project: ORIGIN as a participant: 2012-2017
(g). **CSIR-Fast Track Translational (FTT) project as a Co-Investigator (process development of Eribulin (anti-cancer drug), Bedaquiline (anti-tuberculosis agent)**: 2016-2018
(h). **CSIR-Fast Track Translational (FTT) project as a Co-Investigator (Discovery of Novel Anticancer Agent (HDAC Inhibitor)**: 2016-2018
(i). DST-SERB Project: Development of Novel Enyne-Assisted Annulations towards the Construction of Fused Polycyclic Alkaloids (Principal Investigator): 2017-2020 (Rs. 58 Lakhs – ongoing)
(j). **Ministry of Earth Sciences – Drugs from Sea**: Synthesis of Diketopiperazine=based marine alkaloids towards evaluation of anti-cancer activity: 18-Oxotryptostatin A and 6-Methoxyspirotryptostating B and their analogues (Principal Investigator): 2017-2020 (Rs. 56 lakhs - ongoing)
(k). **Project Leader: Innovative Processes & Technologies for Indian Pharmaceutical and Agrochemical Sector Industries [INPROTICS – Pharma & Agro]**- (Project Co-ordinator), CSIR Mission Mode Project), CSIR-IICT as Nodal Lab involving four other CSIR labs **(NCL, NEIST, IHBT, IICB)** 2017-2020**.**
(l) **Project Leader – COVID-19 Mission Process Development of APIs. Working with 9-CSIR chemical laboratories (8 crores project) – CSIR Mission Project** (2020-2022)

<u>Pharmaceutical Industry Sponsored Projects: As Project Leader</u>

(a). A new industry collaborative project "Development of Processes for Eribulin Mesylate sponsored by M/s Cipla Ltd., Mumbai 2017-2019 (Rs. 30 lakhs)
(b). A new industry collaborative project "Development of Processes for New Molecules and APIs has been initiated sponsored by M/s Alfa Biosciences Pvt Ltd., Hyderabad 2015-2016 (Rs. 15 lakhs)
(b). A project on Development of process know how for commercially potential API's and key intermediates sponsored by M/s Aisin Cosmos R & D company Ltd, Japan. 2015-2016 (USD 40,000)
(c). DST-Bharat Biotech sponsored project on synthesis of Fondaparinaux (Rs 1.1 Crores):
(as co-investigator) – Completed and final report submitted.
(d). CSIR-IICT and Evolva CRO project (2008-2010): As a participant- completed.
(e). Indo-Korean Project with Changwon National University, Korea – (USD 40, 000):

(as co-investigator) – Completed.
(f). Synthesis of designed heterocyclic compounds – Sai Life Sciences – (Rs. 5, 00, 000/-) – Completed
(g). Development of Process know-how for Favipiravir and Remdesivir – Cipla Ltd. (Rs. 15,00,000/-) - completed
(h). Transfer of process knowhow of Remdesivir and Favipiravir – Laurus Labs. (Rs. 15,00,000/-) – ongoing
(i) Development of Process for key intermediate in Vaccine Project – Bharat Biotech Int. Ltd. – (Rs. 5,00,000/-) – completed.
(j) Development of Process for 2-Deoxy Glucose – PI Industries Ltd. – (Rs. 5,00,000) - completed
(k) **Development of Chromatographic-free Process for agonist molecule, used as an adjuvant in COVAXIN® – Bharat Biotech Int. Ltd. –** (Rs. 4,25,00,000/-) – ongoing
(l) Development of Environmet-friendly Process for Pyronaridine – Bill Gates and Milinda Foundation, USA – (Rs. 60,00,000/-)

Annexure 1

Summary of the Work

Dr. Raji Reddy has made outstanding contributions in the field of pharmaceutical chemistry for human health care through the development novel processes for Active Pharmaceutical Ingredients to support the pharmaceutical companies' for commercialization. In addition, contributions in the synthesis of New Chemical Entities (NCE) by the development of novel synthetic methods including natural product analogues as potential therapeutic agents towards drug discovery are noteworthy. His work resulted in discovering NCEs as leads for the treatment of cancer. Dr. Reddy planned his research programmes in such a way that the fundamental problems taken up will have a direct translation into applied research with a main focus on social relevance and positive impact towards pharmaceuticals development and materials. The research work by his group resulted in 140 publications in reputed journals and 10 patents. Two of the patents have been commercialized. The highlights of his work is described below.

- During January 2020, when whole world is getting alerted with the novel-corona virus, Dr. Reddy has played a crucial role towards the treatment of COVID-19, by developing a novel process under the repurposing drugs project. **His team accomplished the novel process for FAVIPIRAVIR towards COIVD-19 within four weeks from procuring the raw materials to sharing the technology with Cipla Ltd for production is highly commendable, which is presently commercialized and sold in the name of Ciplenza**. ***On the marketed pack, CSIR-IICT logo has also been printed***. The process has also been transferred to four other API manufacturing companies.
- **He has been fruitfully developed a novel and efficient scalable process for the synthesis of TLR 7/8 agonist molecule (IMDG), used as an adjuvant in COVAXIN® (COVID-19 vaccine) and transferred to Bharat Biotech Int. Ltd. and being produced in kilograms scale.** The use of expensive reagents and catalysts was avoided in the new process and yield improvement at each step made the process economically efficient. Importantly the process is chromatographic-free in all the stages and the final compound are now being carried out by crystallization. **BBIL has launched the vaccine, in COVAXIN® in the market and supplying to several countries.** The process has been transferred to three companies for scaleup.

- Involved in the **Development of a process for the synthesis of 2-deoxy glucose (2-DG, which was approved for the emergency usage for the treatment of COVID-19.** The developed process by our team at CSIR-IICT has been transferred to the 9-pharmaceutical companies.
- Similarly, processes for **Remdesivir**, **(*S*)-pregabalin**, **key fragment of Erubulin mesylated have also been developed and** transferred to various organizations towards commercialization. One of the molecules developed by him, a selective HDAC-inhibitor was found as potent compound for the treatment pulmonary fibrosis and potential for out-licensing (negotiation under progress with companies). Oxindole-derivative for cancer and Pyrrole-derivative for CNS disorder treatment will be taken for further development. One of the developed processes for Evolva-Biotech (anti-fungal compound, made in kilogram scale) is presently under phase-III clinical trials.
- He is also contributing to the human resource development to have the skilled man power in the country by mentoring Ph. D. research scholars as well as master students. **22-**Students have already been awarded Ph. D. degree under his supervision and **14** students are currently pursuing Ph.D. More than 18-students have got training in their master's course under his guidance. In the process of training, he has chosen the problems in such way that they will be helpful in translational work in the pharmaceutical sector. All the work done by his research group resulted in **140-publications, 10-patents and three review 3-review articles and 2-book chapters with 2,846 citations and 30 publications have been cited more than 30 times (H-index 30)**. His contributions have been highly appreciated by researchers working in the area of total synthesis and annulation reactions and are having impact in pharmaceutical sector. His efforts resulted in the development of new molecules, which are essential towards the Drug Discovery programme and this is an uninterrupted practice for the discovery of new medication.
- Dr. Reddy is contributing to the national programmes very enthusiastically by delivering the lectures to school children and college students to insprire them towards SCIENCE and Research as their future studies and career.

Overall Dr. Reddy is unique researcher by doing both fundamental and applied research towards the human health care.

