Prof. RAM RAJASEKHARAN, Ph.D., FNA, FNSc., FNASc., FNNAS

Department of Microbiology, School of Life Sciences,
Central University of Tamil Nadu, Thiruvarur,
Tamil Nadu, Pincode: 610005

Mobile No. 9483521260

ram@cutn.ac.in

Date of Birth: 25 December 1960

1. Present position:

a	**Designation**	Professor
b.	**Organization**	Central University of Tamil Nadu
c.	**Date of appointment to the present post**	25 November 2019
d.	**Total experience**	3-year and 6 months

2. Details of Experience possessed:

S. No.	Post held	Pay scale	Organization	Nature of duties	Experience
1	Professor	PB-4 + 10,500	Indian Institute of Science, Bangalore	Chemical Biology Program Coordinator at the Institute; Teaching and guiding PhD students.	7-years & 4-months

2	Professor & Director	79,000 + 12,000	Academy of Scientific and Innovative Research & Central Food Technological Research Institute, Mysore	Brought focus to food and food processing technology related research programs. Brought grants to the Institute to execute, translate and commercialize technologies. I was instrumental in creating two centers of excellence • Molecular Nutrition • Lipid Research.	3-years & 3-months
3	Professor & Dean	Level 14	Central University of Tamil Nadu, School of Life Sciences, Thiruvarur	Teaching post graduate students and guiding PhD students. Securing research grants to establish the lab. Bring research focus to the School of Life Sciences and bringing infrastructure for research. Routine Department Head and Dean's duties.	3-years

3. Educational Qualification (in chronological order from highest to Graduation level)

S. No.	Qualification	University / Institution	Year	Subject/ Topics	% marks	Distinctions etc.
1	Ph.D.	Indian Institute of Science, Bangalore	1987	Biochemistry	-	-
2	M.Sc.	Madurai Kamaraj University	1981	Integrated Biology	66	First Class
3	B.Sc.	Madurai Kamaraj University	1979	Zoology	64	First Class

4. Administrative Experience/Post(s) & responsibility held

S. No.	Post	Organization / University	Duration		Experience
			From	To	
1	Director	Central Institute of Medicinal and Aromatic Plants, Lucknow.	Apr. 2009	Aug. 2012	3-years &4-months

	Director	Central Food Technological Research Institute, Mysore.	Aug. 2012	Aug. 2018	6-years
2	Dean of Faculty	Central University of Tamil Nadu, Thiruvarur	Dec. 2019	Jan. 2023	3-years
3	Head of the Department	Department of Microbiology, Central University of Tamil Nadu, Thiruvarur	Dec. 2019	Jan. 2023	3-years
4	Professor-in-charge & Wardenship etc.	Nil	--	--	--
5	Member of Academic Council / Senate	Research Council, CSIR-Central Electrochemical Research Institute, Karaikudi.	Apr. 2014	Mar. 2017	3-years
		Research Council, CSIR-Central Institute of Medicinal and Aromatic Plants, Lucknow.	Apr. 2014	Mar. 2016	2-years
		Research Council, CSIR-Center for Cellular and Molecular Biology, Hyderabad.	Apr. 2014	Mar. 2017	3-years
		Research Council, CSIR-National Botanical Research Institute, Lucknow.	Apr. 2011	Mar. 2014	3-years
		Research Council, CSIR-North Eastern Institute of Science & Technology, Jorhat.	Apr. 2011	Mar. 2014	3-years
		Central University of Tamil Nadu, Thiruvarur	Jan. 2020	Dec. 2022	3-years
		Sri Sathya Sai Institute of Higher Learning	Sep. 2015	Sep. 2019	4-years
		University of Horticultural Science, Bagalkot	June 2016	June 2018	2-years
		JSS University, Mysore	July 2017	Aug. 2019	2-years

6. Member of Executive Council		Vision Group on Biotechnology, Department of IT/BT, Science & Technology, Govt. of Karnataka.	Apr. 2014	Mar. 2018	3-years, 3 months
		KVPY, National Fellowships for Students Interested in Research Careers, National Management Committee	Apr. 2015	Serving	6-years, 8 months
		Review Committee on Genetic Manipulation (RCGM) in Department of Biotechnology, Ministry of Science & Technology, New Delhi.	Apr. 2012	Mar. 2016	4-years
		Project Approval Committee, Plan Coordination Division, Ministry of Food Processing Industries, New Delhi.	Apr. 2014	Mar. 2017	3-years,
		Central University of Tamil Nadu, Thiruvarur	April 2022	Mar. 2023	1-year
7	Member, Professional Academic Bodies	Guha Research Conference Treasurer, Society of Biological Chemistry, India	Jan 2002 Aug. 2000	Dec 2019 July 2003	17-years 3-years
8	Others (specify)	Elected Corresponding Member of the International Conference on the Bioscience of Lipids (ICBL; http://www.icbl.uni)	Oct. 2010	Sep. 2013	3-years

