

**DISSERTATION SUPERVISED FOR MASTER'S/PH.D. DEGREE****Awarded**

1. J. Naga Lakshmi (Synthesis of the core molecule of Ritonavir/Lopinavir), *JNTU*, 2007. (Master degree)
2. D. Anil Kumar Reddy (Photochemically triggered allylic and benzylic bromination), *JNTU*, 2007. (Master degree)
3. Abhishek (Synthesis of Tolmetin intermediate), IIT Roorkee, 2008 (Master degree)
4. Abhinash (Studies on [3+2] dipolar cycloaddition), Dr. Ambedkar College, Nagpur, 2008 (Master degree)
5. GCM Kondaiah (Synthesis and characterization of some biologically active heterocyclic compounds containing O, N and S.), SRMT University, Nanded, 2009 (Ph.D. degree awarded)

**PH.D. CO-WORKERS**

1. V. Ravindra

Thesis title:

**Synthetic Studies on Heterocycles Containing Two or More Hetero Atoms**

2. V. Raju

Thesis title:

**Novel Synthetic Route to Renin Inhibitor Analogs**

3. G. Prasant Reddy

Thesis title:

**New synthetic approaches to quinazolines**

4. Pallavi Thakur

Thesis title:

**Stereoselective Synthesis of Antispasmodic Agent and its Congeners**

5. M. Lokeswara Rao

Thesis title:

**New Synthetic Approaches to Zafirlukast and its Analogs**

6. M. Ravi Kumar

Thesis title:

**Synthetic route to pharmaceutically active Heterocycles**

7. M. Naga raju

Thesis title:

**Development of New Synthetic Methods for Active Pharmaceutical Ingredients**

8. V. Satish Kumar

Thesis title:

**New Synthetic Route to Intermediates for Active Pharmaceutical Ingredients**

9. L. Amarnath Reddy

Thesis title:

**Synthesis and characterization of biologically active pharmaceutical ingredients and their key intermediate**

## Publications

### 1998

1. V. K. Tandon, R. B. Chhor, G.K. Goswamy: An Improved Two-Step Regioselective Synthesis of Naphth [1,2,-□]- and Naphth [2,1-□] Oxepin-5-ones. *Indian J. Chem.* **1998**, 37B, 1027-1029.

### 1999-2001

2. V. K. Tandon, R. B. Chhor,: An Efficient One Pot Synthesis of 1,3,4-Oxadiazoles, *Synthetic Commun.* **2001**, 31, 1727-1732.
3. R. Bandichhor, Oliver Reiser: The Photochemistry of 2-(1-Naphthyl)ethyl Benzoate: Cyloaddition and Intramolecular Exiplex Formation, *Chemtracts* **2001**, 14, 773-777.

### 2002

4. V. K. Tandon, R. V. Singh, S. Rai, R. B. Chhor, Z. K. Khan: Synthesis and Pharmacological Studies of Some 2-*t*-Amino and 2,3-di-*t*-Amino Substituted 1,4-Naphthoquinones and Related Compounds, *Boll. Chim. Farm.* **2002**, 141, 304-310.
5. Rakeshwar Bandichhor, Claudius Böhm, Bernd Nosse, Sebastian Sörgel, Oliver Reiser: Asymmetric Cyclopropanation of Furans As Key step in the Synthesis of Natural Products and Analogues,- *An ACS proceeding in "Research Trends in Science and Technology"*, **2002**, 23-32, Beirut & Byblos, Lebanon.
6. V. K. Tandon, A. Sharon, R. B. Chhor, P. R. Maulik, 1,4- Dichloro-1,4-diphenyl-2,3-diazabuta-1,3-diene, *Acta Crystallogr. E* **2002**, E58, 869-867.

### 2003

7. Rakeshwar B. Chhor, Bernd Nosse, Sebastian Sörgel, Claudius Böhm, Michael Seitz, Oliver Reiser: Enantioselective Synthesis of Paraconic Acids, *Chem-Eur. J.* **2003**, 9, 260-270.
8. Rakeshwar B. Chhor, Bernd Nosse, Sebastian Sörgel, Claudius Böhm, Michael Seitz, Oliver Reiser: Enantioselective Synthesis of Paraconic Acids,- An Elsevier proceeding in "*Drug Discovery and Process Research*", **2003**, 23-25 Jan, Kolhapur, India.
9. R. B. Chhor, Kunwar A. Singh, B. Nosse, V. K. Tandon: A One-Pot Stereoselective Syntheses of 4-Hydroxystilbenes and X-ray Structure of its Precursor, *Synthetic Commun.* **2003**, 33, 2519-2530.
10. Bernd Nosse, Rakeshwar Bandichhor, Jeong Won-Boo, Claudius Böhm, Oliver Reiser: Facile Asymmetric Synthesis of the Core Nuclei of Xanthanolides, Guaianolides and Eudesmanolides, *Org. Lett.*, **2003**, 5, 941-944. (features first tetra-substituted olefin metathesis)