Annexure 2

Complete list of Publications

140	Saqlain Haider, Pankaj Pandey, **Chada Raji Reddy**, Lanet A Lambert and Amar Chittiboyina*	Novel Machaeriol Analogues as Modulators of Cannabinoid Receptors: Structure–Activity Relationships of (+)-Hexahydrocannabinoids and Their Isoform Selectivities	ACS Omega **2021**, *6*, 20408−20421
139	Andhavaram Ramaraju, Atul Upare, Ewan W. Blanch, Subashani Maniam, Balasubramanian Sridhar, Surendar Reddy Bathula and **Chada Raji Reddy***	Chemoselective [3+2] annulation of oxime acetate with 2-aryl-3-ethoxycarbonyl-pyrroline-4,5-dione: Entry to pyrrolo[2,3-*b*] pyrrole derivatives	Org. Biomol. Chem **2021**, *19*, 7875-7882
138	**Chada Raji Reddy*** Mounika Aila, Muppidi Subbarao, Kamalkishor Warudikar, and René Grée	Domino Reaction of 2,4-Diyn-1-ols with 1,3-Dicarbonyl Compounds: Direct access to Aryl/heteroaryl-Fused Benzofurans and Indoles	Organic Letters **2021**, *23*, 4882-4887
137	**Chada Raji Reddy*** and Amol D. Patil	Iodo- and Chalcogeno-Annulation of Morita-Baylis-Hillman Alcohols of Propiolaldehydes: Entry to Functionalized 2-pyrones	Organic Letters **2021**, *23*, 4749-4753
136	D. Brahmaiah, A. K. Durga Bhavani, P. Aparna, N. Sampath Kumar, Helene Solhi, R Le Guevel, B. Baratte, S. Ruchaud, S. Bach, Surender S. J, **Ch. Raji Reddy**, Thierry Roisnel, Paul Mosset , N. Levoin, Rene Gree	Discovery of DB18, a potent inhibitor of CLK kinases with a high selectivity against DYRK1A kinase	Bioorg. Med. Chem. **2021**, *31*, 115962
135	**Chada Raji Reddy*** Roshan Chandrakant	Facile access to [1,2]-oxazine derivatives *via* annulations of	Org. Biomol. Chem **2021**, *19*, 809-821

	Kajare, Mayur C. Bhandari, Siddique Z. Mohammed, Mahender khatravath, Kamalkishor Warudikar and Nagender Punna	aminoxy-tethered 1,7-enynes	
134	**Chada Raji Reddy**,* Srinivas Bodasu, Kathe Mallesh and Y. Lakshmi Prapurna	Synthesis of Fused Pyrimido[1,6-*a*]indolones *via* Rh(III)-Catalyzed Cascade Annulations	Synthesis **2021**, *53*, 1127-1136
133	**Chada Raji Reddy**,* Ejjirotu Srinivasu, Puppala Sathish, M. Subbarao, and Ramachandra Reddy Donthiri	One-pot arylative benzannulation of 2-formyl-3-propargyl indoles with boronic acids leading to 3,4-diaryl carbazoles	J. Org. Chem. **2021**, *86*, 1118-1132
132	**Chada Raji Reddy**,* Uprety Ajaykumar and Dattahari H. Kolgave	Expeditious Access to Spiro-fused 2,5-Cyclohexadienones via Thio(seleno)cyanative ipso-Cyclization	J. Org. Chem. **2020**, *85*, 15521-15531
131	Avula Shiva Krishna, Shalini B., Rajesh N., **Chada Raji Reddy**, G. Sudhakar, Srihari P. Prathama Mainkar, Kumaraguru T.∗, Subhash Ghosh∗ and S. Chandrasekhar∗	Chemo-enzymatic process for the preparation of (*S*)-7-((tert-butyldiphenylsilyl)oxy)hept-1-yn-4-ol in a continuous packed-bed reactor (PBR), a key intermediate for Eribulin synthesis	Org. Process. Res. Dev. **2020**, *24*, 2657-2664
130	**Chada Raji Reddy**,* Puppala Sathish, Kathe Mallesh and Y. Lakshmi Prapurna	Construction of Unique Polycyclic 3, 4-Fused Indoles *via* Rhodium(III)-Catalyzed Domino Annulations	Chemistry Select **2020**, *5*, 12736–12739
129	**Chada Raji Reddy**,* and Sudam N Sinare	Expedient approach to the synthesis of betrixaban	SynOpen **2020**, *4*, 62-65
128	**Chada Raji Reddy**,* Veeramalla Ganesh and Ajay K Singh	Photo-flow controlled E-Z isomeric motion of the functionalized 3-benzylidene-indolin-2-ones	RSC Adv. **2020**, *10*, 28630-28634

127	**Chada Raji Reddy**,* Dattahari H. Kolgave, Muppidi Subbarao, Mounika Aila and Santosh K. Prajapti	Ag-Catalyzed Oxidative *ipso*-Cyclization *via* Decarboxylative Acylation/Alkylation: Access to 3-Acyl/Alkylspiro[4.5]trienones	Organic Letters **2020**, *22*, 5342-5346
126	**Chada Raji Reddy**,* Amol D. Patil and Siddique Z. Mohammed	Oxa-[3+3] Annulation of MBH-Carbonates of Propiolaldehydes with α-Nitro/Bromo Ketones to Access 2*H*-Pyrans	Chem. Commun. **2020**, *56*, 7191-7194
125	**Chada Raji Reddy**,* Kathe Mallesh, Bodasu Srinivas and Ramachandra Reddy Donthiri	Rh(III)-Catalyzed Domino [4+2] Annulation/aza-Michael Addition of *N*-(pivaloyloxy)benzamides with 1,5-Enynes via C-H Activation: Synthesis of Functionalised Aromathecins	J. Org. Chem. **2020**, *85*, 7905-7915
124	**Chada Raji Reddy**,* Roshan Chandrakant Kajare and Nagender Punna	Silver-catalyzed acylative annulation of *N*-propargylated indoles with α-keto acids: Access to acylated pyrrolo[1,2-a]indoles	Chem. Commun. **2020**, *56*, 3445-3448
123	**Chada Raji Reddy**,* Muppidi Subbarao, Puppala Sathish, Dattahari H. Kolgave and Ramachandra Reddy Donthiri	One-pot Assembly of 3-Hydroxycarbazoles *via* Uninterrupted Propargylation/ Hydroxylative Benzannulation Reactions	Organic Letters **2020**, *22*, 689-693
122	**Chada Raji Reddy**,* Mounika Aila, Puppala Satish, Madoori Mrinalini, Giribabu Lingamallu, Seelam Prasanthkumar and Rene Gree	Metal-free Propargylation/*aza*-Annulation Approach to Substituted β-Carbolines and Evaluation of their Photophysical Properties	Org. Biomol. Chem **2019**, *17*, 9291-9304
121	**Chada Raji Reddy*** Kathe Mallesh Gajula Dharmapuri Uredi Dilipkumar	Total Synthesis of Pandangolide 1 Proposed Structure	Synth Commun **2019**, *49*, 2709-2716
120	**Chada Raji Reddy**,*	Successive Allylic	Chemistry Select