6. (a) Academic/Teaching Experience & Responsibilities

S. No	Post	Organization / University	Duration		Experience
			From	To	
1	Professor	Central University of Tamil Nadu, Thiruvarur	Nov. 2019	Current	3-years & 6-months
2	Professor	Academy of Scientific & Innovative Research (AcSIR)	Aug. 2015	July 2018	3-years
3	Assistant Professor, Associate Professor and Professor	Indian Institute of Science, Bangalore	Apr. 1995	Apr. 2015	20-years
4	College Assistant Professor	New Mexico State University, Las Cruses, USA	Apr. 1991	Aug. 1994	3-years & 3-months

(b) Involvement with formulation of academic programs:

S.No.	Nomenclature of innovative Academic Programs formulated	Date of approval by Academic Council	Year of introduction
1	Nutrition Biology- Integrated MSc- PhD (DBT funded)	Mar. 2015 by AcSIR Senate	Aug. 2015
2	Metabolism	Dec. 2000 by IISc Senate	Mar. 2001

(c) Important MoUs formulated for academic collaborations:

S. No.	MoUs formulated	Name of Agencies / Departments involved	Year of MoU
1	Innovative Research in Biological Sciences	CSIR-CIMAP & Monash University	2010
2	Development of new plant varieties	CSIR-CFTRI & University of Horticulture Science	2015

(d) Position of Chairs:

S. No.	Name of Chair	Name of Agencies/Departments involved	Period of holding the Chair
1	"Futuristic Space Research" Sectorial Expert Committee on Biomanufacturing. Chairman	Department of Biotechnology, Ministry of Science & Technology, New Delhi. (July 2023 to June 2026)	3-years On-going

2	Fats & Oils Scientific Panel Chairman	Food Safety and Standard Authority of India (FSSAI) Apr. 2023 to Mar. 2026	3-years On-going
3	Food and Agriculture Sectorial Committee of the South Asian Regional Standards Organization.	Bureau of Indian Standards, Ministry of Consumer Affairs, Food & Public Distribution, New Delhi.	4-years
4	Drinks & Drinking Water Sectional Committee, FAD 14.	Bureau of Indian Standards, Ministry of Consumer Affairs, Food & Public Distribution, New Delhi.	3-years
5	Task Force on "Biotechnological Approaches for Food and Nutritional Security"	Department of Biotechnology, Ministry of Science & Technology, New Delhi.	3-years
6	Project Screening Committee-2 on Research & Development of National Medicinal Plants Board.	Department of AYUSH, Ministry of Health and Family Welfare, New	3-years

7. International academic exposure:

S. No.	Post/ Assignment	Organization/ University	Area of assignment	Duration		
				From	To	In years & months
1	Visiting Professor	Monash University, Sunway Campus, Malaysia	Undergraduate teaching in Biochemistry.	Sep. 2006	Oct. 2010	3-years & 1 month
2	Visiting Professor	Monsanto Company, St. Louis, MO 63198, USA.	Research on Plant Genetic Engineering	Sep. 1994	Mar. 1995	7-months
3.	College Assistant Professor	New Mexico State University, Las Cruses, USA	Teaching and guiding research students	Apr. 1991	Aug. 1994	3-years & 4-months
4	Research Associate	E.I. duPont Company, Wilmington, DE, USA	New plant oil product development	Mar. 1989	Apr. 1991	2-years 1-month
5	Post-doctoral Fellow	University of Illinois, Urbana, IL, USA	Microbial Genetics	Feb. 1987	Mar. 1989	2-years

8. Scholarly Achievements:

A. Contributions to Journals and Books:

S. No	Authors' Name	Title of Book	Name of the Publisher	Year	No. of Citation
1	Srinivasan M & Rajasekharan, R	Analysis of Membrane Lipids. – Chapter 4 ISBN 978-1-0716-0630-8 ISBN 978-1-0716-0631-5 (eBook) https://doi.org/10.1007/978-1-0716-0631-5	Springer Protocols Handbooks	2020	2

2	Rajasekharan R, & Nachiappan V	Plant Developmental Biology, Biotechnological Perspectives: Volume 2, Chapter 6, pp. 105-115 (Pua, E. C. and Davey, M., eds)	Springer Publishing Company, Berlin, Germany ISBN: 978-3-642-04670-4	2010	3
3	Shockey JM, Kemp JD, & Rajasekharan R	Plant Lipid Metabolism, pp. 540-542. (Kader,J.-C. and Mazliak, P eds)	Springer, Dordrecht, ISBN: 978-94-015-8394-7	1995	11
4	Rajasekharan R, & Roychowdhury H	Plant Lipid Metabolism, pp. 540-542. (Kader, J.-C. and Mazliak, P eds)	Springer, Dordrecht, ISBN: 978-94-015-8394-7	1995	1
5	Weselake R, Pomeroy K, Furukawa-Stoffer T, Little D & Rajasekharan R	Plant Lipid Metabolism, pp. 540-542. (Kader,J.-C. and Mazliak, P eds)	Springer, Dordrecht, ISBN: 978-94-015-8394-7	1995	4

Editor in chief	Journal of Medicinal and Aromatic Plant Sciences
Editorships	Advance in Life Science
Peer reviewer for	9 International Journals 3 National Journals in Biological Sciences
Member of the International Advisory Board	None
Others (Specify)	None

