Nominee's Biodata

Dr. Rodney A. Fernandes

[Birth Date: 19 June 1972]

Professor, Chemistry Department, IIT Bombay, Powai, Mumbai 400076, INDIA
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Positions, Education and Research Experience

July 2020 onwards: **Member UGPC**, IIT Bombay
August 2020 onwards: **Member Board of Studies**, Chemical Sciences (UG), Goa University.
August 2017-August 2020: **Member Board of Studies**, Chemical Sciences, M.S. University of Baroda, Vadodara, Gujarat

August 2017-July 2018: **Dean Academic Programme and Dean Faculty Affairs**, IIT Goa (on deputation from IIT Bombay), January 09-14, 2018: **Acting Director, IIT Goa**

May 2015 onwards: **Professor.** Jan. 2011–May 2015: **Associate Professor,** August 2007–January 2011: **Assistant Professor,** Department of Chemistry, Indian Institute of Technology (IIT) Bombay.
September 2006–July 2007: **Investigator Titular A** (~ Assistant Professor), Instituto de Quimica, Universidad Nacional Autonoma de Mexico, Mexico D.F.

April 2006–June 2006: **Postdoctoral Research,** DFG Research Fellowship, Germany
July 2004– March 2006: **Postdoctoral Research, Alexander von Humboldt Research Fellow (AvH),** with **Prof. Dr. Reinhard Brückner**, Institut für Organiche Chemie und Biochemie, Albert-Ludwigs-University, Freiburg, Germany.

January 2003–December 2003: **Postdoctoral Research Associate** with **Prof. Dr. Yoshinori Yamamoto**, Department of Chemistry, Graduate School of Science, Tohoku University, Sendai 980–8578, JAPAN.

July 1998– January 2003: **Ph. D. in Synthetic Organic Chemistry,** Pune University, Pune-411 007, INDIA. Research work carried out at the National Chemical Laboratory (NCL). Guide: Dr. Pradeep Kumar (Senior Scientist NCL, AvH Fellow).Thesis: "Asymmetric Dihydroxylation Approach to the Enantioselective Syntheses of Bioactive Molecules and PCC Mediated Oxidative Organic Transformation"

January 1998–June 1998: **Lecturer** in Organic Chemistry, Department of Chemistry, Goa University, Goa.
June 1995– May 1997: **M.Sc**. Organic Chemistry, Goa University, Goa.
Class: **Outstanding grade "O", 1st Rank in Chemistry Department, Goa University.**
June 1992–May 1995: **B.Sc**. Dhempe College of Arts and Science, Miramar, Goa University, Goa, **First class with distinction, Goa State 2nd Rank, Goa University.**

Affiliation to Scientific Bodies

Elected Fellow of Maharashtra Academy of Sciences (2016)
Life Member of Maharashtra Academy of Sciences
Life Member of Chemical Research Society of India (CRSI)
Life Member of Indian Society of Chemists and Biologists (ISCB)
Life Member of Indian Association of Chemistry Teachers (IACT)

Award and Honours

September 2019: '**Departmental Award for Excellence in Teaching**', IIT Bombay
September 2019: '**Outstanding Reviewer Award**' by the Journal Chemical Communication of RSC.
December 2017: **Delivered the 4th Professor S. C. Bhattacharya Memorial Lecture:** *"Dead Ends and Detours: Pushing the Strategic Limits in Total Synthesis"*. Delivered at EDC Hall, Panaji, Goa. Hosted by Prof. S. K. Paknikar Research and Education Trust, 08th Dec, 2017

October 2016: **Elected Fellow of Maharashtra Academy of Sciences (FMASc)**
December 2004: **INSA–YOUNG SCIENTIST MEDAL AWARD 2004** (Chemical Sciences) by Indian National Science Academy, New Delhi, INDIA.
July 2004–March 2006: **Alexander von Humboldt** (AvH, Germany) Research Fellowship,

February 2003: **International Patent Award–Silver Medallion**, by NCL Research Foundation, India for US Patent. Patent No. 6376683, 2002. Pradeep Kumar and Rodney A. Fernandes.
January 2002: **Keerti Sangoram Endowment Award**: '**Best Research Scholar**' of the Year 2001 (Chemical Sciences); NCL Research Foundation.
February 2001: **Dr. Rajappa Award**, Year 2000 for '**Best Research Paper**' in Organic Chemistry; NCL Research Foundation.