	Puppala Satish and Reddi Rani Valleti	Substitution/Intramolecular [3+2] Annulation: Entry to 3,4-Oxepino-Fused Tricyclic Indoles from MBH-Acetates of Acetylenic Aldehydes	**2019**, *4*, 8229-8232
119	**Chada Raji Reddy*** Kamalkishor Warudikar and Bellamkonda Latha	Facile strategy to access the indolo[2,3-*a*]quinolizidine framework: Synthetic study on tangutorine	Synthesis **2019**, *51*, 3715-3722
118	**Chada Raji Reddy*** and Amarender Goud Burra	[4+2]-Annulation of MBH-Acetates of Acetylenic Aldehydes with Imidazoles/Benzimidazoles to Access Imidazo[1,2-a]pyridines /Benzimidazo[1,2-a]pyridines	J. Org. Chem. **2019**, *84*, 9169-9178
117	**Chada Raji Reddy**,* Siddique Z. Mohammed, Gaddam Krishna and Y. Lakshmi Prapurna	Synthesis of the Southern Furan Segment of Furanocembranoids	Synth Commun **2019**, *49*, 1153-1158
116	**Chada Raji Reddy*** Ravi Ranjan and Santosh Kumar Prajapti	Copper-Catalyzed Intramolecular Chalcogenoamination of Enynyl Azides: Synthesis of 5-Selenyl/Sulfenyl Nicotinates	Organic Letters **2019**, *21*, 623-626
115	**Chada Raji Reddy*** Kamalkishor Warudikar and Balasubramanian Sridhar	Synthetic Access to Cyclopenta[a]inden-2(1*H*)-ones from Morita-Baylis-Hillman Products of 2-Alkynyl Benzaldehydes	ACS Omega **2018**, *3*, 15734-15742
114	**Chada Raji Reddy*** and Siddique Z. Mohammed	Synthetic Studies toward (±)-Furanocembranoid 1: Construction of the Acyclic Carbon Framework	ACS Omega **2018**, *3*, 15628–15634
113	**Chada Raji Reddy*** Muppidi Subbarao, J. Vijaykumar, Surender S. Jadav, Nilesh Sasane, Reddi Rani Valleti, Bhukya Supriya, and	One-Pot Synthesis of Triazolo-Heterolignans: Biological Evaluati on and Molecular Docking Studies as Tubulin Inhibitors	Anti-Cancer Agents in Med. Chem., **2018**, *18*, 1702-1710

	Ramesh Ummanni*		
112	**Chada Raji Reddy*** Santosh Kumar Prajapti and Ravi Ranjan	Cu(I)-Catalyzed Aminative aza-Annulation of Enynyl Azide using N-Fluorobenzenesulfonimide (NFSI): Synthesis of 5-Amino Nicotinates	Organic Letters **2018**, *20,* 3128-3131
111	**Chada Raji Reddy*** Amol G. Tukaram, Siddique Mohammed, Uredi Dilipkumar, B. Nagendra Babu, SumanaChakravarty* D. Bhattacharya, Pranav C. Joshi and Rene Gree	Synthesis and biological evaluation of Longanlactone analogues as neurotrophic agents	Bioorg. Med. Chem. Lett **2018**, *28*, 673-676
110	**Chada Raji Reddy*** and Kathe Mallesh	Rh(III)-Catalyzed Cascade Annulations to Access Isoindolo[2,1-b]isoquinolin-5(7*H*)-ones *via* C−H Activation: Synthesis of Rosettacin	Organic Letters **2018**, *20,* 150-153
109	**Chada Raji Reddy**,* Ravi Ranjan, Santosh Kumar Prajapti and Kamalkishor Warudikar	One-Pot Consecutive Sulfonamidation/*ipso*-Cyclization Strategy for the Construction of Azaspirocyclohexadienones	J. Org. Chem. **2017**, *82*, 6932-6939
108	**Chada Raji Reddy**,* Santosh Kumar Prajapti, Kamalkishor Warudikar, Ravi Ranjan and Billa Bhargava Rao	*Ipso*-Cyclization: An Emerging Tool for Multifunctional Spirocyclohexadienones	Org. Biomol. Chem. **2017**, *15*, 3130-3151 (Review Article)
107	**Chada Raji Reddy**,* Reddi Rani Valleti and Puppala Sathish	[4+2]-Benzannulation of 3-alkenyl-pyrroles/thiophenes with propargylic alcohols: Access to Substituted Indoles, Benzothiophenes and Aza[5]helicenes	J. Org. Chem. **2017**, *82*, 2345-2354
106	**Chada Raji Reddy**,* Uredi Dilipkumar and	Atom- and Pot-Economical Consecutive Multi-Step Reaction	Chem. Commun.

	Ravula Shravya	Sequence to Poly Aromatic Hydrocarbons (PAHs)	**2017**, *53*, 1904-1907
105	**Chada Raji Reddy**,* Sujatarani A. Panda and A Ramaraju	Oxidative Aza-Annulation of Enynyl Azides to 2-keto/formyl pyrroles	J. Org. Chem. **2017**, *82*, 944-949
104	**Chada Raji Reddy**,* Palacherala Ramesh, and Bellamkonda Latha	Formal Syntheses of 5, 8-Disubstituted Indolizidine Alkaloids, (-)-205A, (-)-207A and (-)-235B	Synlett **2017**, *28*, 481-484
103	**Chada Raji Reddy**,* Amarender Goud B, Kiran K. Singarapu and René Grée	Facile entry to 3,4-dihydro-1*H*-pyrrolo[2,1,*c*][1,4]-oxazines *via* the *oxa*-Pictet-Spengler reaction	Eur. J. Org. Chem. **2016**, 5274-5281
102	**Chada Raji Reddy**,* Uredi Dilipkumar, Kathe Mallesh, Bellamkonda Latha and Ravula Shravya	Total synthesis of (+)-Cladospolide D	Tetrahedron: Asymmetry **2016**, *27*, 222-225
101	**Chada Raji Reddy**,* Reddi Rani Valleti and Uredi Dilipkumar	One-pot Sequential Propargylation /Cycloisomerization: A Facile [4+2]-Benzannulation Approach to Carbazoles	Chem. Eur. J. **2016**, *22*, 2501-2506
100	**Chada Raji Reddy*** Bellamkonda Latha, Kamalkishore Warudikar and Kiran Kumar Singarapu	Total synthesis of a piperidie alkaloid, Microcosamine A	Org. Biomol. Chem. **2016**, *14*, 251-258
99	Utpal Bhadra, Tanmoy Mondal, Indira Bag, Debasmita Mukhopadhyay, Paromita Das, Bibhuti B. Parida, Prathama S. Mainkar, **Chada Raji Reddy** & Manika Pal Bhadra	HDAC inhibitor misprocesses *bantam* oncomiRNA, but stimulates *hid* induced apoptotic pathway	Scientific Reports **2015**, *5*, 14747
98	**Chada Raji Reddy,***	A [3+2]-Annulation Approach to	Org. Biomol. Chem.