B. Publications:

Total Publications: 86

S. No	Date	Title	Name of journal	Refereed journal or not	Number of Citations
1	2022	Impairment of transcription factor Gcr1p binding motif perturbs *OPI3* transcription in *Saccharomyces cerevisiae* Chidambaram R, Ramachandran G, Rajasekharan R, Nachiappan V.	Journal of Cellular Biochemistry 123(6):1032-1052.	Referred	0
2	2020	A bioactive polypeptide from sugarcane selectively inhibits intestinal sucrase. Abduldileep S, Narayanasamy R, Usharani D, Singh A, Rajasekharan R	International Journal of Biological Macromolecules 156:938-948	Referred	1
3	2020	Phenotypic changes of bacteria through opportunity and global methylation leads to antibiotic resistance Neerathilingam M, …… Rajasekharan R	bioRxiv	Not Referred	0

4	2020	*Ocimum basilicum* seed mucilage reinforced with montmorillonite for preparation of bionanocomposite film for food packaging applications. Rohini B, Ishwarya SP, Rajasekharan R, and VijayaKumar A	Polymer Testing 87, 10646	Referred	10
5	2020	Activity-based protein profiling of rice (Oryza sativa L.) bran serine hydrolases. Dolui AK, Vijayakumar AK, Rajasekharan R, and Vijayaraj P	Scientific Reports. 10;15191	Referred	1
6	2018	Sesaminol diglucoside, a water- soluble lignan from sesame seeds induces brown fat thermogenesis in mice. A Jahagirdar, D Usharani, M Srinivasan, R Rajasekharan	Biochemical and Biophysical Research Commun. 507(1-4), 155-160.	Refereed	8
7	2018	Leaf lipidome and transcriptome profiling of Portulaca oleracea: Characterization of lysophos-phatidylcholine acyltransferase. V Venkateshwari, A Vijayakumar, AK Vijayakumar, LPA Reddy, M Srinivasan, R Rajasekharan	Planta, 248(2), 347-367.	Refereed	3
8	2018	Cell size is regulated by phospholipids and not by storage lipids in Saccharomyces cerevisiae. JP Rao, M Srinivasan, R Rajasekharan	Current Genetics, 64(5), 1071-1087, 2018	Refereed	8
9	2018	Arabidopsis serine/threonine/ tyrosine protein kinase phosphorylates oil body proteins that regulate oil content in the seeds. Ramachandiran, A Vijayakumar, R Visvanathan, R Rajasekharan	Scientific Reports 8(1), 1154.	Refereed	8
10	2018	The role of yeast m^6A methyltransferase in peroxisomal fatty acid oxidation. Yadav PK, Rajvanshi PK, Rajasekharan R	Current Genetics, 64(2):417-422	Refereed	8
11	2018	The m^6A methyltransferase Ime4 and mitochondrial functions in yeast. Yadav PK, Rajasekharan R	Current Genetics , 64(2):353-357	Refereed	9
12	2017	The stress regulatory transcription factors Msn2 and Msn4 regulate fatty acid oxidation in budding yeast. PK Rajvanshi, M Arya, R Rajasekharan	Journal of Biological Chemistry 292, 18628-18643.	Refereed	15
13	2017	Unravelling a stearidonic acid-rich triacylglycerol biosynthetic pathway in the developing seeds of *Buglossoides arvensis*: a transcriptomic landscape. RV Sreedhar, P Prasad, LPA Reddy, R Rajasekharan, M Srinivasan	Scientific Reports 7, 10473. doi: 10.1038/s41598-017-09882-y,	Refereed	11
14	2017	The m6A methyltransferase Ime4	Journal of	Refereed	17

		epitranscriptionally regulates triacylglycerol metabolism and vacuolar morphology in haploid yeast cells. PK Yadav, R Rajasekharan	Biological Chemistry, jbc. M117. 783761		
15	2017	Human alpha beta hydrolase domain containing protein 11 and its yeast homolog are lipid hydrolases. M Arya, M Srinivasan, R Rajasekharan	Biochemical and Biophysical Research Communications 487 (4), 875-880	Refereed	5
16	2017	Effect of zinc deprivation on the lipid metabolism of budding yeast. N Singh, KK Yadav, R Rajasekharan	Current Genetics. 63(6), 977-982	Refereed	5
17	2017	Study of minor components in some Indian commercial vegetable oils. PKP Kumar, …….R Rajasekharan	Beverage & Food World 44(10), 21-27	Referred	0
18	2017	Cardiolipin deficiency causes triacylglycerol accumulation in Saccharomyces cerevisiae. PK Yadav, R Rajasekharan	Molecular and Cellular Biochemistry, 434 (1-2), 89-103	Refereed	2
19	2016	Responses to phosphate deprivation in yeast cells. KK Yadav, N Singh, R Rajasekharan	Current Genetics 62 (2), 301-307	Refereed	22
20	2016	Misregulation of a DDHD domain-containing lipase causes mitochondrial dysfunction in yeast. PK Yadav, R Rajasekharan	Journal of Biological Chemistry 291 (35), 18562-18581	Refereed	21
21	2016	The transcription factor GCN4 regulates PHM8 and alters triacylglycerol metabolism in Saccharomyces cerevisiae. KK Yadav, R Rajasekharan	Current Genetics 62 (4), 841-851	Refereed	4
22	2016	ZAP1-mediated modulation of triacylglycerol levels in yeast by transcriptional control of mitochondrial fatty acid biosynthesis. N Singh, KK Yadav, R Rajasekharan	Molecular Microbiology 100(1), 55-75	Refereed	16
23	2016	The RNA polymerase I subunit Rpa12p interacts with the stress-responsive transcription factor Msn4p to regulate lipid metabolism in budding yeast. KK Yadav, N Singh, PK Rajvanshi, R Rajasekharan	FEBS Letters 590 (20), 3559-3573	Refereed	3
24	2016	ATG15 encodes a phospholipase and is transcriptionally regulated by YAP1 in *Saccharomyces cerevisiae.* V Ramya, R Rajasekharan	FEBS Letters 590 (18), 3155-3167	Refereed	24
25	2016	Distnct rols of alpha/beta hydrolase domain containing proteins. A Vijayakumar, R Rajasekharan	Biochem. Mol. Biol. Journal	Not Referred	0