11. Rakeshwar Bandichhor, Bernd Nosse, Claudius Böhm, Oliver Reiser: Enantioselective Synthesis of the Core Nucleus of Xanthanolides, Guaianolides and Eudesmanolides,- *An ACS proceedings in 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003*.
12. Rakeshwar Bandichhor, Recent development in combination therapy for AIDS, *Asian Stud. Med. J.* **2003**, 2, 6.
13. Bernd Nosse, Rakeshwar Bandichhor, Won Boo Jeong, Oliver Reiser, Wan Joo Kim, Jin Soo Lim, Novel Farnesyl Transferase Inhibitors, *Korean Patent*, **2003**, 7553. Link: Korean Patent Office (<http://patent.kipris.or.kr> 1020030007553), 06 February 2003.

## 2004

14. V. K. Tandon, R. B. Chhor, Metal Mediated Cyclodechlorination 1,4-Dichloro-1,4-disubstituted-2,3-diaza-1,3-butadienes:A New Route to Cyclazines and Nitriles, *Lett. Org. Chem.* **2004**, 1, 40-42.
15. Rakeshwar Bandichhor, Oliver Reiser, Cyclopropanation with Fischer acyloxycarbene complexes: preparation of cyclopropane and cycloheptane-fused  $\alpha$ -lactones. *Chemtracts*, **2004**, 17, 67-71.
16. R. B. Chhor, Kunwar A. Singh, B. Nosse, V. K. Tandon: Synthesis and Anti-implantation activity of new stilbene derivatives, *Arzneimittel-Forschung*, **2004**, 8, 452-455.
17. V. K. Tandon, Rakeshwar B. Chhor, Ravindra V. Singh, Sanjay Rai and Dharmendra B. Yadav: Design, Synthesis and Evaluation of Novel 1,4-Naphthoquinone derivatives as Antifungal and Anticancer Agents, *Bio. Med. Chem. Lett.*, **2004**, 14, 1079-1083.
18. Oliver, Reiser; Bernd, Nosse; Bandichhor, Rakeshwar; Jeong, Won Boo; Kim, Wan Joo; Lim, Jin Soo: Farnesyl transferase inhibitors for treatment of diseases mediated with ras farnesylation. *Repub. Korean Kongkae Taeho Kongbo* (**2004**), CODEN: KRXXA7 KR 2004071530 A 20040812 AN 2006:771291 CAPLUS

## 2005

19. V. K. Tandon, R. B. Chhor: Current Status of Anti-HIV Agents, *Curr. Med. Chem.- Anti-infective Agents*, **2005**, 4, 3-28.
20. Rakeshwar Bandichhor, Bernd Nosse, Oliver Reiser: Paraconic Acids–The Natural products from *Lichen* symbiont, *Top. Curr. Chem.*, **2005**, 243, 43-72.

## 2006

21. Rakeshwar Bandichhor, Cliferson Thivierge, Nattami S. P. Bhuvanesh, Kevin Burgess: 4,4-difluoro-1,3,5,7-tetramethyl-4-bora-3a,4a-diaza-s-indacene, *Acta Crystallogr. E.*, **2006**, E62, 4310-4311.

22. D. A. Evans, K. A. Woerpel, B. Nosse, Andreas Schall, Yogesh Shinde, M. Haque, E. Jezek, R. B. Chhor, O. Reiser: Synthesis of (S,S)-iso-Propylbis(oxazoline), *Org. Synth.*, **2006**, 83, 97-99. (Aldrich has now commercialized the product; CAS#680192)
23. Stephen P. Waters, Michael W. Fennie, Marisa C. Kozlowski, Rakeshwar Bandichhor (Ack. Sec.): Investigation of a Convergent Route to Purpuromycin: Benzofuran Formation vs Spiroketalization, *Org. Lett.*, **2006**, 8, 3243-3246.
24. R. Bandichhor, A.D. Petrescu, A. Vespa, A.B. Kier, F. Schroeder, K. Burgess: Water-soluble Through-bond Energy Transfer Cassettes in Intracellular Imaging, *J. Am. Chem. Soc.*, **2006**, 128, 10688-10689.
25. R. Bandichhor, A.D. Petrescu, A. Vespa, A.B. Kier, F. Schroeder, K. Burgess: Synthesis of a New Water-Soluble Rhodamine Derivative and Application to Protein Labeling and Intracellular Imaging, *Bioconjugate Chem.*, **2006**, 17, 1219-1225 (most accessed article Oct.-Dec., **2006**).
26. Rakeshwar Bandichhor, Cliferson Thivierge, Kevin Burgess: Ir-Catalyzed C-H Activation of Porphyrin Core, *Chemtracts*, **2006**, 19, 11-16.