	Siddique Zabeeh Mohammed and Paridala Kumaraswamy	Tetrasubstituted Furans from MBH-Carbonates of Acetylenic Aldehydes *via* Sequential Substitution/Cycloisomerization	**2015**, *13*, 8310-8321
97	**Chada Raji Reddy**,* Devatha Suman and Nagavaram Narsimha Rao	Alkyne-mediated approach to the synthesis of (4*R*, 5*R*)-5-hydroxy-4-decanolide and (-)-muricatacin	Helv. Chim. Acta **2015**, *98*, 967-972
96	**Chada Raji Reddy**,* Sujatarani A. Panda and Motatipally Damoder Reddy	Aza-Annulation of Enynyl Azides: A New Approach to Substituted Pyridines	Organic Letters **2015**, *17*, 896-899
95	Narayana Nagesh,* G. Raju, R. Srinivas, P. Ramesh, M. Damoder Reddy and **Ch. Raji Reddy**	A dihydroindolizino indole derivative selectively stabilizes G-quadruplex DNA and down-regulates c-MYC expression in human cancer cells	Biochimica et Biophysica Acta **2015**, *1850*, 129–140
94	**Chada Raji Reddy**,* Palacherla Ramesh and Nagavaram Narsimha Rao	Synthesis of the highly stereocentered (C8-C16) fragment of Amphidinolide R	Tetrahedron: Asymmetry **2014**, *25*, 1532-1536
93	**Chada Raji Reddy**,* Motatipally Damoder Reddy and Uredi Dilipkumar	Total synthesis of a pyrrole lactone alkaloid, Longanlactone	Eur. J. Org. Chem. **2014**, 6310-6313
92	**Chada Raji Reddy*** Paridala Kumaraswamy and Kiran K. Singarapu	Sequential allylic substitution /Pauson-Khand reaction: A strategy to bicyclic fused cyclpentenones from MBH-acetates of acetylenic aldehydes	J. Org. Chem. **2014**, *79*, 7880-7888
91	**Chada Raji Reddy**,* Uredi Dilipkumar and Motatipally Damoder Reddy	A novel [4+2]-benzannulation to access substituted benzenes, polycyclic aromatic and benzene-fused heteroaromatic compounds	Organic Letters **2014**, *16*, 3792-3795
90	**Chada Raji Reddy**,* Ravi Ranjan, Paridala Kumaraswamy, Motatipally Damoder	1-Aryl propargylic alcohols as handy synthons for the construction of heterocycles and carbocycles	Curr. Org. Chem. **2014**, *18*, 2603-2645

	Reddy and René Grée		
89	David J. Weldon, Falgun Shah, Amar G. Chittiboyina, Anjaneyulu Sheri, **Raji Reddy Chada**, Jiri Gut, Philip J. Rosenthal, Develeena Shivakumar, Woody Sherman, Prashant Desai, Jae-Chul Jung, Mitchell A. Avery*	Synthesis, biological evaluation, hydration site thermodynamics, and chemical reactivity analysis of α-keto substituted peptidomimetics for the inhibition of Plasmodium falciparum	Bioorg. Med. Chem. Lett. **2014**, *24*, 1274-1279
88	G. Raju, R. Srinivas, M. Damoder Reddy, **Ch. Raji Reddy** and N. Nagesh*	Studies on non-covalent interaction of coumarin attached pyrimidine and 1-methyl indole 1,2,3 triazole analogues with intermolecular telomeric G-quadruplex DNA using ESI-MS and spectroscopy	Nucleosides, Nucleotides and Nucleic Acids **2014**, *33*, 489-506
87	**Chada Raji Reddy**,* Enukonda Jithender, Ashita Singh and Ramesh Ummanni	Stereoisomers of ieodoglucomides A and B: Synthesis and evaluation of anticancer activity	Synthesis **2014**, *46*, 822-827
86	**Chada Raji Reddy**,* Gaddam Krishna and Motatipally Damoder Reddy	Synthesis of substituted 3-furoates from MBH-acetates of acetylenic aldehydes *via* tandem isomerization/deacetylation/ cycloisomerization: access to Elliott's alcohol	Org. Biomol. Chem. **2014**, *12*, 1664-1670
85	**Chada Raji Reddy*** and Paridala Kumaraswamy	Copper-promoted cascade reaction of active methylenes with MBH-acetates of acetylenic aldehydes to functionalized cyclopentenes	RSC Advances **2014**, *4*, 7035-7040
84	**Chada Raji Reddy*** and Motatipally Damoder Reddy	A Metal-free Tandem C-C/C-O Bond Formation Approach to Diversely Functionalized Tetrasubstituted Furans	J. Org. Chem. **2014**, *79*, 106-116
83	Jerald Mahesh	Phenyl 1,2,3-triazole thymidine	PLoS One

	Kumar, Mohammed M. Idris, Gunda Srinivas, Pallerla Vinay Kumar, Vuppalapaty Meghah, Mitta Kavitha, **Chada Raji Reddy**, Prathama S. Mainkar, Biswajit Pal, Srivari Chandrasekar, Narayana Nagesh*	ligands stabilize G-quadruplex DNA, inhibit DNA synthesis and potentially reduce tumor cell proliferation over 3'Azido deoxythymidine	**2013**, *8*, e70798
82	**Chada Raji Reddy**,* Reddi Rani Valleti and Motatipally Damoder Reddy	A thioannulation approach to substituted thiophenes from Morita Baylis Hillman-acetates of acetylenic aldehydes	J. Org. Chem. **2013**, *78*, 6495-6502
81	**Chada Raji Reddy**,* Devatha Suman and Nagavaram Narsimha Rao	Alkyne-Mediated Approach for Total Syntheses of Cladospolides A, B, C and *iso*-Cladospolide B	Eur. J. Org. Chem. **2013**, 3786-3796
80	**Chada Raji Reddy**,* Enukonda Jithender, and Kothakonda Rajendra Prasad	Total Syntheses of the Proposed Structure for Ieodoglucomides A and B	J. Org. Chem. **2013**, *78*, 4251-4260
79	**Chada Raji Reddy**,* Uredi Dilipkumar, M. Damoder Reddy and Nagavaram Narsimha Rao	Total synthesis and revision of the absolute configuration of seimatopolide B	Org. Biomol. Chem. **2013**, *11*, 3355-3364
78	**Chada Raji Reddy**,* Jonnalagadda Vijaykumar and René Grée	Facile one-pot access to 3,5-disubstituted 1*H*-pyrazoles from propargylic alcohols *via* propargyl hydrazides	Synthesis **2013**, *45*, 830-836
77	**Chada Raji Reddy*** and G. Dharmapuri	Stereoselective synthesis of the C10-C18 fragment of iriomoteolide-3a	Synthesis **2013**, *45*, 673-677
76	**Chada Raji Reddy**,* B. Srikanth, U. Dilipkumar, K. VeeraMohana Rao	Total synthesis of a 6,6-spiroketal metabolite, dinemasone A	Eur. J. Org. Chem. **2013**, 525-532