26	2016	Synthesis of hydroxymethyl furfural from cellulose using green processes: A promising biochemical & biofuel feedstock. Rout PK, Nannaware AD, Prakash O, Kalra A, Rajasekharan R	Chemical Engineering Science 142 (13) 318-346	Refereed	104
27	2016	Microarray data analyses of yeast RNA Pol I subunit RPA12 deletion strain. KK Yadav, R Rajasekharan	Genomics Data 8, 104-105	Refereed	2
28	2016	Yeast MRX deletions have short chronological life span and more triacylglycerols. D Kanagavijayan, R Rajasekharan, M Srinivasan	FEMS Yeast Research 16 (1), 1-14	Refereed	5
29	2015	PHO4 transcription factor regulates triacylglycerol metabolism under low- phosphate conditions in *Saccharomyces cerevisiae.* KK Yadav, N Singh, R Rajasekharan	Molecular Microbiology 98 (3), 456-472	Refereed	11
30	2015	The Arabidopsis ABHD11 mutant accumulates polar lipids in leaves as a consequence of absent acylhydrolase activity. A Vijayakumar, V Panneerselvam, AK Vijayakumar, R Rajasekharan	Plant Physiology, 170 (1), 180-193	Refereed	20
31	2015	Exploring triacylglycerol biosynthetic pathway in developing seeds of Chia (*Salvia hispanica* L.): A transcriptomic approach. RV Sreedhar, P Kumari, SD Rupwate, R Rajasekharan, M Srinivasan	PloS One 10 (4), e0123580	Refereed	32
32	2015	Aging Yeast Cells Are Fat! D Kanagavijayan, M Srinivasan, R Rajasekharan	The FASEB Journal 29 (1 Suppl), 715.47	Refereed	0
33	2014	Depolymerization of cellulose and synthesis of hexitols from cellulose using heterogeneous catalysts. Rout PK, Nannaware AD, and Rajasekharan R	ChemBioEng. Rev. 1, 96–116	Refereed	10
34	2013	A soluble diacylglycerol acyltransferase is involved in triacylglycerol biosynthesis in the oleaginous yeast *Rhodotorula glutinis.* SH Rani, S Saha, R Rajasekharan	Microbiology 159 (1), 155-166	Refereed	34
35	2012	Oleosin is bifunctional enzyme that has both monoacylglycerol acyltransferase and phospholipase activities. V Parthibane, S Rajakumari, V Venkateshwari, R Iyappan, R Rajasekharan	Journal of Biological Chemistry 287 (3), 1946-1954	Refereed	83

36	2012	Serine/threonine/tyrosine protein kinase phosphorylates oleosin, a regulator of lipid metabolic functions. V Parthibane, R Iyappan, A Vijayakumar, V Venkateshwari, R Rajasekharan	Plant Physiology 159 (1), 95-104	Refereed	34
37	2012	Plant phosphatidylinositol-specific phospholipase C – An insight. Rupwate SD, Rajasekharan R	Plant Signaling & Behavior. 7, 1281-1283	Refereed	35
38	2012	C2 domain is responsible for targeting rice phosphoinositide specific phospholipase C. SD Rupwate, R Rajasekharan	Plant Molecular Biology 78 (3), 247-258	Refereed	26
39	2012	Regulation of lipid biosynthesis by phosphatidylinositol-specific phospholipase C through the transcriptional repression of upstream activating sequence inositol containing genes. SD Rupwate, PS Rupwate, R Rajasekharan	FEBS Letters 586 (10), 1555-1560	Refereed	12
40	2012	A bifunctional enzyme that has both monoacylglycerol acyltransferase and acyl hydrolase activities. P Vijayaraj, CB Jashal, A Vijayakumar, SH Rani, DKV Rao, R Rajasekharan	Plant Physiology 160 (2), 667-683	Refereed	16
41	2010	Defective in cuticular ridges (DCR) of *Arabidopsis thaliana*, a gene associated with surface cutin formation, encodes a soluble diacylglycerol acyltransferase. SH Rani, THA Krishna, S Saha, AS Negi, R Rajasekharan	Journal of Biological Chemistry 285 (49), 38337-38347	Refereed	85
42	2010	Triacylglycerol lipolysis is linked to sphingolipid and phospholipid metabolism of the yeast *Saccharomyces cerevisiae*. S Rajakumari, R Rajasekharan, G Daum	Biochimica et Biophysica Acta (BBA)	Refereed	50
43	2010	Functional characterization of lysophosphatidic acid phosphatase from *Arabidopsis thaliana.* VS Reddy, DKV Rao, R Rajasekharan	Biochimica et Biophysica Acta (BBA)	Refereed	28
44	2009	*At4g24160*, a soluble acyl-coenzyme A-dependent lysophosphatidic acid acyltransferase. AK Ghosh, N Chauhan, S Rajakumari, G Daum, R Rajasekharan	Plant Physiology 151 (2), 869-881	Refereed	73
45	2009	Triacylglycerol lipases of yeast and plants: more than just hydrolases. S Rajakumari, R Rajasekharan, G Daum	Chemistry and Physics of Lipids 160, S7	Not Refereed	1
46	2008	CGI-58, the causative gene for Chanarin-Dorfman syndrome, mediates acylation of lysophosphatidic	Journal of Biological Chemistry 283	Refereed	147