July 1998–January 2003: JRF and SRF, CSIR New Delhi, India.
March 1997: Cleared the State Eligibility Test (SET) for Lectureship in Chemical Sciences by UGC (Pune University), INDIA.
January 1998: [1] The Goa University Prize for Highest Marks in Chemistry at M.Sc. Chemistry Examination, April 1997.
[2] Prof. S. K. Paknikar Research and Educational Trust Endowment Prize for Highest Marks in M.Sc. Organic Chemistry Examination, April 1997, Goa University.
[3] The Xth Indian Council of Chemistry Conference Endowment for Highest Marks in M.Sc. Organic Chemistry Examination, April 1997, Goa University.

December 1995: [1] Late Dattaram Gopinath Gude Memorial Prize- for standing 1st at final B.Sc. Examination with chemistry as principal subject from Dhempe College, Goa.
[2] Late Shri Dattaram G. S. Gude alias Rajiv Gude Memorial Prize for securing highest marks in Chemistry at final B.Sc. Examination among the students of Dhempe College, Goa.
[3] Late Mr. Dattaram Purshottam Kabadi Scholarship for highest marks at final B.Sc. Examination of Goa University, for a student from Dhempe College, Goa.
[4] Shri Mark Fernandes Memorial Prize for highest percentage of marks at the final B.Sc. Examination among the students of Dhempe College, Goa.

Research Projects

No.	Project title	From -To	Agency
1.	Intramolecular Allylic Amination, Oxygenation and Alkoxylation for New Molecular Scaffolds and Natural Products Synthesis	July 2021- July 2024	CSIR
2.	Lewis Acid Catalyzed Rearrangements in the Synthesis of Natural Products, Drug Candidates and Valuable Compounds	July 2018 - July 2021	DST-SERB
3.	Development of Cyclopentannulation and Dötz Benzannulation in the Synthesis of New Molecular Scaffolds and Natural Products	March 2014 - March 2017	DST

4.	Strategic Total Synthesis of Strained Medium-Ring-Sized Bioactive Molecules	Feb. 2014 - Feb. 2017	BRNS
5.	Development of Chiral π-Allylpalladium Catalysis: Synthesis of *N*-Heterocycles and New Molecular Scaffolds	Nov. 2013 – March2017	CSIR
6.	Development of Dimeric Fischer Carbene Complexes: Bidirectional Approach to the Synthesis of Naphthoquinone Natural Products	Dec. 2008 – Dec. 2011	DST
7.	Asymmetric Allylation of Carbonyl Derivatives through π-Allylpalladium: Synthesis of N-Heterocycles	Jan. 2009 – Jan 2012	CSIR
8.	Asymmetric Synthesis of Pyranonaphthoquinones through Dötz Annulation and Asymmetric Methods	Nov. 2009 – Nov. 2012	BRNS
9.	Synthetic Studies in Pyranonaphthoquinones Antibiotics	July 2008 – Jan 2012	INSA
10.	Equipment Grant, HPLC purchased	Aug. 2009 – Aug. 2010	AvH Germany
11.	Synthetic Studies towards Phenatic Acid B, Machillene and Chabrolonaphthoquinones	Sep. 2007 – March 2011	IRCC, IIT Bombay