## 2007

27. Andreas Schall, Srinivas Kalidindi, Won-Boo Jeong, Sindhu Mathai, Dominic Laventine, Bernd Nosse, Rakeshwar Bandichhor, Oliver Reiser, Total synthesis of guaianolides-An *ACS proceedings in 233rd ACS National Meeting, Chicago, IL USA, March 25-29, 2007*.
28. Srinivas Kalidindi, Won-Boo Jeong, Andreas Schall, Rakeshwar Bandichhor, Bernd Nosse, Oliver Reiser, Enantioselective synthesis of arglabin, *Angew. Chem. Int. Ed. Engl.*, **2007**, 46, 6361-6363. (highlighted in Synfact, Organic Chemistry Portal and Annual Reports on the Progress of Chemistry, Section B: Organic Chemistry, Synthesis highlights **2008**, 104, 142-163).
29. Cliferson Thivierge, Rakeshwar Bandichhor, Kevin Burgess, Spectral dispersion and water solubilization of BODIPY dyes via palladium-catalyzed C-H functionalization, *Org. Lett.* **2007**, 9, 2135-2138.
30. Karrothu, Srihari Babu; Kolla, Naveenkumar; Lekkala, Amarnath Reddy; Golla, China Malakondaiah; Anand, Ramasamy Vijaya; Gandu, Venkateswarlu; Bhattacharya, Apurba; Padi, Pratap Reddy; Bandichhor, Rakeshwar. Effect of Solvent on Stereoselectivity in Pd/C (Type 39K)-Catalyzed Hydrogenation of Methyl 3-Oxo-4-aza-5-androstene-17-carboxylate, A Key Intermediate for Finasteride and Dutasteride, *Org.Proc.Res.&Dev.*, **2007**, 11, 889-891.
31. Kotagiri, Vijay Kumar; Suthrapu, Sashikanth; Reddy, Jambula Mukunda; Rao, Chitneni Prasad; Bollugoddu, Vijaybhaskar; Bhattacharya, Apurba; Bandichhor, Rakeshwar, An Improved Synthesis of Rimonabant: Anti-Obesity Drug, *Org.Proc.Res.&Dev.*, **2007**, 11, 910-912 (most accessed in the year **2007** and one of the articles featured in noteworthy chemistry compiled by ACS; November **2007**).
32. Bandichhor, Rakeshwar; Reddy, Jambula Mukunda; Kumar, Kotagiri Vijay; Raju, Veeramalla; Bhaskar, Bolguddu Vijay; Himabindu, Vurumidi; Bhattacharya, Apurba; Reddy, Ghanta

Mahesh. Total synthesis of (-)-galanthamine hydrobromide, Abstracts of Papers, **234th ACS National Meeting, Boston, MA, United States**, August 19-23, **2007**, ORGN-954.

33. Chandrashekar R. Elati, Naveenkumar Kolla, Srinivas Gangula, Anitha Naredla, Pravinchandra J. Vankawala, Muttu L Avinigiri, Subrahmanyeswararao Chalamala, Venkatraman Sundaram, Vijayavithal T.Mathad, Apurba Bhattacharya and Rakeshwar Bandichhor, A convergent approach to the synthesis of aprepitant: a potent human NK-1 receptor antagonist, *Tetrahedron Letters*, **2007**, 48, 8001-8004.
34. Ravi Kumar Mylavarapu, Kondaiah GCM, Naveenkumar Kolla, Raju Veeramalla, Purandhar Koilkonda, Apurba Bhattacharya, Rakeshwar Bandichhor, Boric acid catalyzed amidation in the synthesis of Active Pharmaceutical Ingredients, *Org.Proc.Res.&Dev.*, **2007**, 11, 1065-1068. (most accessed in the last quarter of the year **2007**; Green Chemistry Highlights in *Org.Proc.Res.&Dev.* **2008**, 12, 807–816)
35. Rakeshwar Bandichhor, In house Magazine briefing, Mentoring The Future of Science, *Elixir*, 8, 20, **2007**.
36. Rakeshwar Bandichhor, News briefing, Dr Reddy's-Dr Ambedkar College deal: Students to work on R&D, *The Hitavada*, 16<sup>th</sup> Apr. **2007**.
37. Rakeshwar Bandichhor et al., Process for the preparation of Levetiracetam, **WO2008/077035 A2**.