		acid. AK Ghosh, G Ramakrishnan, C Chandramohan, R Rajasekharan	(36), 24525-24533		
47	2008	YLR099C (ICT1) encodes a soluble Acyl-CoA-dependent lysophosphatidic acid acyltransferase responsible for enhanced phospholipid synthesis on organic solvent stress in *Saccharomyces cerevisiae.* AK Ghosh, G Ramakrishnan, R Rajasekharan	Journal of Biological Chemistry 283 (15), 9768-9775	Refereed	67
48	2008	The *Saccharomyces cerevisiae* PHM8 gene encodes a soluble magnesium-dependent lysophosphatidic acid phosphatase. VS Reddy, AK Singh, R Rajasekharan	Journal of Biological Chemistry 283 (14), 8846-8854	Refereed	40
49	2008	Functional characterization of the phospholipase C activity of Rv3487c and its localization on the cell wall of *Mycobacterium tuberculosis.* M Srinivas, S Rajakumari, Y Narayana, B Joshi, VM Katoch	Journal of Biosciences 33 (2), 221-230	Refereed	22
50	2007	Serine/threonine/tyrosine protein kinase from *Arabidopsis thaliana* is dependent on serine residues for its activity. MM Reddy, R Rajasekharan	Archives of Biochemistry and Biophysics 460 (1), 122-128	Refereed	12
51	2007	Importance of threonine residues in the regulation of peanut serine/threonine/tyrosine protein kinase activity. MM Reddy, P Rudrabhatla, R Rajasekharan	Plant Science 172 (5), 1054-1059	Refereed	1
52	2006	Cytosolic triacylglycerol biosynthetic pathway in oilseeds. Molecular cloning and expression of peanut cytosolic diacylglycerol acyltransferase. S Saha, B Enugutti, S Rajakumari, R Rajasekharan	Plant Physiology 141 (4), 1533-1543	Refereed	283
53	2006	Genome-wide analysis and experimentation of plant serine/threonine/tyrosine-specific protein kinases. P Rudrabhatla, MM Reddy, R Rajasekharan	Plant Molecular Biology 60 (2), 293-319	Refereed	144
54	2006	Potential application of urea-derived herbicides as cytokinins in plant tissue culture. M Srinivasan, V Nachiappan, R Rajasekharan	Journal of Biosciences 31 (5), 599-605	Refereed	24
55	2006	Role of threonine residues in the regulation of manganese-dependent Arabidopsis serine/threonine/tyrosine protein kinase activity. MM Reddy, R Rajasekharan	Archives of Biochemistry and Biophysics 455 (2), 99-109	Refereed	16
56	2006	Spectrophotometric method for quantitative determination of nonionic, ionic and zwitterionic detergents. S Rajakumari, M Srinivasan, R Rajasekharan	Journal of Biochemical and Biophysical Methods 68 (2),	Refereed	8