List of Publications, Books and Patents

Total = 137 **[96 publication in last 10 years]**

Total: 137	**Total citation: 2110**	**h-index: 25**	**i-10 index: 74**

No.	Publication Details as of 18th September 2021	IF	Citations
137	Stereoselective Total Synthesis of Obolactones and 7′,8′-Dihydroobolactones Deepak Saini, Praveen Kumar and Rodney A. Fernandes* ***New J. Chem.*** **2021,** *45,* DOI: 10.1039/D1NJ03990C	3.6	--
136	**Book Chapter**: "Synthetic Approaches to Spiro Bis-THF Natural Products: Cephalosporolides, Penisporolides, Ascospiroketals and Pyrenolides" Rodney A. Fernandes,* Ashvin J. Gangani and Naveen Chandra. Accepted for 'Targets in Heterocyclic Systems – Chemistry and Properties' Vol. 25, Italian Chemical Society	--	--
135	**Book chapter:** "Allylpalladium Complexes in Organic Synthesis" Rodney A. Fernandes, Praveen Kumar and Naveen Chandra. Accepted for Elsevier's Comprehensive Organometallic Chemistry IV, edited by Karsten Meyer, Dermot O'Hare and Gerard Parkin	--	--
134	Synthesis of 5-Vinyl-2-isoxazolines by Palladium-Catalyzed Intramolecular *O*-Allylation of Ketoximes. Rodney A. Fernandes*, Ashvin J. Gangani, Arpita Panja ***Org. Lett.*** **2021**, 23, 6227	6.2	--
133	Catalytic δ-Hydroxyalkynone Rearrangement in the Stereoselective Total Synthesis of Centrolobine, Engelheptanoxides A and C and Analogues Praveen Kumar, Rodney A. Fernandes,* Mohammad N. Ahmad, and Sidharth Chopra ***Tetrahedron*** **2021***, 96*, 132375	2.6	--
132	Concise Stereoselective Synthesis of β-Hydroxy-γ-lactones: (4*R*,5*R*)-4-Hydroxy-γ-decalactone from the Japanese Orange Fly and Enantiomers of Arachnid Harvestmen Isolates. Ashvin J. Gangani, Praveen Kumar and Rodney A. Fernandes* ***J. Nat. Prod.*** **2021**, 84, 120	4.1	1

131	Evolution of Strategies in Protecting-Group-Free Synthesis of Natural Products: A Recent Update. Rodney A. Fernandes,* Praveen Kumar and Priyanka Choudhary ***Eur. J. Org. Chem.*** **2021**, 711	3.0	1
130	Advances in Cu and Ni-Catalyzed Chan–Lam-type Coupling: Synthesis of Diarylchalcogenides, Ar_2-X (X = S, Se, Te). Rodney A. Fernandes,* Amit Bhowmik and Sandhya S. Yadav ***Org. Biomol. Chem.*** **2020**, *18*, 9583	3.6	3
129	Muricatacin a Gateway Molecule to Higher Acetogenin Synthesis. Rodney A. Fernandes,* Amit Bhowmik and Priyanka Choudhary ***Chem. Asian J.*** **2020**, *15*, 3660.	4.6	--
128	A Decade of Muricatacin Synthesis and Beyond. Rodney A. Fernandes,* Ashvin J. Gangani, Anupama Kumari and Praveen Kumar ***Eur. J. Org. Chem.*** **2020**, 6845.	3.0	--
127	Three Decades of Disparlure and Analogue Synthesis. Rodney A. Fernandes,* Naveen Chandra and Ashvin J. Gangani ***New. J. Chem.*** **2020**, *44*, 17616.	3.6	1
126	Asymmetric Synthesis of Catechol Pyran Isolated from *Plectranthus sylvestris* by β-Hydroxyalkynone Rearrangement. Rodney A. Fernandes* and Deepak Saini ***ChemistrySelect*** **2020**, *5*, 13160	2.1	--