	and B. Jagadeesh		
75	**Chada Raji Reddy**,* P. Kumaraswamy and M. Damoder Reddy	Tandem allylic substitution/5-*exo*-dig-carbocyclization: A [4+1]-annulation approach to arylidene cyclopentenes from MBH-acetates of acetylenic aldehydes	Org. Biomol. Chem. **2012**, *10*, 9052-9057
74	**Chada Raji Reddy**,* M. Damoder Reddy and Kothapalli Haribabu	Organocatalyzed intramolecular-Michael addition of Morita-Baylis-Hillman adducts of *β*-aryl nitroethylenes: an entry to 3-aryl 4-nitrocyclohexanones	Eur. J. Org. Chem. **2012**, 6414-6419
73	**Chada Raji Reddy**,* Jonnalagadda Vijaykumar, Enukonda Jithender, Gangireddy Pavan Kumar Reddy and René Grée	One-pot access to 3, 5-disubstituted isoxazoles from propargylic alcohols	Eur. J. Org. Chem. **2012**, 5767-5773
72	**Chada Raji Reddy**,* G. Krishna, N. Kavitha, B. Latha and Dong-Soo Shin	Access to 2, 3-disubstituted benzofurans *via* one-pot acid-catalyzed nucleophilic substitution/TBAF-mediated oxacycloisomerization	Eur. J. Org. Chem. **2012**, 5381-5388
71	**Chada Raji Reddy**,* N. Narsimha Rao and M. Damoder Reddy	Total synthesis of seimatopolide A	Eur. J. Org. Chem. **2012**, 4910-4913
70	**Chada Raji Reddy*** and Nagavaram Narsimha Rao	Formal total synthesis of (-)-exiguolide	RSC Advances **2012**, *2*, 7724-7734
69	**Chada Raji Reddy**,* Nagavaram Narsimha Rao, Pombala Sujitha and Chityal Ganesh Kumar	Protecting-group-free synthesis of (4*S*, 5*S*, 11*R*) and (4*S*, 5*S*, 11*S*)-*iso*-cladospolide B and their biological evaluation	Synthesis **2012**, 1663-1666
68	**Chada Raji Reddy**,* M. Damoder Reddy and B. Srikanth	Phosphine-mediated cascade reaction for substituted pyrroles: A facile access to *N*-fused pyrrolo-heterocycles	Org. Biomol. Chem. **2012**, *10*, 4280-4288

67	**Chada Raji Reddy**,* Nagavaram Narsimha Rao, Pombala Sujitha and Chityal Ganesh Kumar	Total synthesis of (+)-aspicilin employing an alkyne-based approach and it's biological evaluation	Eur. J. Org. Chem. **2012**, 1819-1824
66	**Chada Raji Reddy*** Devatha Suman and Nagavaram Narsimha Rao	Alkyne-assisted approach to the formal synthesis of a macrolide antibiotic, A2677B1	Synlett **2012**, 272-274
65	S. Chandrasekhar* S. NCVL Puspavalli, Srinivas Chatla, D. Mukhopadhyay, Bogonda Ganganna, Kandi Vijeender, Pabbaraja Srihari, **Chada Raji Reddy**, M. Janaki Ramaiah and Utpal Bhadra*	*Aza*-flavanones as potent cross-species microRNA inhibitors that arrest cell cycle	Bioorg. Med. Chem.Lett. **2012**, *22*, 645-648
64	**Chada Raji Reddy*** Bellamkonda Latha and Nagavaram Narsimha Rao	Enantioselective Access to (-)-Indolizidines 167B, 209D, 195B, 239AB and (-)-Monomorine from a Common Chiral Synthon	Tetrahedron **2012**, *68*, 145-151
63	**Chada Raji Reddy*** and Bellamkonda Latha	Synthesis of (-)-Dihydropinidine, (*2S, 6R*)-Isosolenopsin and (+)-Monomorine *via* a chiral synthon from *L*-Aspartic acid	Tetrahedron: Asymmetry **2011**, *22*, 1849-1854
62	**Chada Raji Reddy*** G. Balakrishna Reddy and B. Srikanth	Stereoselective Synthesis of a Tetrahydropyranyl Diarylheptanoid,*ent*-Diospongin A	Tetrahedron: Asymmetry **2011**, *22*, 1725-1728
61	**Chada Raji Reddy*** L. Radhika, T. Pavan Kumar and S. Chandrasekhar	First acid-catalyzed entry to *O*-alkylated hydroximides from benzylic alcohols	Eur. J. Org. Chem. **2011**, 5967-5970
60	S. Chandrasekhar* B. V. D. Vijaykumar, B. Mahesh Chandra **Ch. Raji Reddy,**	Flow chemistry approach for partial deuteration of alkynes: Synthesis of deuterated taxol side chain	Tetrahedron Letters **2011**, *52*, 3865-3867

	P. Naresh		
59	S. Chandrasekhar* T. Pavan Kumar, K. Haribabu, **Ch. Raji Reddy** and Ch. Ramesh Kumar	A chiral pyrrolidine-pyrazole catalyst for the enantioselective Michael addition of carbonyls to nitroolefins	Tetrahedron: Asymmetry **2011**, *22*, 697-702
58	**Ch. Raji Reddy*** M. Damoder Reddy, B. Srikanth and K. Rajendra Prasad	Morita-Baylis-Hillmann acetates of acetylenic aldehydes: Versatile synthons for substituted pyrroles *via* a metal-free tandem reaction	Org. Biomol. Chem. **2011**, *9*, 6027-6033
57	**Ch. Raji Reddy**,* E. Jithender, G. Krishna, E. Venkat Reddy and B. Jagadeesh	A novel acid-catalyzed C5-alkylation of oxindoles using alcohols	Org. Biomol. Chem. **2011**, *9*, 3940-3947
56	**Ch. Raji Reddy**,* P. Ramesh, N. Narsimha Rao and Syed Aziz Ali	A facile synthesis of substituted dibenzoxepines using an acid-catalyzed tandem reaction	Eur. J. Org. Chem. **2011**, 2133-2141
55	S. Chandrasekhar,* M. Seenaiah, A. Kumar, **Ch. Raji Reddy**, Suman Kumar, M., C. Ganesh Kumar and Sridhar, B.	Intramolecular copper(*I*)-catalyzed 1, 3-dipolar cycloaddition of azido-alkynes: Synthesis of triazolo-benzoxazepine derivatives as anti-microbial agents	Tetrahedron Letters **2011**, *52*, 806-808
54	**Ch. Raji Reddy**, P. Phani Madhavi and S. Chandrasekhar*	Stereoselective synthesis of tetrahydropyranyl diarylheptanoids (-)-Centrolobine and (+)-Centrolobine	Synthesis **2011**, 123-126
53	**Ch. Raji Reddy**,* and N. Narsimha Rao	Synthesis of the methylene *bis*-tetrahydropyran motif of (-)-Exiguolide	Tetrahedron Letters **2010**, *51*, 5840-5842
52	S. Chandrasekhar,* T. Pavankumar, K. Haribabu and **Ch. Raji Reddy**	Hydroxyphthalimide allied triazole-pyrrolidine catalyst for asymmetric Michael addition in water	Tetrahedron: Asymmetry **2010**, *21*, 2372-2375