			133-137		
57	2004	Functional characterization of peanut serine/threonine/tyrosine protein kinase: molecular docking and inhibition kinetics with tyrosine kinase inhibitors. P Rudrabhatla, R Rajasekharan	Biochemistry 43 (38), 12123-12132	Refereed	25
58	2003	Organogelation of plant oils and hydrocarbons by long-chain saturated FA, fatty alcohols, wax esters, and dicarboxylic acids. J Daniel, R Rajasekharan	Journal of the American Oil Chemists' Society 80 (5), 417-421	Refereed	134
59	2003	Mutational analysis of stress-responsive peanut dual specificity protein kinase. Identification of tyrosine residues involved in regulation of protein kinase activity. P Rudrabhatla, R Rajasekharan	Journal of Biological Chemistry 278 (19), 17328-17335	Refereed	26
60	2003	Cytosolic iron superoxide dismutase is a part of the triacylglycerol biosynthetic complex in oleaginous yeast. S Raychaudhuri, MM Reddy, NR Rajkumar, R Rajasekharan	Biochemical Journal 372 (2), 587-594	Refereed	18
61	2003	Biosynthesis of stearate-rich triacylglycerol in developing embryos and microsomal membranes from immature seeds of *Garcinia indica* Chois. J Daniel, L Abraham, K Balaji, R Rajasekharan	Current Science, 363-370	Refereed	6
62	2003	Nonorganellar acyl carrier protein from oleaginous yeast is a homologue of ribosomal protein P2. S Raychaudhuri, R Rajasekharan	Journal of Biological Chemistry 278 (39), 37648-37657	Refereed	3
63	2003	A single-step procedure for the synthesis of photoreactive and radioactive glycerolipids. S Lata, K Bhardwaj, R Rajasekharan	Analytical biochemistry 313 (1), 155-159	Refereed	3
64	2002	Developmentally regulated dual-specificity kinase from peanut that is induced by abiotic stresses. P Rudrabhatla, R Rajasekharan	Plant Physiology 130 (1), 380-390	Refereed	87
65	2002	Isolation of lysophosphatidic acid phosphatase from developing peanut cotyledons. S Shekar, AW Tumaney, TJVS Rao, R Rajasekharan	Plant Physiology 128 (3), 988-996	Refereed	33
66	2002	Alteration in the cytosolic triacylglycerol biosynthetic machinery leads to decreased cell growth and triacylglycerol synthesis in oleaginous yeast. A Gangar, S Raychaudhuri, R Rajasekharan	Biochemical Journal 365 (3), 577-589	Refereed	25

67	2001	Identification, purification, and characterization of a thermally stable lipase from rice bran. A new member of the (phospho) lipase family. K Bhardwaj, A Raju, R Rajasekharan	Plant Physiology 127 (4), 1728-1738	Refereed	123
68	2001	Shoot organogenesis and mass propagation of *Coleus forskohlii* from leaf derived callus. PS Reddy, R Rodrigues, R Rajasekharan	Plant Cell, Tissue and Organ Culture 66 (3), 183-188	Refereed	102
69	2001	Identification, purification, and characterization of monoacylglycerol acyltransferase from developing peanut cotyledons. AW Tumaney, S Shekar, R Rajasekharan	Journal of Biological Chemistry 276 (14), 10847-10852	Refereed	48
70	2001	Isolation and localization of a cytosolic 10 S triacylglycerol biosynthetic multienzyme complex from oleaginous yeast. A Gangar, AA Karande, R Rajasekharan.	Journal of Biological Chemistry 276 (13), 10290-10298	Refereed	46
71	2001	Purification and characterization of acyl-acyl carrier protein synthetase from oleaginous yeast and its role in triacylglycerol biosynthesis. A Gangar, AA Karande, R Rajasekharan	Biochemical Journal 360 (2), 471-479	Refereed	20
72	2000	Lipid biosynthesis in seed-derived embryogenic callus of kokum (*Garcinia indica*). K Balaji, PS Reddy, R Rajasekharan	Journal of Plant Biology 27 (3), 283-289	Refereed	1
73	1999	Synthesis of azidophospholipids and labeling of lysophosphatidylcholine acyltransferase from developing soybean cotyledons. AW Tumaney, R Rajasekharan	Biochimica et Biophysica Acta (BBA)	Refereed	18
74	1999	Identification of lysophosphatidic acid acyltransferase in the microsomal membranes of developing castor endosperm. AW Tumaney, S Narkunaraja, R Rajasekharan	Current Science, 660-664	Refereed	0
75	1995	Photoaffinity labeling of developing jojoba seed microsomal membranes with a photoreactive analog of acyl- Coenzyme A (Acyl-CoA): Identification of a putative Acyl-CoA: Fatty alcohol acyltransferase. JM Shockey, R Rajasekharan, JD Kemp	Plant Physiology 107 (1), 155-160	Refereed	15