125	Recent Advances in Wacker Oxidation: From Conventional to Modern Variants and Applications. Rodney A. Fernandes,* Amit K. Jha and Praveen Kumar ***Catal. Sci. Technol.*** **2020**, *10*, 7448	6.1	10
124	Emergence of 2,3,5-Trisubstituted Tetrahydrofuran Natural Products and Their Synthesis. Rodney A. Fernandes,* Dnyaneshwar A. Gorve and Ramdas S. Pathare ***Org. Biomol. Chem.*** **2020**, *18*, 7002	3.6	4
123	MnO_2 as Terminal Oxidant in Wacker Oxidation of Homoallyl Alcohols and Terminal Olefins. Rodney A. Fernandes,* Gujjula V. Ramakrishna and Venkati Bethi ***Org. Biomol. Chem.*** **2020**, *18*, 6115	3.6	1
122	Evolution of Strategies in Paraconic Acids Synthesis. Rodney A. Fernandes,* Dipali A. Chaudhari and Amit K. Jha ***Asian J. Org. Chem.*** **2020**, *44*, 3970	3.1	3
121	Advances in Total Synthesis of Some 2,3,5-Trisubstituted Tetrahydrofuran Natural Products. Rodney A. Fernandes,* Ramdas S. Pathare and Dnyaneshwar A. Gorve ***Chem. Asian. J.*** **2020**, *15*, 2815	4.6	3
120	(-)-β-Pinene-based π-Allylpalladium Complex-Catalyzed Asymmetric Allylation of Bis-Imines. Rodney A. Fernandes* and Jothi L. Nallasivam ***ChemistrySelect***, **2020**, 5, 8301	2.1	--
119	A Decade with Dötz Benzannulation in the Synthesis of Natural Products. Rodney A. Fernandes,* Anupama Kumari and Ramdas S. Pathare ***Synlett*** **2020**, 403 [Personal Account]	2.5	8
118	Advances in Catalytic and Protecting-Group-Free Total Synthesis of Natural Products: A Recent Update. Rodney A. Fernandes* Praveen Kumar and Priyanka Choudhari ***Chem. Commun.*** **2020**, *56*, 8569	6.2	5
117	A Concise Synthesis of the Key Tetrahydrofuran Moieties of Caruifolin A and EBC-342. Rodney A. Fernandes* and Venkati Bethi ***Eur. J. Org. Chem.*** **2020**, 6922	3.0	--
116	Fischer Carbene Pentannulation with Alkynes Having Adjacent Carbonate or Acyloxy Groups: Synthesis of 3-Substituted 1-Indanones. Rodney A. Fernandes,* Sachin P. Gholap, Vijay P. Chavan, Akeel S. Saiyed and Shubhankar Bhattacharyya ***Org. Lett.*** **2020**, *22*, 3438	6.2	2
115	BX_3-Mediated Intermolecular Formation of Functionalized 3-Halo-1*H*-indenes via Cascade Halo-Nazarov-Type Cyclization. Anupama Kumari and Rodney A. Fernandes* ***Synthesis*** **2020**, 2245	3.0	--
114	Room Temperature Nickel-Catalyzed Cross-Coupling of Aryl-Boronic Acids with Thiophenols: Synthesis of Diarylsulfides. Amit Bhowmik, Mahesh Yadav and Rodney A. Fernandes* ***Org. Biomol. Chem.*** **2020**, *18*, 2447	3.6	6
113	Metal-Free Annulative Hydrosulfonation of Propiolate Esters: Synthesis of 4-Sulfonates of Coumarins and Butenolides. Rodney A. Fernandes*, Ashvin J. Gangani and Rupesh A. Kunkalkar ***New. J. Chem.*** **2020**, *44*, 3970	3.6	1
112	The Potential of β-Hydroxy-γ-vinyl-γ-lactone in the Synthesis of Natural Products and Beyond. Rodney A. Fernandes* ***Eur. J. Org. Chem.*** **2020**, 634	3.0	2
111	A Chiron Approach to the Stereoselective Total Synthesis of Phomonol and Phytotoxic Nonenolides. Naveen Chandra and Rodney A. Fernandes* ***Eur. J. Org. Chem.*** **2020**, 6909	3.0	1