## 2008

38. Alexy Sharonov, Rakeshwar Bandichhor, Kevin Burgess, Anca Petrescu, Friedhelm Schroeder, Ann Kier, Robin Hochstrasse, Single molecule tracks of a dynamically associated external label provide fluid properties of free-standing giant unilamellar vesicle membranes and supported bilayers, *Langmuir*, **2008**, 34, 844-850.
39. Aurore Ludolet, Rakeshwar Bandichhor, Liangxing Wu, Kevin Burgess (**2008**): New Aza-BODIPY Based Fluorescent probes: Development of Water-soluble "Through Bond Energy Transfer Cassette", *Tetrahedron*, **2008**, 64, 3642-3654.
40. L. Amarnath Reddy, GCM Kondaiah, K. Srihari Babu, A. Bhattacharya, Rakeshwar Bandichhor, Vimmi Himabindu, P. Pratap Reddy, R. Vijaya Anand, An investigation on key parameters that influences the resolution of omeprazole sodium, *Org.Proc.Res.&Dev.* **2008**, 12, 66-68. (most accessed in the last quarter of the year **2007**)
41. GCM Kondaiah, L. Amarnath Reddy, K. Srihari Babu, V. M. Gurav, K. G. Huges, P. Pratap Reddy, A. Bhattacharya, R. Vijaya Anand, Boric Acid: An Efficient and Environmentally Benign Catalyst for Transesterification of  $\alpha$ -Keto Esters, *Tetrahedron Lett.* **2008**, 49, 106-109.
42. Konda Ramesh Babu, H.M. Meshram, R. Madhusudan Raju, Apurba Bhattacharya, and Rakeshwar Bandichhor, Synthesis of Quinoline Analogs: Search for Anti-malarial Agents, *Monatshefte für Chemie*, **2008**, 139, 179-181.
43. Jambula Mukunda Reddy, Kotagiri Vijay Kumar, Veeramalla Raju, Bolguddu Vijay Bhaskar, Vurumidi Himabindu, Apurba Bhattacharya, Venkatram Sundaram, Rahul Banerjee, Ghanta

Mahesh Reddy, Rakeshwar Bandichhor, Improved total synthesis of (-)-Galanthamine Hydrobromide, *Synthetic Commun.*, **2008**, 38, 2138-2149.

44. Kotagiri Vijay Kumar, Jambula mukunda Reddy, Suthrapu Sashikanth, Chitneni Prasad Rao, Vijay Bhaskar Bollugoddu, P. Pratap Reddy, Apurba Bhattacharya, Rakeshwar Bandichhor, Synthesis of Rimonabant Regioisomer, *Monatshefte für Chemie*, **2008**, 139, 1091-1094.
45. Chandrashekar R. Elati, Srinivas Gangula, Anitha, Apurba Bhattacharya and Rakeshwar Bandichhor, A novel synthesis of fosphenytoin: Anti-convulsant prodrug, *Synthetic Commun.*, **2008**, 38, 2950-2957.
46. Ramasamy Vijaya Anand, Rakeshwar Bandichhor and Apurba Bhattacharya: Boric acid catalyzed environmentally benign amidation and esterification processes in the synthesis of active pharmaceutical ingredients (APIs). *236th American Chemical Society Meeting, Philadelphia, PA, USA*, August 17-21, **2008**.
47. Kandala Sreenadha Charyulu, Chinta Raveendra Reddy, Kisara Satyanarayana, Mandava Venkata Naga Brahmeshwara Rao, Virumudi Hima Bindu, Vijayavithal T Method, Apurba Bhattacharya, Rakeshwar Bandichhor, An Improved Process for Eszopiclone: Anti-insomnia Agent, *Org. Commun.*, **2008**, 1:2, 33-38.
48. Aurore Loudet, Rakeshwar Bandichhor, Kevin Burgess, Aniello Palma, Shane O. McDonnell, Michael J. Hall, Donal F. O'Shea. B,O-Chelated Azadipyrromethenes as Near-IR Probes, *Org. Lett.*, **2008**, 10, 4771-4774. (Highlighted in *Synfacts 2009*, 2, 150.)
49. Raghupathi Reddy Anumala, Lokeshwara Rao Madivada, Goverdhan Gilla, VV NK Prasad Raju, Mukanti Kagga, Padi Pratap Reddy, Apurba Bhattacharya and Rakeshwar Bandichhor, An alternative synthesis of Tadalafil: PDE5 Inhibitor, *Synthetic Commun.*, **2008**, 38, 4265-4271.
50. Radha Krishna Singamestry, Satish Kumar Vujjini, Nagaraju Manne, Brahmeshwara Rao Mandava Venkata Naga, Vimmi Himabindu, Apurba Bhattacharya, Rakeshwar Bandichhor, A scalable and non-infringing synthesis of simvastatin: HMG-CoA reductase inhibitor, *Synthetic Commun.*, **2008**, 38, 4452-4459.
51. Rakeshwar Bandichhor et al., Process for Amorphous Form of Lopinavir, (**2008**) patent filed.
52. Bernd Nosse, Rakeshwar Bandichhor, Oliver Reiser, Synthesis of (1*R*,2*R*,3*R*)-Oxalic Acid 2-Ethoxycarbonyl-3-formyl-cyclopropyl Ester by Asymmetric Cyclopropanation of Furan-2-carboxylic Acid Catalyzed by Bisoxazoline with Cu(OTf)<sub>2</sub> Followed by Ozonolysis (**2008**): see the details; ([http://www-oc.chemie.uni-regensburg.de/OCP/ch/chb/ocp2/Cyclopropanierung\\_akt03.pdf](http://www-oc.chemie.uni-regensburg.de/OCP/ch/chb/ocp2/Cyclopropanierung_akt03.pdf)).