51	**Ch. Raji Reddy**,* J. Vijaykumar and Rene Gree	Tris(pentafluorophenyl)borane–catalyzed alkylation of 1,3–dicarbonyl compounds with benzylic alcohols: Access to oxygenated heterocycles	Synthesis **2010**, 3715-3723
50	**Ch. Raji Reddy**,* and B. Srikanth	Synthesis of the tetrahydropyran subunit (C8-C20 fragment) of (-)-Dactylolide/(-)-Zampanolide	Synlett **2010**, 1536-1538
49	**Ch. Raji Reddy**,* P. Phani Madhavi and S. Chandrasekhar	Synthesis of a diarylheptanoid, (+)-Centrolobine	Tetrahedron: Asymmetry **2010**, *21*, 103-105
48	**Ch. Raji Reddy**,* N. Narsihma Rao and B. Srikanth	Total synthesis of a diarylheptanoid, Rhoiptelol B	Eur. J. Org. Chem. **2010**, 345-351
47	**Ch. Raji Reddy**,* G. Dharmapuri and N. Narsimha Rao	Synthesis of the Macrocyclic core of Iriomoteolide 3a	Organic Letters **2009**, *11*, 5730-5733
46	S. Chandrasekhar,* Sanjida Khatun, G. Rajesh and **Ch. Raji Reddy**	$B(C_6F_5)_3$: An efficient catalyst for reductive alkylation of alkoxy benzenes and for synthesis of triarylmethanes using aldehydes	Tetrahedron Letters **2009**, *50*, 6693-6697
45	S. Chandrasekhar,* G. S. Kiran Babu and **Ch. Raji Reddy**	Asymmetric synthesis of *aza*-diospongin A as a novel iNOS inducer	Tetrahedron: Asymmetry **2009**, *20*, 2216-2219
44	S. Chandrasekhar,* R. V. N. S. Murali and **Ch. Raji Reddy**	Enantioselective synthesis of (-)-Lasubine II	Tetrahedron Letters **2009**, *50*, 5686-5688
43	**Ch. Raji Reddy*** and E. Jithender	Acid-catalyzed *N*-alkylation of tosylhydrazones using benzylic alcohols	Tetrahedron Letters **2009**, *50*, 5633-5635
42	S. Chandrasekhar,* K. Johny and **Ch. Raji Reddy**	Proline-threonine dipeptide as an organocatalyst for direct asymmetric aldol reaction	Tetrahedron: Asymmetry **2009**, *20*, 1742-1745
41.	**Ch. Raji Reddy**,*	An efficient total synthesis of (+)-	Tetrahedron Letters

	and N. Narsimha Rao	Cladospolide C	**2009**, *50*, 2478-2480
40.	**Ch. Raji Reddy**,* N. Kiranmai, K. Johny, M. Pendke and P. Naresh	Nucleophilic addition of 4-hydroxycoumarin on Baylis-Hillman acetate adducts	Synthesis **2009**, 399-402
39.	Zuo Hua, K-H. Kam, H-J. Kwon, L. Meng, Ch. Ahn, T-J. Won, T-H. Kim, **Ch. Raji Reddy,** S. Chandrasekhar and Dong-Soo Shin*	Microwave-assisted synthesis of 2*H*-Benzo[*b*][1,4]oxazin-3(4*H*)-ones and 1*H*-Pyrido[2,3-*b*] [1,4]oxazin-2(3*H*)-ones *via* Smiles Rearrangement	Bull. Korean Chem. Society **2008,** *29*, 1379-1385
38.	**Ch. Raji Reddy**,* B. Srikanth, N. Narsihma Rao and Dong-Soo Shin	Solid supported acid-catalyzed C3-alkylation of 4-hydroxy coumarins with secondary benzyl alcohols: access to synthesis of 3, 4-disubstituted coumarins via Pd-coupling	Tetrahedron **2008**, *64*, 11666-11672
37.	S. Chandrasekhar,* M. Seenaiah, Ch. Lohitha Rao and **Ch. Raji Reddy**	A smooth access to benzotriazoles *via* azide-alkyne cycloaddition	Tetrahedron **2008,** *64*, 11325-11327
36.	**Ch. Raji Reddy**,* P. Phani Madhavi and S. Chandrasekhar	Asymmetric synthesis of 6-*epi*- (-)-Centrolobine	Synthesis 2**008**, 2939-2942
35.	**Ch. Raji Reddy**,* N. Narsimha Rao and A. Sudhakar	Exploring the catalytic activity of $MoCl_5$ as a Lewis acid in various C-C bond formation reactions	Letters in Organic Chemistry **2008**, *5*, 473-477
34.	Zuo Hua, Meng Lijuan, Manjunath Ghate, Kyu-Hyeon Hwang, Young Kweon Cho, S. Chandrasekhar **Ch. Raji Reddy**, and Dong-Soo Shin*	Microwave-assisted one-pot synthesis of benzo[*b*][1,4]oxazin -3(4*H*)-ones *via* Smiles rearrangement	Tetrahedron Letters **2008**, *49*, 3827-3830

33.	S. Chandrasekhar,* B. Saritha, T. Naresh, M. Udaykiran, **Ch. Raji Reddy** and B. Jagadeesh*	Hybrid cyclic peptide based on *cis*-*β*-furanoid sugar amino acid (FSAA) and ornithine: Formation of macro cavity stabilized by 6/7-membered hydrogen bonded rings	Helv. Chim. Acta **2008**, *91*, 1267-1276
32.	S. Chandrasekhar,* Y. Srinivasa Rao, B. Mahipal, L. Sreelakshimi and **Ch. Raji Reddy**	$B(C_6F_5)_3$-Catalyzed three-component reaction for the synthesis of 1,8-dioxo decahydroacridines under solvent-free conditions	Synthesis **2008**, 1737-1740
31.	S. Chandrasekhar,* Y. Srinivasa Rao A. Sreelakshimi and **Ch. Raji Reddy**	Formal total synthesis of (-)-Spongidepsin	Tetrahedron **2008**, *64*, 5174-5183
30.	S. Chandrasekhar,* Bhoopendra Tiwari, Bhusan B. Parida and **Ch. Raji Reddy**	Chiral pyrrolidine-triazole conjugate catalyst for asymmetric Michael and Aldol reactions	Tetrahedron: Asymmetry **2008**, *19*, 495-499
29.	**Ch. Raji Reddy**,* B. Mahipal and Y. Srinivasa Rao	Lewis acid catalyzed *N*-acylation of carbamates and oxazolidinones	Arkivoc **2008**, 250-257
28.	**Ch. Raji Reddy**,* G. Rajesh, S. V. Balaji and N. Chethan	Tris(pentafluorophenyl) borane: A mild and efficient catalyst for the chemoselective tritylation of alcohols	Tetrahedron Letters **2008**, *49*, 970-973
27.	**Ch. Raji Reddy**,* G. Balakrishna Reddy and Ch. Lohitha Rao	Titanium tetrachloride mediated reductive ring opening of *C*-aryl pseudoglycals	Tetrahedron Letters **2008**, *49*, 863-866
26.	J. Kang, K. H. Kam, Manjunath Ghate, Zho Hua, Tae-Hyun Kim, **Ch. Raji Reddy**, S. Chandrasekhar, and Dong-Soo Shin*	An Efficient Synthesis of *2H*-1,4-benzoxazine 3-(*4H*)-ones via Smiles Rearrangement	Arkivoc **2008**, 67-76
25.	**Ch. Raji Reddy**,* Y. Srinivasa Rao,	Hydroxylamine derivatives as nucleophiles in Ferrier	Synthesis **2008**, 122-126