110	Iron(III)/O_2-Mediated Regioselective Oxidative Cleavage of 1-Arylbutadienes to Cinnamaldehydes. Amit Bhowmik and Rodney A. Fernandes* ***Org. Lett.*** **2019**, *21*, 9203	6.2	7
109	Catalytic Allylic Functionalization via π-Allyl Palladium Chemistry. Rodney A. Fernandes* and Jothi L. Nallasivam ***Org. Biomol. Chem.*** **2019**, *17*, 8647	3.6	28
108	A Catalytic Asymmetric Protecting-Group-Free Total Synthesis of (4S,5S)-4,8-Dihydroxy-3,4-dihydrovernoniyne and its Enantiomer. Gujjula V. Ramakrishna and Rodney A. Fernandes* ***J. Org. Chem.*** **2019**, *84*, 14127	4.8	2
107	Protecting-Group-Free Total Synthesis of Chatenaytrienin-2. Rupesh A. Kunkalkar and Rodney A. Fernandes* ***J. Org. Chem.*** **2019**, *84*, 12216	4.8	7
106	Total Synthesis of the Sensitive Triyne Natural Product (4S,5S)-4,8-Dihydroxy-3,4-dihydrovernoniyne and all its Stereoisomers. Gujjula V. Ramakrishna and Rodney A. Fernandes* ***Org. Lett.*** **2019**, *21*, 5827	6.2	13
105	A Step-Economic Synthesis of (*S*)-(-)-Juglomycin C and (*S*)-(-)-NHAB by Dötz Benzannulation and Convergent Deprotections. Amit Bhowmik, Sandip V. Mulay, and Rodney A. Fernandes* ***Asian J. Org. Chem.*** **2019**, *8*, 1534	3.1	3
104	Tandem IBX-Promoted Primary Alcohol Oxidation/Opening of Intermediate β,γ-Diolcarbonate Aldehydes to (*E*)-γ-Hydroxy-α,β-enals. Anupama Kumari, Sachin P Gholap, Rodney A. Fernandes* ***Chem. Asian. J.*** **2019**, *14*, 2278	4.6	5
103	A Lewis Acid Catalyzed Phenolic Ether 'O to C' Rearrangement: Synthesis of 4-Aryldihydrocoumarins. Praveen Kumar, Rupesh A. Kunkalkar and Rodney A. Fernandes* ***Asian J. Org. Chem.*** **2019**, *8*, 1001	3.1	1
102	Menthane-Based Chloride Bridged η^3-Bis-π-Allylpalladium Chloride Dimers: Catalytic Asymmetric Allylation of Imines. Amit K. Jha and Rodney A. Fernandes* ***Eur. J. Org. Chem.***, **2019**, 2857	3.0	4
101	Metal-Free Bronsted Acid-Catalyzed Rearrangement of Hydroxyalkynones to 2,3-Dihydro-4*H*-pyran-4-ones: Total Synthesis of Obolactone and a Catechol Pyran Isolated from *Plectranthus sylvestris*. Sachin P. Gholap, Dashrath Jangid and Rodney A. Fernandes* ***J. Org. Chem.*** **2019**, *84*, 3537	4.8	7
100	Lewis Acid-Catalyzed Annulative Partial Dimerization of 3-Aryloxyacrylates to 4-Arylchroman-2-ones: Synthesis of Analogues of Tolterodine, RORγ Inhibitor and a GPR40 Agonist. Rupesh A. Kunkalkar and Rodney A. Fernandes* ***Chem. Commun.*** **2019**, 55, 2313	6.2	3
99	Synthetic Modifications of Bifunctional Homoallylamines: Synthesis of 2-Arylpiperidines, (*R*)-Anatabine and (*R*)-Anabasine. Jothi L. Nallasivam and Rodney A. Fernandes* ***Synth. Commun.*** **2019**, *49*, 2815	1.8	--
98	A Concise Stereoselective Synthesis of Naturally Occurring D-Xylo-C18-Guggultetrol and its C2-Epimer. Naveen Chandra and Rodney A. Fernandes* ***Asian J. Org. Chem.*** **2019**, *8*, 532	3.1	4
97	A Process for Synthesis of Methyl Ketones by Wacker-Type Oxidation Reaction. **Patent Granted No. 314743**, dated 26/06/2019. Patent Application Filed, No. 2965/MUM/2015. Rodney A. Fernandes* and Dipali A. Chaudhari	PATENT	--
96	A Process for Preparation of Cephalosporolides E and F. **Patent Granted No. 327987**, dated 23/12/2019. Patent Application Filed, No. 2595/MUM/2015. Rodney A. Fernandes,* Dipali A. Chaudhari and Pullaiah Kattanguru	PATENT	--
95	Protecting Group Free Organic Synthesis: Improving Economy and Efficiency. Editor Rodney A. Fernandes, John Wiley & Sons, August **2018**	BOOK	11
94	A Novel Process for the Four Step Protecting Group Free Synthesis of (+)-Hagen's Gland Lactones. **Patent Granted No. 292674**, dated 07/02/2018. Application filed No. 1908/MUM/2012. Rodney A. Fernandes* and Pullaiah Kattanguru.	PATENT	--
93	A Novel Process for the Three Step Protecting Group Free Synthesis of (+)-Cardiobutanolide. **Patent Granted No. 285997**, dated 02/08/2017. Application filed No. 1780/MUM/2012. Rodney A. Fernandes* and Pullaiah Kattanguru	PATENT	--
92	Evolution of Total Syntheses of β-Hydroxy-γ-Lactones: Cardiobutanolide and Hagen's Gland Lactones. Rodney A. Fernandes,* Pullaiah Kattanguru, Mahesh B. Halle and Rupesh A. Kunkalkar ***ChemistrySelect*** **2017**, *2*, 6503	2.1	6
91	Short Eight-Step Total Synthesis of Racemic Asteriscunolide C. Rodney A. Fernandes,* Vijay P. Chavan and Arpita Panja ***Synth. Commun.*** **2017**, *47*, 2103	1.8	1