## 2009

53. Rakeshwar Bandichhor, Featured in INDIGO; Indian-German Graduate School of Advanced Organic Synthesis for a Sustainable Future, *DAAD, Newsletter*, **2009**, 1, 2.
54. Srinivasula Reddy Maddula, Manoj Kharkar, Kushal Manudhane, Sandeep Kale, Abijar Bhorl, Arvind Lali, P. K. Dubey, K. R. Janardana Sarma, Apurba Bhattacharya and Rakeshwar Bandichhor, Preparative Chromatography Technique in the Removal of Isostructural

Genotoxic Impurity in Rizatriptan: Use of Physicochemical Descriptors of Solute and Adsorbent, *Org.Proc.Res.&Dev.* **2009**, 13, 683-689.

55. Rakeshwar Bandichhor et al., New synthesis of Boc-Core and Amorphous Form of Ritonavir (2009) *patent* filed.
56. Apurba Bhattacharya, Rakeshwar Bandichhor (2009), Green Chemistry in the Generic Pharmaceutical Industry, accepted in a *Elsevier book chapter*.
57. Srinivasula Reddy Maddula, Kushal S. Manudhane, Sridhar Thota, Manoj R. Kharkar, MV Rama Krishna, KR Janardana Sarma, P. K. Dubey, Apurba Bhattacharya, Rakeshwar Bandichhor, Cocrystal Engineering Approach in API Development: Novel Application in Finasteride Process (2009), *Chem. Com.* under considerations.
58. Lekkala Amarnath Reddy, Golla China Malakondaiah, Vimmidi Himabindu, Padi Pratap Reddy, Apurba Bhattacharya, Rakeshwar Bandichhor, (2009), Scalable process for the premix of esomeprazole  
*Org.Proc.Res.&Dev.* accepted.
59. Srinivas Gangula, Elati Chandrashekhar, Anita Nardela, Guide Kumar, Apurba Bhattacharya, Rakeshwar Bandichhor, Synthesis of all enantiomerically pure diastereomers of aprepitant (2009), *Synthetic Communications*. accepted.
60. Lokeswara Rao Madivada, Raghupathi Reddy Anumala, Goverdhan Gilla, Kavita, Mukanti Kagga, Apurba Bhattacharya and Rakeshwar Bandichhor, An Improved Process for Pioglitazone and its Pharmaceutically Salt (2009), *Org.Proc.Res.&Dev.*, accepted.
61. Rakeshwar Bandichhor et al., New Synthesis of Bazedoxifene (2009) *patent* filed.
62. Apurba Bhattacharya, Rakeshwar Bandichhor (2009), Green Chemistry in Drug Discovery and Process Research *an invited review article to be published in Current Opinion in Drug Discovery & Development*. accepted.
63. Rakeshwar Bandichhor et al., Process for the preparation of Sitagliptin and pharmaceutically acceptable salt thereof (2009) *patent* filed.