	T. Pavan Kumar K. Vankatram Reddy and S. Chandrasekhar	glycosylation: Synthesis of aminoxy pseudoglycals	
24.	Gyeonghyeon Gim, Meng Lijuan, Zuo Hua, Manjunath Ghate, Chuljin Ahn, Tae-Jin Won, Tae-Hyun Kim, **Ch. Raji Reddy**, S. Chandrasekhar, and Dong-Soo Shin	Practicable Synthesis of 1-(1-Phenylethyl)-*1H*-pyrido[2,3-b][1,4]oxazine	Bull. Korean Chem. Society **2007**, *28*, 2486-2488
23.	S. Chandrasekhar,* K. Vijeender, G. Chandrashekar and **Ch. Raji Reddy**	Towards synthesis of Palmerolide A: asymmetric synthesis of C1-C14 fragment	Tetrahedron: Asymmetry **2007**, *18*, 2473-2478
22.	**Ch. Raji Reddy**,* B. Mahipal and Y. Srinivasa Rao	A new and efficient method for the synthesis of *N*-acyl sulfonamides under Lewis acid catalysis	Tetrahedron Letters **2007**, *48*, 7528-7532
21.	**Ch. Raji Reddy**,* P. Phani Madhavi and A. Syamprasad Reddy	Molybdenum(V) chloride-catalyzed amidation of secondary benzyl alcohols with sulfonamides and carbamates	Tetrahedron Letters **2007**, *48*, 7169-7172
20.	S. Chandrasekhar,* Ch. Lohitha Rao, Ch. Nagesh, **Ch. Raji Reddy** and B. Sridhar	Inter and intramolecular copper(I)-catalyzed 1,3-dipolar cycloaddition of azido-alkynes: Synthesis of furanotriazole macrocycles	Tetrahedron Letters **2007**, *48*, 5869-5872
19.	S. Chandrasekhar,* Debjit Basu and **Ch. Raji Reddy**	Palladium catalyzed reduction of *N-Boc*-indoles using polymethylhydrosiloxane	Synthesis **2007**, 1509-1512
18.	**Ch. Raji Reddy**,* K. Vijeender, P. Bibhuti Bhusan, P. Phani Madhavi and S. Chandrasekhar	Reductive *N*-alkylation of aromatic amines and nitro compounds with nitriles using polymethylhydroxiloxane	Tetrahedron Letters **2007**, *48*, 2765-2768

17.	S. Chandrasekhar,* G. P. K. Reddy, Ch. Nagesh and **Ch. Raji Reddy**	A Novel one-pot conversion of amines to homologated esters in poly(ethylene glycol)	Tetrahedron Letters **2007,** *48,* 1269-1271
16.	**Ch. Raji Reddy**,* N. Kiranmai, G. S. Kiran Babu, G. Dattatreya Sarma, B. Jagadeesh and S. Chandrasekhar	Palladium catalyzed addition of hydroxylamine derivatives to Baylis Hillman acetate adducts	Tetrahedron Letters **2007,** *48,* 215-218
15.	**Ch. Raji Reddy**, Amar G. Ch., Rajashaker K., J. C. Jung, E. B. Watkins and M. A. Avery*	The trimethylsilyl xylyl (TIX) ether: A useful protecting group for alcohols	Tetrahedron **2005,** *61,* 1289-1295
14.	Amar G. Ch., **Ch. Raji Reddy**, E. B. Watkins and M. A. Avery*	Addition of lithioimidazoles to isocyanates followed by Pd-coupling: access to 4-substituted imidazole-2,5-dicarboxamides	Tetrahedron Letters **2004**, *45*, 1869-1872
13.	Amar G. Ch., **Ch. Raji Reddy**, E. B. Watkins and M. A. Avery*	First synthesis of antimalarial Machaeriols A and B	Tetrahedron Letters **2004**, *45*, 1689-1691
12.	S Chandrasekhar***,** G Chandrashekar and **Ch. Raji Reddy**	Tris(pentafluorophenyl)borane catalyzed Ferrier azaglycosylation with sulfonamides and carbamates	Tetrahedron Letters **2004**, *45,* 6481-6484
11.	S. Chandrasekhar***,** **Ch. Raji Reddy** and B. Nagendra Babu	Single step conversion of *N*-Benzyl, *N*-trityl, *N*-Diphenyl methyl amines to *tert.*Butyl carbamates using PMHS	Tetrahedron Letters **2003**, *44*, 2057-2059
10.	S. Chandrasekhar**,** **Ch. Raji Reddy** and B. Nagendra Babu	Rapid defunctionalization of carbonyl functionality to methylene using polymethylhydrosiloxane-$B(C_6F_5)_3$	J. Org. Chem., **2002**, *67,* 9080-9082
9.	S. Chandrasekhar*, **Ch. Raji Reddy** B. Nagendra Babu &	Highly efficient cleavage of epoxides catalyzed by $B(C_6F_5)_3$	Tetrahedron Letters, **2002**, *43,* 3801-3803

	G. Chandrashekar		
8.	S. Chandrasekhar***,** and **Ch. Raji Reddy**	Towards a synthesis of epothilone A: Asymmetric synthesis of C(1)-C(6) and C(7)-C(15) fragments	Tetrahedron: Asymmetry **2002**, *13*, 261-268
7.	S. Chandrasekhar***,** **Ch. Raji Reddy** R. Jagadeeshwar Rao J. Madusudana Rao	Efficient and Chemoselective Deoxygenation of Amine *N*-Oxides using Polymethyl-hydrosiloxane	Synlett, **2002**, 349-351
6.	S. Chandrasekhar***,** **Ch. Raji Reddy** and R. Jagadeeshwar Rao	Unprecedented Direct Conversion of N-N and N=N bonds to N-(*tert*-Bytyloxy)-carbamates	Synlett, **2001**, 1561-1562
5.	S. Chandrasekhar***,** **Ch. Raji Reddy** and R. Jagadeeshwar Rao	Facile and selective cleavage of allyl ethers, amines and esters using polymethylhydrosiloxane-$ZnCl_2$/Pd $(PPh_3)_4$	Tetrahedron **2001**, *57*, 3435-3438
4.	S. Chandrasekhar***,** **Ch. Raji Reddy** and M. Ahmed	A Single Step Reductive Amination of Carbonyl Compounds with Polymethyl-hydrosiloxane-$Ti(O^iPr)_4$	Synlett, **2000**, 1655-1657
3.	S. Chandrasekhar***,** L. Chandraiah**,** **Ch. Raji Reddy** and M. Venkat Reddy	Direct Conversion of Azides and Benzylcarbamates to *t*-butyl Carbamates using Polymethyl-hydrosiloxane and Pd-C	Chemistry Letters, **2000**, 780-781
2.	S. Chandrasekhar***,** **Ch. Raji Reddy** and M. Venkat Reddy	DDQ as a versatile reagent for the oxidative cleavage of tosyl hydrazones and oximes	Chemistry Letters, **2000**, 430-431
1.	S. Chandrasekhar*****, Y. Ravindra Reddy and **Ch. Raji Reddy**	Regioselective Reductive Opening of 1,2 and 1,3 Benzylidene Acetals	Chemistry Letters, **1998**, 1273-1274

Annexure 3

List of Invited Lectures_Ch. Raji Reddy
National and International Conferences (Invited Lectures): Last Five Years