90	Recent Advances in Overman Rearrangement: Synthesis of Natural Products and Valuable Compounds. Rodney A. Fernandes,* Pullaiah Katanguru, Sachin P. Gholap and Dipali A. Chaudhari ***Org. Biomol. Chem.*** **2017**, *15*, 2672	3.6	33
89	A Protecting-Group-Free Synthesis of (+)-Nephrosteranic, (+)-Protolichesterinic, (+)-Nephrosterinic, (+)-Phaseolinic, (+)-Rocellaric Acids and (+)-Methylenolactocin. Jothi L. Nallasivam and Rodney A. Fernandes* ***Org. Biomol. Chem.*** **2017**, *15*, 708	3.6	17
88	Pd-Catalyzed Site-Selective Mono Allylic Substitution and Bis-Arylation by Directed Allylic C-H Activation: Synthesis of anti-γ-(Aryl,Styryl)-β-Hydroxy Acids and Highly Substituted Tetrahydrofurans. Jothi L. Nallasivam and Rodney A. Fernandes* ***J. Am. Chem. Soc.*** **2016**, *138*, 13238	15.2	22
87	Traceless OH-directed Wacker Oxidation-Elimination, an Alternative to Wittig Olefination/Aldol Condensation: One-pot Synthesis of α,β-Unsaturated and Non-conjugated Ketones from Homoallyl Alcohols. Venkati Bethi and Rodney A. Fernandes* ***J. Org. Chem.*** **2016**, *81*, 8577	4.8	13
86	Hypervalent Iodine as a Terminal Oxidant in Wacker-type Oxidation of Terminal Olefins to Methyl Ketones. Dipali A. Chaudhari and Rodney A. Fernandes* ***J. Org. Chem.*** **2016**, *81*, 2113	4.8	47
85	De Novo Protecting-Group-Free Total Synthesis of (+)-Muricadienin, (+)-Ancepsenolide and (+)-3-Hexadesyl-5-methylfuran-2(5*H*)-one. Rupesh A. Kunkalkar, Debasish Laha and Rodney A. Fernandes* ***Org. Biomol. Chem.*** **2016**, *14*, 9072	3.6	16
84	A Concise Synthesis of (-)-Incrustoporin and its Analogues by Pd-catalyzed Suzuki-Miyaura Coupling from γ-Vinyl- γ-butyrolactone. Jothi L. Nallasivam and Rodney A. Fernandes* ***ChemistrySelect*** **2016**, *1*, 5137	2.1	4
83	Total Synthesis of Marine Natural Products, Cephalosporolides. Mahesh B. Halle and Rodney A. Fernandes* ***Asian J. Org. Chem.*** **2016**, 5, 839	3.1	10
82	Dimeric Pyranonaphthoquinones: Isolation, Bioactivity, Biosynthesis and Synthetic Approaches. Rodney A. Fernandes,* Pradnya H. Patil and Dipali A. Chaudhari ***Eur. J. Org. Chem.*** **2016**, 5778	3.0	3
81	Total Synthesis of Unique *anti*, *anti*-4-Hydroxy-5-(1-hydroxyalkyl)-γ-lactones, Polyporolide and Mupirocine H. Rodney A. Fernandes* and Mahesh B. Halle ***Tetrahedron Lett.*** **2016**, *57*, 3694	2.6	3
80	A Concise Synthesis of (4*R*,5*R*)-(-)-Muricatacin and (4*R*,5*R*)-L-(-)-Factor from D-Glucono-δ-Lactone. Dipali A. Chaudhari, Arun B. Ingle and Rodney A. Fernandes* ***Tetrahedron: Asymmetry*** **2016**, *27*, 114	2.6	11
79	A Concise Protecting-Group-Free Synthesis of Cephalosporolides E and F. Dipali A. Chaudhari, Pullaiah Kattanguru and Rodney A. Fernandes* ***RSC Advances*** **2015**, *5*, 42131	3.0	25
78	Unimolecular Tetrakis-Piperidine-4-ol: an Efficient Ligand for Copper and Amine Free Sonogashira Coupling. Pradnya H. Patil and Rodney A. Fernandes* ***RSC Advances*** **2015**, *5*, 54037	3.0	6
77	Synthetic Studies toward Actinorhodin and γ-Actinorhodin by Homo-coupling Strategy: Synthesis of Hemiactinorhodin and Hemi-γ-actinorhodin. Sandip V. Mulay, Amit Bhowmik, Rodney A. Fernandes* ***Eur. J. Org. Chem.*** **2015**, 4931	3.0	8
76	A Stereoselective Synthesis of the Reported Structure of Polyporolide Pradnya H. Patil and Rodney A. Fernandes* ***RSC Advances*** **2015**, *5*, 49189	3.4	8
75	Development of Unimolecular Tetrakis-Piperidine-4-ol as New Ligand for Suzuki-Miyaura Cross Coupling Reaction: Synthesis of Incrustoporin and Preclamol. Jothi L. Nallasivam and Rodney A. Fernandes* ***Eur. J. Org. Chem.*** 2015, 3558	3.0	17
74	Formal Synthesis of the Human Rhinovirus 3C-Protease Inhibitor (–)-Thysanone. Sandip V. Mulay, Sachin P. Gholap and Rodney A. Fernandes* ***Asian J. Org. Chem.*** **2015**, *4*, 560	3.1	6
73	Unimolecular 4-Hydroxy Piperidines: New Ligands for Copper Catalyzed *N*-Arylation. Pradnya H. Patil, Jothi L. Nallsivam and Rodney A. Fernandes* ***Asian J. Org. Chem.*** **2015**, *4*, 552	3.1	11