#### PENDING/UNDER CONSIDERATION

64. Rakeshwar Bandichhor, R. Vijaya Anand, Apurba Bhattacharya, Emerging Trends in the Synthesis of Central Core of HIV Protease Inhibitors (2009), *Tetrahedron*, submitted.
65. Rakeshwar Bandichhor, Marisa C. Kozlowski (2009): Implementing Enhanced Nucleophilicity of Isocoumarin Surrogate to Accomplish the Spiroketalization: Synthesis of Rubromycins Derivatives, *J. Org. Chem.*, submitted.
66. L. Amar Nath, Mylavarapu Ravi Kumar, GCM Kondaih, Arnab Roy, R. Vijay Anand, Pratap P. Reddy, Apurba Bhattacharya, David Ripin, Rakeshwar Bandichhor, Short Synthesis of 5-HMT: One of the side chains of Ritonavir (2009), *Org.Proc.Res.&Dev.*, submitted.
67. Ravikumar Mylavarapu, Gade Srinivas Reddy, Ramasamy Vijaya Anand, Golla China Mala Kondaiah, Lekkala Amarnath Reddy, Arnab Roy, Padi Pratap Reddy, Apurba Bhattacharya,

- Kagga Mukkanti, Rakeshwar Bandichhor, An alternate synthesis of levetiracetam (2009), *Green Chemistry Letters and Review* submitted.
68. Dinesh S. Bhalerao, Golla China Mala Kondaiah, Namrata Dwivedi, Ravi Kumar Mylavarappu, Lekkala Amarnath Reddy, Arnab Roy, Gudimalla Nagaraju, Padi Pratap Reddy, Apurba Bhattacharya, Rakeshwar Bandichhor, A novel approach to the synthesis of omeprazole: An anti-peptic ulcer agent (2009), *Synthetic Communications*, submitted.
69. Gurav. V. M., Vivekananda Reddy Mothukuri, Rakeshwar Bandichhor, Smita. V. Anurkar, An expeditious amidation of *N*, *S*-bis acylated-L-cysteine with less reactive aromatic amines (2009), *Synthetic Communications*, submitted.
70. Srinivas Gangula, Elati Chandrashekhar, Anita Nardela, Guide Kumar, Apurba Bhattacharya, Rakeshwar Bandichhor, Salvaging apreitant: Recycling of undesired isomert (2009), *Green Chemistry Letters and Review* submitted.
71. GCM Kondaiah, L. Amarnth Reddy, V. M. Gurav, M. Ravi Kumar, Apurba Bhattacharya, Rakeshwar Bandichhor, (2009): Asymmetric synthesis of (*S,S,S*)-2-azbicyclo-(3.3.0)-octane-3-carboxylic acid benzyl ester by using SAMP as a chiral auxiliary, *SYNLETT*. submitted.
72. Kandala Sreenadha Charyulu, Tirumalaraju Satyanarayana Raju, Chinta Raveendra Reddy, Kisara Satyanarayana, Mandava Venkata Naga Brahmeshwara Rao, Virumudi Hima Bindu, Vijayavithal T Mathod, Apurba Bhattacharya, Rakeshwar Bandichhor, Identification of potential impurities in Clopidogrel premix (2009). *Monatshefte für Chemie* manuscript under preparation.
73. Rakeshwar Bandichhor, Vishnu Ji Ram (2009): Versatility of 2H-pyran-2-ones and 5,6-Dihydro-2H-pyran-2-ones in the Synthesis of Natural Products with Their Therapeutic Importance, *Tetrahedron*, manuscript under preparation.
74. Rakeshwar Bandichhor et al., New synthesis of Amtolmetin (2009) *patent* in preparation.
75. Rakeshwar Bandichhor et al., Improved process for Valine derivative: One of the side chains of Ritonavir (2009) *patent* in preparation.
76. Rakeshwar Bandichhor et al., Improved process for Tetrahydropyrimidine derivative: One of the side chains of Lopinavir (2009) *patent* in preparation.
77. Rakeshwar Bandichhor, Bernd Nosse, Jeong Won-Boo, Claudius Böhm, Oliver Reiser (2009): SAR with Xanthanolides, Guaianolides and Eudesmanolides and their biological evaluations as farnesyl transferase inhibitors, *J. Med. Chem.* Manuscript under preparation.
78. Vishnu K. Tandon, Rakeshwar Bandichhor, Oliver Reiser (2009): Perspectives in Total Synthesis of Eudesmanolides: Emerging Sesquiterpene Lactones of Broad Spectrum Biological Profile, *Chem. Rev.*, accepted (abstract) manuscript under preparation.
79. Juan, R. Bandichhor, A. Loudet, K. Burgess, Chiral transition metal complexes of Tetraaryl Aza-DIPY (2009), *J. Am. Chem. Soc.*, manuscript under preparation.
80. Lekkala Amarnath Reddy, Saurya Chakraborty, Golla China Malakondaiah, Vimmidu Himabindu, Padi Pratap Reddy, Apurba Bhattacharya, Rakeshwar Bandichhor, (2009):

Synthesis and Process Optimization of Amtolmetin, *Org.Proc.Res.&Dev.* manuscript under preparation.