76	1994	Lipid peroxidation and ethanol-related tumor promotion in Fischer-344 rats treated with tobacco-specific nitrosamines. V Nachiappan, SI Mufti, A Chakravarti, CD Eskelson, R Rajasekharan	Alcohol and Alcoholism 29 (5), 565-574	Refereed	38
77	1994	Use of photoreactive substrates for characterization of lysophosphatidate acyltransferases from developing soybean cotyledons. R Rajasekharan, V Nachiappan	Archives of Biochemistry and Biophysics 311 (2), 389-394	Refereed	18
78	1994	Photolabeling of soybean microsomal membrane proteins with photoreactive acyl-CoA analogs. R Rajasekharan, V Nachiappan, HS Roychowdhury	The FEBS Journal 220 (3), 1013-1018	Refereed	13
79	1994	Synthesis of photoreactive phosphatidylethanolamine and its interaction with phospholipase A2. R Rajasekharan, JD Kemp	Journal of Lipid Research 35 (1), 45-51	Refereed	7
80	1994	Enzymatic synthesis of [^{32}P] acyl-sn-glycerol 3-phosphate using diacylglycerol kinase. V Nachiappan, R Rajasekharan	Analytical Biochemistry 222 (1), 283-285	Refereed	5
81	1993	Photoaffinity labeling of acyl-CoA oxidase with 12-azidooleoyl-CoA and 12-[(4-azidosalicyl) amino] dodecanoyl-CoA. R Rajasekharan, RC Marians, JM Shockey, JD Kemp	Biochemistry 32 (46), 12386-12391	Refereed	31
82	1990	Substrate-mediated purification and characterization of a 3- hydroxybenzoic acid-6-hydroxylase from Micrococcus. S Rajasekharan, R Rajasekharan, CS Vaidyanathan	Archives of Biochemistry and Biophysics 278 (1), 21-25	Refereed	27
83	1990	Effect of thiocarbamate, urea, and uracil herbicides on lipid metabolism in groundnut (*Arachis hypogaea*) leaves. R Rajasekharan, PS Sastry	Biochemistry and Cell Biology 68 (2), 567-573	Refereed	4
84	1989	Effect of phenoxy acids and their derivatives on lipid metabolism in groundnut (*Arachis hypogaea*) leaves. R Rajasekharan, PS Sastry	Pesticide Biochemistry and Physiology 33 (1), 26-36	Refereed	1
85	1988	A direct nonchromatographic assay for 1-acyl-sn-glycerol-3-phosphate acyltransferase. R Rajasekharan, TK Ray, JE Cronan	Analytical Biochemistry 173 (2), 376-382	Refereed	6
86	1987	Effect of pyridazinone herbicides on lipid metabolism in groundnut (*Arachis hypogaea*) leaves. R Rajasekharan, PS Sastry	Pesticide Biochemistry and Physiology 29 (2), 163-175	Refereed	6

C. Participation and scholarly presentations in conferences:

National

S.No	Date	Institution	Title / Subject of Presentation
1	13 – 15 Feb. 2018	Banaras Hindu University, Varanasi	Trends in Biochemical and Biomedical Research Advances and Challenges
2	7 – 9 Dec. 2017	Indian Institute of Chemical Technology, Hyderabad	Food and Nutrition Challenges: Role of Food Science and Technology
3	21 – 24 Nov. 2016	Central Food Technological Research Institute, Mysore	Innovations in Biological Research for Health, Disease and Environment
4	26 – 27 Nov. 2014	Amity University, New Delhi	Food Technology and Cold Chain Management
5	6 – 7 Dec. 2012	Central Food Technological Research Institute, Mysore	Nutritional Security through Sustainable Development, Research & Education for Healthy Foods
6	12 – 15 Nov. 2011	Central Institute of Medicinal and Aromatic Plants. Lucknow	Symposium on Metabolic Pathway Modulations, Applications in Health and Agriculture
7	28 – 30 Oct. 2011	Central Institute of Medicinal and Aromatic Plants. Lucknow	5th International Conference on Vetiver
8	7 – 11 Feb. 2011	Central Institute of Medicinal and Aromatic Plants. Lucknow	International Symposium on Papavar
9	8 – 11 Dec. 2010	National Botanical Research Institute. Lucknow	Fourth International Conference on Plants and Environmental Pollution (ICPEP-4)
10	21 – 24 Feb. 2010	Central Institute of Medicinal and Aromatic Plants. Lucknow	International Symposium on Current Status and Opportunities in Aromatic and Medicinal Plants

International

S.No	Date	Institution	Title / Subject of Presentation
1	7 – 11 Feb. 2011	Central Institute of Medicinal and Aromatic Plants. Lucknow	International Symposium on Papavar
2	28 – 30 Oct. 2011	Central Institute of Medicinal and Aromatic Plants. Lucknow	5th International Conference on Vetiver

3	8 – 11 Dec. 2010	National Botanical Research Institute. Lucknow	Fourth International Conference on Plants and Environmental Pollution (ICPEP-4)
4	21 – 24 Feb. 2010	Central Institute of Medicinal and Aromatic Plants. Lucknow	International Symposium on Current Status and Opportunities in Aromatic and Medicinal Plants

D. Participation and contribution in National / International fora in the area of your academic and professional expertise:

		Number(s)
Plenary Lectures/Invited talks	International	12
	National	32
Congress attended	International	3
	National	13
Examinership, etc.	International	2
	National	24
Others (specify)	International	-
	National	-

9. Research project: from 2005 onwards as PI

S.No	Client/Organization's name	Nature of project	Duration of project	Amount of Grant (Rupees)
1	DST-SERB-CRG 2020	Understanding the relationship between cell size and storage lipid metabolism in yeast: Role of phosphorylation	3 years On-going	66.2 lakhs
2	DST-SERB-EEQ 2020	Epitranscriptional regulation of phospholipid metabolism in yeast cells	3 years On-going	51.3 lakhs
3	Dept of Biotechnology (DBT)-BIRAC	Development of novel economical process for the recovery of sucrase inhibitor	1.5 years	49.95 Lakhs
4	DST-SERB	Sucrase inhibitor from sugarcane for controlling calorie intake in mammals	5 years	40.5 Lakhs
5	DST-SERB	JC Bose Fellowship Lipid biosynthesis in plants and yeast	5 years	68 Lakhs
6	DBT	The first Integrated MSc- PhD program on Nutritional Biology	3 years	112.92 lakhs
7	CSIR	Facility Creation - Lipidomic center	5 years	2220.60 lakhs