72	Synthetic Studies on Actinorhodin and γ-Actinorhodin: Synthesis of Deoxyactinorhodin and Deoxy-γ-Actinorhodin/Crisamicin A Isomer. Sandip V. Mulay and Rodney A. Fernandes* ***Chem. Eur. J.*** **2015**, *21*, 4842	5.7	19
71	A Cascade Aza-Cope/Aza-Prins Cyclization to Piperidine Derivatives. Jothi L. Nallasivam and Rodney A. Fernandes* ***Eur. J. Org. Chem.*** **2015**, 2012	3.0	12
70	Tandem Benzylic Oxidative Dihydroxylation of α-Vinyl and α-Alkenylbenzyl Alcohols. Rodney A. Fernandes* and Pullaiah Kattanguru ***Helv. Chim. Acta*** **2015**, *98*, 92	1.4	3
69	A Relay Ring-opening/Double Ring-closing Metathesis Strategy for the Bicyclic Macrolide-butenolide Core Structures. Mahesh B. Halle and Rodney A. Fernandes* ***RSC Advances*** **2014**, *4*, 63342	3.4	11
68	An Expedient Osmium(VI)/$K_3Fe(CN)_6$-Mediated Selective Oxidation of Benzylic, Allylic and Propargylic Alcohols. Rodney A. Fernandes* and Venkati Bethi ***RSC Advances*** **2014**, *4*, 40561	3.4	19
67	Iron(III) Sulfate as Terminal Oxidant in the Synthesis of Methyl Ketones via Wacker Oxidation. Rodney A. Fernandes* and Dipali A. Chaudhari ***J. Org. Chem.*** **2014**, *79*, 5787	4.8	33
66	Synthesis of Methyl Ketones from Terminal Olefins using $PdCl_2/CrO_3$ System Mimicking the Wacker Process. Rodney A. Fernandes* and Venkati Bethi ***Tetrahedron*** **2014**, *70*, 4760	2.6	27
65	Chiral Cups (Calixarenes) via Dötz Benzannulation. Rodney A. Fernandes* and Sandip V. Mulay ***Synthesis*** **2014**, 1836	3.0	7
64	A Practical and Improved Process for the Synthesis of Hagen's Gland Lactones by Catalytic Hydro-deiodination. Dipali A. Chaudhari, Pullaiah Kattanguru and Rodney A. Fernandes* ***Tetrahedron: Asymmetry*** **2014**, *25*, 1022	2.6	13
63	Domino Recombinant γ-Isomerization and Reverse Wacker Oxidation of γ-Vinyl-γ-butyrolactone: Synthesis of (+)-*trans*-, (–)- and (+)-Disparlures. Venkati Bethi, Pullaiah Kattanguru and Rodney A. Fernandes* ***Eur. J. Org. Chem.*** **2014**, 3249	3.0	14
62	Stereoselective inversion of γ-vinyl-γ-butyrolactone under palladium catalysis: Application to the synthesis of (+)-exo- and (+)-endo-brevicomins. Rodney A. Fernandes,* Pullaiah Kattanguru, Venkati Bethi ***RSC Advances*** **2014**, *4*, 14507	3.4	13
61	A Facile Chemoselective Deprotection of Aryl Silyl Ethers using Sodium Hydride/ DMF and in situ Protection of Phenol with Various Groups. Rodney A. Fernandes,* Sachin P. Gholap and Sandip V. Mulay ***RSC Advances*** **2014**, *4*, 16438	3.4	10
60	Ring-Closing Metathesis Enabled Efficient Synthesis of γ-Butenolide Antifungal Agent (–)-Incrustoporin and Its Analogues. Rodney A. Fernandes,* Pradnya H. Patil and Asim K. Chowdhury ***Asian. J. Org. Chem.*** **2014**, 58	3.1	18
59	The Orthoester Johnson-Claisen Rearrangement in the Synthesis of Bioactive Molecules, Natural Products, and Synthetic Intermediates - Recent Advances. Rodney A. Fernandes,* Asim K. Chowdhury and Pullaiah Kattanguru ***Eur. J. Org. Chem.*** **2014**, 2833	3.0	30