- National Symposium on Nanomaterials & Sustainable Synthetic Strategies - March 21-22, 2015, Department of Chemistry, BHU-Varanasi, Title: *Annulation Reactions of Morita-Baylis-Hillman Adducts of Acetylenic Aldehydes.*
- Invited Lecture on May 29, 2015, Cipla Ltd., Mumbai, Title: *Alkyne-Assisted Approaches Towards the Synthesis of Natural Products and Heterocycles*.
- Invited Lecture - September 9, 2015, Gregynog Organic Synthesis Workshop, UK. Title: *Annulation Reactions towards Heterocycles and Carbocyles*.
- XVII NOST-Organic Chemistry Conference, October 27-30, 2015, Hotel Le Meridien, Jaipur, Title: *Enyne-Assisted Annulations towards Indoles, Carbazoles and a Pyrrole Alkaloid, Myrmicarin.*
- INDO-FRENCH Joint Lab SYMPOSIUM, March 17-18, 2016, University of Rennes 1, FRANCE, Title: *Enyne-Assisted Annulations to Heterocycles.*
- A Tributory Symposium on 100 Years of Chemical Bonding, August 4-5. 2016; CSIR-IICT, Hyderabad, Title: *Enyne-Assisted Annulations to Aromatics and Heteroaromatics.*
- Invited lecture delivered as part of series of lectures at Dr. Reddy's Institute of Life Sciences Hyderabad, INDIA August 9, 2016, Title: *Alkyne-Assisted Approaches Towards the Synthesis of Natural Products and Heterocycles.*
- UGC-Sponsored Seminar: Green and Sustainable Chemistry, 1st September, 2016 University College for Women – Koti Hyderabad, Title: *π-Activated Alcohols towards Green Chemistry: Handy Synthons for Aromatics and Heteroaromatics.*
- 21st International Conference on Organic Synthesis (ICOS), IIT-Mumbai, 11-16 December 2016, Title: *Enyne-Assisted Annulations to Aromatics and Heteroaromatics.*
- New Dimensions in Chemistry, Corbett Conference, 3-5 May, 2017. Title: *Cascade Annulations to Polycyclic Aromatics and Heteroaromatics*
- Invited Lecture at National Chemical Laboratory, 27 July, 2017. Title*: Enyne-Assisted Annulations to Aromatics and Heteroaromatics*
- *International Conference on* Emerging Trends in Drug Development and Natural Products, University of Delhi, New Delhi, 12-14 January, 2018. Title: *Enyne-Assisted Annulations to Natural Products and Their Derivatives*

- Conference on New Research Advances in Chemical Sciences, Palamuru University, 21 February, 2018. Title: *Natural Products: Source for Drug Discovery and Development*

- Faculty Development Programme in CHEMISTRY, Shatavahana University, 29 August, 2019. Title: *Natural Products and Organic Synthesis: Recent Advancements*

- 6th INDIGO Research Conference Dr. Reddy's Laboratories Ltd, Hyderabad, 25-27 November 2018, Title: *Enyne-Assisted Annulation: Handy Approach to Natural Products and their Analogues*

- Inter-Disciplinary Explorations in Chemistry (I-DEC 2018), IISER – Bhopal, 6-8 December, 2018. Title: *Enyne-assisted annulations to natural products and their key structural motifs*

- IIT Bombay Diamond Jubilee Chemistry Symposium, IIT Bombay, 25-28 February, 2019. Title: *Propargylic Alcohols in Annulation Reactions: Recent Endeavors*

- Two-Day National Seminar on Current Issues And Challenges In Chemical Research, University Arts & Science College, Kakatiya University, 18-19 March 2019. Title: *Natural Products and Organic Synthesis: Current Developments*

- Recent Advances in Organic and Bioorganic Chemistry (RAOBC), IISER Mohali, 22-24 March, 2019. Title: *Cascade Annulations to Polycyclic Aromatics and Heteroaromatics*

- International Conference on Emerging Trends in Chemistry, July 12-15, 2019, IIT-Indore, Title: *Enyne-Assisted Annulations to Access Heteroaryl Natural Product Motifs*

- XX NOST-Organic Chemistry Conference, December 4-7, 2019, Hotel The Ananta, Udaipur, Title: *Cascade Reactions of Propargylic Alcohols and Propiolamides*

- Invited Lecture by National Institute of Pharmaceutical Education and Research, Kolkata, INDIA: 6th January 2020; *Role of Natural Products and Organic Synthesis towards Pharmaceuticals*

- Invited Lecture by INSA & INYAS Hyderabad Local Chapter, Webinar on 27th August, 2020; *Role of Chemistry in Mitigating COVID-19*

- Invited Lecture by Telangana social Welfare Residential Degree College for Women, International Webinar on 6th September, 2020; *Role of Chemistry in Mitigating COVID-19*

Annexure 4

List of Ph. D. Thesis Supervised – Ch. Raji Reddy

S. No.	Name of the Student	Thesis title	Year
1	B. Srikanth	Towards the total synthesis of pyran containing bio-active natural products: (-)-Dactylolide, Dinemasone A and Rhoiptelol B	2012
2	N. Narsimha Rao	Studies towards the total synthesis of bio-active natural macrolides: (-)-Exiguolide, (+)-Cladospolide C, (+)-Aspicilin and Seimatopolide A	2013
3	M. Damoder Reddy	Development of Synthetic strategies to furans, pyrroles and alkaloid molecules, (-)-Longolactone & (±)-Epibatidine	2013
4	G. Dharmapuri	Towards synthesis of cytotoxic macrolides- Iriomoteiolide-3a and Pandangolide 1	2014
5	J. Vijay Kumar Reddy	Development of new approaches towards the synthesis of Isoxazoles, Pyrazoles, Triazoles, Furans and Chromenes from propargylic alcohols	2014
6	E. Jithender	Synthetic studies towards Ieodoglucomides, Fondaparinux sodium and acid catalyzed alkylation of Oxindoles and Hydrazones	2015
7	B. Latha	New approaches for the synthesis of bio-active piperidine alkaloids	2015
8	Kumaraswamy	Development of new approaches to cylopentens and fused cyclopente-nones from Morita-Baylis-Hillman adducts of acetylenic aldehydes	2015
9	Krishna Gaddam	Development of alkyne-assisted approaches to the synthesis of Benzofurans, Furans and furan fragments of Furanocembramoid 1	2016
10	Suman Devatha	Development of alkyne assisted approaches to bio-active natural lactones: Cladospolides, (-)- A26771B and (-)- Muricatacin	2016
11	P. Ramesh	Studies directed towards the syntheseses of Amphidinolide-R, Indolizidine-(-)-205a, Dibenzoxepines and indolizino Indoles	2016
12	U. Dilipkumar	Total Synthesis of bioactive macrolides, Seimatopolide B & (+)-Cladospolide D and Development of [4+2]-benzannulation reactions	2016
13	R.R. Valleti	Development of Enyne-Assisted annulations to substituted Thiophenes, Benzothiophenes, Indoles and Carbazoles	2017
14	Sujata Panda	Development of Enyne-Assisted annulations towards the synthesis of Pyridines, Pyrroles and Myrmicarin	2017
15	Ravi Ranjan	Development of Alkyne Assisted Annulation Approach toward Azaspirocyclohexadienone and Nicotinate Derivatives	2018
16	Md. Siddique	Studies towards the synthesis of substituted Furans, Furanocembranoid and fused Cyclopentenones via Alkyne-assisted Cyclizations.	2018
17	Kamalkishore Warudikar	Studies Towards The Synthesis Of Tangutorine, Pyrrolo[2,1-a] Isoquinoline Alkaloids and Cyclopent[a]Inden-2(1*H*)-Ones	2019
18	B Amarender Goud	Synthetic strategies towards Pyrroles, N-fused Pyrroles and Imidazopyridines	2019
19	K Mallesh	Development of New Synthetic Strategies Towards Fused Isoquinolone based Alkaloids and Pandangolide 1	2020
20	Sudam Sinare	Synthetic studies on Active Pharmaceutical Ingrediants: Betrixaban, Ibrutinib & Eliglustat	2021
21	Puppala Satish	Development of Transition Metal-Catalyzed Annulation Approaches towards the Synthesis of 3,4-Fused Indoles	2021
22	Aila Mounika	Utilization of propargylic alcohols as handy precursors towards the synthesis of hetero aromatic compounds	2021