81. Arnab Roy, L. Amarnath, Namrata Dwivedi, Jyotirmayi, Swapna Akula, GCM Kondaiah, M. Ravi Kumar, Dinesh Bhale Rao, Abhijeet, Bhanu Pratap, Padi Pratap Reddy, Apurba Bhattacharya, Rakeshwar Bandichhor, (2009): Diastereoselective Synthesis of a Core Fragment of Ritonavir and Lopinavir, *J. Am. Chem. Soc.*, manuscript under preparation.

**Published contribution to academic conferences:**

82. V. K. Tandon, V. Agarwal, R. B. Chhor: IKCOC-7. Seventh International Kyoto Conference on New Aspects of Organic Chemistry, Kyoto, Japan, November 1997, 147.
83. Rakeshwar Bandichhor, National Symposium on Potential of Natural Products in Drug Research and Young Scientists Awareness Programme, November 16, 1988, University of Lucknow, India.
84. Rakeshwar Bandichhor, Millenium's Last Friday Lecture on Mn Dependant Transformations, December 31, 1999, Division of Medicinal Chemistry, Central Drug Research Institute, Lucknow, India.
85. Rakeshwar Bandichhor, Fourth National Conference of Indian Society of Chemists and Biologists on Drug Research Scenario of 21<sup>st</sup> Century, Role of Combinatorial Chemistry and High Throughput Screening, January 28-30, 2000, Central Drug Research Institute, Lucknow, India.
86. V. K. Tandon, R. B. Chhor, S. Rai, A. Chandra, Federation of Australian Pharmaceutical Association Conference, October, 2000, Sydney, Australia, 109.
87. V. K. Tandon, G. K. Goswamy, S. Rai, R. B. Chhor, R. V. Singh, International Symposium on Current Trends in Drug Discovery Research at CDRI, Lucknow, February, 2001, 69.
88. Rakeshwar Bandichhor, Eva Jeck, Bernd Nosse, Oliver Reiser, 20<sup>th</sup> European Colloquium on Heterocyclic Chemistry (20<sup>th</sup> ECHC), August 18-21, 2002, Stockholm, Sweden, F.
89. Rakeshwar Bandichhor, Eva Jeck, Bernd Nosse, Oliver Reiser, Summer School, University of Regensburg, Germany, September, 2002, 3.
90. Rakeshwar Bandichhor, Eva Jeck, Bernd Nosse, Oliver Reiser, Bayer's Pharmaceuticals Germany, October, 2002.
91. R. B. Chhor, Kunwar A. Singh, V. K. Tandon, Indian Pharmaceutical Congress, India, December 12-16, 2002, 203.
92. R. B. Chhor, Kunwar A. Singh, V. K. Tandon, International Symposium on Drug Discovery and Process Research (DDPR-2003), Shiva Ji University, Kolhapur-416004, India, January 23-25, 2003, 121.
93. R. B. Chhor, Participated in discussion at Symposium on International Careers for Young Chemists in USA and Germany at T-U. Munich 24 Feb. 2003.