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49	A Protecting-Group-Free Synthesis of Hagen's Gland Lactones. Rodney A. Fernandes* and Pullaiah Kattanguru ***J. Org. Chem.*** **2012**, 77, 9357	4.8	38
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40	A Concise Synthesis of Paraconic Acids: (−)-Methylenolactocin and (−)-Phaseolinic Acid. Rodney A. Fernandes* and Asim K. Chowdhury ***Tetrahedron: Asymmetry*** **2011**, *22*, 1114	2.2	22
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36	Stereoselective Total Synthesis of (+)-Nephrosteranic Acid and (+)-Roccellaric Acid through Asymmetric Dihydroxylation and Johnson-Claisen Rearrangement. Rodney A. Fernandes* and Asim K. Chowdhury ***Eur. J. Org. Chem.*** **2011**, 1106	3.0	20
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	Santolinolides. Rodney A. Fernandes,* Arun B. Ingle and Vijay P. Chavan ***Tetrahedron: Asymmetry*** **2009**, *20*, 2835		
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4	An Improved Process for the Preparation of Enantiomerically Pure Cyclohexylphenyl Glycolic Acid, **US patent, No. 6825378**, 2004. Pradeep Kumar,* Rodney A. Fernandes and Priti Gupta	PATENT	-
3	Catalytic Asymmetric Allylation of Imines with Tetraallylsilane-TBAF-MeOH System using Bis-π-allyl Palladium Complex. **Japanese patent JP 2003-396110**, 2003. Yoshinori Yamamoto* and Rodney A. Fernandes	PATENT	-
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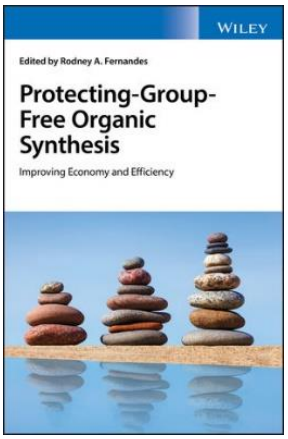
1	Process for the Preparation of (4*R*,6*S*)-4-Hydroxy-6-hydroxymethyl- tetrahydro-pyran-2-one, **US Patent, No 6376683**, 2002. Pradeep Kumar and Rodney A. Fernandes	PATENT	1

Books

1] A book titled **"Protecting-Group-Free Organic Synthesis: Improving Economy and Efficiency"** has been edited by me.



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Also contributed three book chapters in this book.

2] Book chapter: "**Allylpalladium Complexes in Organic Synthesis**" Rodney A. Fernandes, Praveen Kumar, Naveen Chandra. Accepted for Elsevier's Comprehensive Organometallic Chemistry IV, edited by Karsten Meyer, Dermot O'Hare and Gerard Parkin.

3] Book Chapter: "Synthetic Approaches to Spiro Bis-THF Natural Products: Cephalosporolides, Penisporolides, Ascospiroketals and Pyrenolides" Rodney A. Fernandes, Ashvin J. Gangani and Naveen Chandra. 'Targets in Heterocyclic Systems – Chemistry and Properties', Vol. 25 to be Published by Italian Chemical Society.

Students Supervision

i. **Post-doctoral Fellows Mentored:** 07 including 2 ongoing.

ii. Doctoral Research Guidance: 14 completed, 15 ongoing.
iii. Masters' Research Guidance: 25 including 1 ongoing.

Lectures/Seminars Delivered (National and International): **82**

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