8	CSIR	Established a new molecular nutrition department	5-years	774.26 lakhs
9	MOSTI Malaysia	Elucidation of physiological function …..… protein kinase	3 years	75 lakhs

10. Honors / Awards & Fellowships for Outstanding Work:

S. No.	Name of Award / Fellowship	Elected / Honorary Fellow	Awarded by	Year of Award
1	SCSB - Life Time Achieved Award	Elected	Society of Chemical and Synthetic Biology	2021
2	Professor G. V. Joshi Memorial Award	Elected	Indian Society of Plant Physiology (NCCP-2016) at University of Agricultural Sciences, Bangalore	2016
3	Sir J C Bose Memorial Award	Elected	Indian Science Monitor	2014
4	J.C. Bose National Fellow	Elected	Department of Science and Technology, Ministry of Science and Technology, Government of India, New Delhi.	2013
5	Fellow of Indian National Science Academy (**FNA**)	Elected	Indian National Science Academy, New Delhi	2012
6	Technology Award for Life Sciences	Elected	Council of Scientific and Industrial Research (CSIR), Ministry of Science & Technology, Government of India, New Delhi.	2012
7	Prof. I. S. Bhatia Memorial Award	Elected	The Society of Biological Chemists, India	2011
8	Pro Vice-Chancellor Award -Excellence in Research	Elected	Monash University, Malaysia	2009
9	Pro Vice-Chancellor Award -Excellence in Research	Elected	Monash University, Malaysia	2008
10	Platinum Jubilee Award for Application Oriented Innovations in Biological Sciences	Elected	National Academy of Sciences - Reliance Industries:	2008
11	Fellow of the Indian Academy of Sciences (**FASc**)	Elected	Indian Academy of Sciences, Bangalore	2006
12	Fellow of the National Academy of Sciences, (**FNASc**)	Elected	Indian Academy of Sciences, Allahabad	2006
13	Fellow of National Academy of Agricultural Sciences, (**FNAAS**)	Elected	Indian Academy of Sciences, Allahabad	2003
14	Sir C. V. Raman State Award in Life Sciences	Elected	Ministry of Science and Technology, Government of Karnataka, Bangalore	2004

15	National Bioscience Award for Career Development	Elected	Department of Biotechnology, Ministry of Science and Technology, Government of India, New Delhi.	2002
16	Agricultural Biotechnology Excellence Award	Elected	Nagarjuna Group, Nagarjuna Fertilizers and Chemicals Limited, Hyderabad	1999

11. (a) Membership of Societies and their names

S. No.	Membership of Societies and their names
1	Society of Biological Chemists, India
2	American Society for Plant Biology
3	American Society for Biochemistry and Molecular Biology
4	Association of Food Technologists, India

12. No. of Research Scholars successfully guided:

Name of programs	Awarded (No.)
Ph.D.	**28**

13. No. of Patents (Awarded/Filed):

1. P. K. Rout, A. K. Nannaware, Prakash O, and R. Rajasekharan (2019) Eco-friendly process for the isolation of biopolymers from agricultural residues. ***US Patent 10,287,527***.

2. P. K. Rout, A. K. Nannaware, and R. Rajasekharan (2015) Process for chemical conversion of cellulose isolated from aromatic spent biomass to hydroxymethyl furfural. ***US Patent 9,199,956***.

3. R. Rajasekharan, and C. S. Vivek Babu (2013) Fungal strains and a process for production of insecticide thereof. ***US Patent 8,497,090.***

4. R. Rajasekharan, C. S. Vivek Babu, and D. K. Venketa Rao (2013) Method of protecting plant(s) and a process thereof. ***US Patent 8,383,128***.

5. P. N. Rangarajan, R. Rajasekharan, and A. Mohanty (2011) Cells expressing Pichi cytochrome C. ***US Patent 7,892,792***.

6. R. Rajasekharan (2007) Triacylglycerol biosynthesis in the cytosol of eukaryotes - ***US Patent 7,229,815***.

7. R. Rajasekharan, and Bhardwaj, K. (2002) A process of isolation and utilization of rice bran lipase - PCT International Publication No. ***WO 02/101033.***

8. R. Rajasekharan, and Daniel, J. (2002) Process for preparing a novel synergistic solid/semi-solid organic composition - ***US Patent 6,391,928***.

9. R. Rajasekharan, Rodrigues, R., and Reddy, S. (2001) Herbicide comprising phytotoxins

of *Lasiodiplodia theobromae* (LT) fungus, A process of producing the herbicide and a method of using the same - ***US Patent 6,277,786.***

Indian Patents:

10. R. Rajasekharan, and J. Daniel (2007) A novel reversible solid/semi-solid composition and a process for preparing the same. Indian Patent 208610.

11. Anandharamakrishnan, V.K. Arun Kumar, L. Bhavani Devi, and R. Rajasekharan (2017) A colorimetric method for the detection of beta-carotene in milk using nanoparticle. Appl. No. 201711000166.

* * * * *