94. Oliver Reiser, Bernd Nosse, Rakeshwar Bandichhor, Jeong Won-Boo, Claudius Böhm: Asymmetric Cyclopropanation of Furans as Key Step in the Synthesis of  $\alpha$ -Butyrolactone Natural Products, GDCH, German Chemical Society (Jahrestagung Chemie 2003), München, October 6-11, **2003**.
95. Bernd Nosse, Rakeshwar Bandichhor, Jeong Won-Boo, Claudius Böhm, Oliver Reiser: Studies directed to Total Synthesis of  $\alpha$ -Butyrolactone derived Natural Products, GDCH, German Chemical Society (Jahrestagung Chemie 2003), München, October 6-11, **2003**.
96. Rakeshwar Bandichhor, Eva Jezek, Bernd Nosse, Oliver Reiser: Radical Cyclization on *anti*-2,3- disubstituted  $\alpha$ -Butyrolactone Derivatives, GDCH, German Chemical Society (Jahrestagung Chemie 2003), München, October 6-11, **2003**.
97. R. B. Chhor, A. Gissibl, C. Geiger, B. Nosse, , W. B. Jeong, H. Werner, O. Reiser: Immobilisation of Azabisoxazolines and the use in Asymmetric Catalysis, Med. Chem. Workshop, Lilly Forschung GmbH, Essener strasse 93, D-22419 Hamburg, 17-18 July, **2003**.
98. Rakeshwar Bandichhor, Stephen P. Waters, Marisa C. Kozlowski: Investigations toward the Total Synthesis of Rubromycin Family Members, *Symposia, Philadelphia Organic Chemists' Club*, **21st April, 2005, 22**.
99. Rakeshwar Bandichhor: attended mini-symposium for the F.A. Cotton Medal for Excellence in Chemical Research Presented to Prof. Robin M. Hochstrasser for Stretching Vibrational Spectroscopy: Infrared Analogues of 2D NMR, **12<sup>th</sup> April, 2006**.
100. Rakeshwar Bandichhor: attended ACS course on Process Resaerch in the Pharmaceutical Industry: The Design and Development of Practical Synthesis taught by Dr. Ed. Gabrowski and Dr. Ulf Dolling from Merck, 23-24rth of January, **2008**.
101. Apurba Bhattacharya, Rakeshwar Bandichhor: Application of Green Technology in the Generic Pharmaceutical Process Development, 2nd International Symposium on Green Processing in the Pharmaceutical & Fine Chemical Industries , 29-30 May, **2008** at Yale University, USA.
102. L. Amarnath Reddy, Arnab Roy, Dinesh, Swapna, Namrata, GCM. Kondaiah, M. Ravi Kumar, Jyothi, Ch. Malleshwar Rao, Rajeshwari, Sita and Rakeshwar Bandichhor, HIV Encounter Cell: Synthesis and Process Development of Protease Inhibitors, February, **2009**, In house Technical conclave, Dr. Reddy's Laboratories Hyderabad.

## ORAL PRESENTATIONS

103. Rakeshwar Bandichhor, "Achievements of India in the Field of Science", Science Festival, Sarasswati Vidyamandir, Manyang, Sultanpur, December 2, **2002**.
104. Rakeshwar B. Chhor, Bernd Nosse, Sebastian Sörgel, Claudius Böhm, Michael Seitz, Oliver Reiser, Indian Pharmaceutical Congress, India, December 12-16, **2002**, 203.

105. Rakeshwar B. Chhor, Bernd Nosse, Sebastian Sörgel, Claudius Böhm, Michael Seitz, Oliver Reiser, International Symposium on Drug Discovery and Process Research (DDPR-2003), Shiva Ji University, Kolhapur-416004, India, January 23-25, **2003**, 56.
106. Rakeshwar Bandichhor, Bernd Nosse, Claudius Böhm, Oliver Reiser “Enantioselective Synthesis of the Core Nucleus of Xanthanolides, Guaianolides and Eudesmanolides.” 225th American Chemical Society Meeting, New Orleans, LA, USA, March 23-27, **2003**.
107. Rakeshwar Bandichhor, Marisa C. Kozlowski, Is the Open-chain Keto Synthone the Right Precursor in the Biosynthesis of Rubromycin Class of Broad Spectrum Emerging Leads: Biosynthetic vs Synthetic Analysis?, 17-21 Feb. CTDDR, **2007**.
108. Bandichhor, Rakeshwar; Reddy, Jambula Mukunda; Kumar, Kotagiri Vijay; Raju, Veeramalla; Bhaskar, Bolguddu Vijay; Himabindu, Vurumidi; Bhattacharya, Apurba; Reddy, Ghanta Mahesh. “Total synthesis of (-)-galanthamine hydrobromide” 234th ACS National Meeting, Boston, MA, United States, August 19-23, **2007**, ORGN-954.
109. Kotagiri Vijay Kumar, Jambula mukunda Reddy, Sashi Kanth Suthrapu, P. Pratap Reddy, Apurba Bhattacharya, Rakeshwar Bandichhor. “De Novo Synthesis of Rimobant and its Regioisomer” 9<sup>th</sup> Annual Florida Heterocyclic and Synthetic Conference, March 9-12, **2008**, University of Florida, Gainesville, USA (**INVITED TALK**)
110. Ramasamy Vijaya Anand, Rakeshwar Bandichhor and Apurba Bhattacharya: Boric acid catalyzed environmentally benign amidation and esterification processes in the synthesis of active pharmaceutical ingredients (APIs). 236th American Chemical Society Meeting, Philadelphia, PA, USA, August 17-21, **2008**.

#### **OTHER ACTIVITIES:**

**Shia Degree College Cricket Team**, member, **1994**

**Aromophilic Club for Assessment of District Level Wisdom Competition**, participant, **1991**

#### **REFERENCES:**

**Will be provided on request**