

# Biodata of Prof.K.R.S.Sambasiva Rao

**Name** : Dr.K.R.S.Sambasiva Rao

**Present Position** : Vice-Chancellor, Mizoram University (a Central University)

**Date of Birth** : 15-8-1958

**Address for Correspondence** : Vice-Chancellor  
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(Central University)  
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## Previous Positions held

- Rector, Acharya Nagarjuna University - October 2014 to Nov 2017
- Vice-Chancellor i/c, ANU - April 2015 to August, 2015)
- Professor - August 2005 to November, 2017
- Adjunct faculty at INDICASAT, Panama - Oct. 2010 to 2016
- Visiting Scientist , VCU Medical College, USA - April to May 2005
- Visiting Scientist at Gottingen Univ. Germany - May to Aug. 2004
- Visiting Scientist, Emory Medical School, USA- Dec. 1999 to April 2000
- Associate Professor - July 1998 to August 2005
- Asst. Professor - 1988 to July 1998

## Other Positions

- General Secretary, Association of Biotechnology and Pharmacy
- Editor, Current Trends in Biotechnology and Pharmacy

## Other Previous Positions

- Chairman, BOS in Zoology, Acharya Nagarjuna University, India
- Chairman, BOS in Biotechnology, MG University, Nalgonda, India
- Member, PG BOS in Biotechnology, SVIMS, Tirupathi, India
- Member, BOS Biotechnology, RayalaseemaUniversity, Kurnool
- Member, PG BOS in Biotechnology, BerhampurUniversity, Orissa
- Member, BOS in Biotechnology, DravidianUniversity, Kuppam, India
- Member, PG BOS Biotechnology, SK University, Anantapur, India
- Member, PG BOS Biotechnology, Bharathidasan Univ, Tiruchi
- Member, BOS in Animal Biotechnology, SV University, Tirupathi, India
- Member, UG BOS in Bioinformatics, Acharya Nagarjuna University, India
- Member, BOS in Engineering Biotechnology, AcharyaNagarjunaUniv.
- Member, BOS in Pharmacy, Acharya Nagarjuna University
- Chairman, Ethical Committee, NRI Medical College
- Chairman, Ethical Committee, Katuru Medical College

## Education:

- **D.Sc. Biotechnology** Berhampur University, India
- **Ph. D. Pharmaceutical Sciences**, Andhra University, Vizag, India
- **Ph. D. Zoology**, S.V.University, Tirupathi, India
- **M. Sc. Information Technology** Acharya Nagarjuna University
- **MBA Clinical Pharmacy**, ISMT, Bangalore, Intl. Business School
- **M. Sc. Zoology**, Bhopal University, Bhopal, India
- **PG Cert. in Statistics**, Nagarjuna University, India
- **PG Dip. in Comp. Applns.**, Madurai Kamaraj Univ. Madurai
- **M.A. Sociology**, Annamalai University, Tamilnadu, India

### **Important Academic Assignments Undertaken**

- Established International Academic program for offering PhD in Biotechnology with INDICASAT, Republic of Panama
- Responsible for signing MoU and Established Twinning programs of MS Biology with University of West Georgia
- Establishment of PhD and Masters programs in Computer Applications, Statistics, Management with EASTAC, Tanzania (an institute for 18 African Countries)
- Signing MoU with Universities at Normal University, Jilin Agricultural University, Jilin Jiang University, Changchun, China
- Responsible for signing MoU with Universities at Ethiopia (Axum University, Ambo University)
- Established International Language Cell at Acharya Nagarjuna University (Japanese, Chinese and Arabic)
- Responsible signing MoU with many industries relating to Biotechnology, Pharmacy and Aquaculture and with many National Research Laboratories and Research Institutes in ANU

### **Abroad Visits**

- Worked as a Visiting Scientist at Dept. of Biochemistry, Emory University, Atlanta, USA on automated DNA sequencing and micro array technology at DNA Sequencing Core Facility, Emory University during Dec. 1999 to April 2000
- Visited Australia and participated in Bioavailability 2001 and visited CSIRO Land and Water and University of Adelaide in November 2001
- Visited School of Environmental Sciences and Management, Pokhara University, Khatmandu, Nepal and delivered a lecture in June, 2002
- Worked as a Visiting Scientist at Dept. of Molecular Wood Biotechnology, Georg-Augusta Gottingen University, Germany and worked on cloning and Expression of laccase genes in *Coprinus cinereus* and purification and characterization of laccases during May to August 2004
- Worked as a Visiting Scientist at Virginia Commonwealth University, Richmond, USA and worked on Molecular Signal Transduction in smooth muscles during April-June, 2005
- Visited and worked as a Adjunct faculty at INDICASAT, Republic of Panama during October, 2010, during April-May, 2011, 2012 and 2013.
- Visited as a member of Committee deputed by ANU for academic collaboration with Institutes and Universities in Tanzania and Ethiopia during January-February, 2015
- Visited China as a member of Committee deputed by ANU for academic collaboration with Institutes and Universities in China during June, 2016
- Visited South Korea for participation in 5<sup>th</sup> World Education Leaders Meeting held at Busan, South Korea during 2-7 July, 2017.

### **Academic Programs Developed**

- Responsible for Development of MSc Biotechnology, MTech Biotechnology, MSc Nanobiotechnology courses at ANU
- Responsible for Development of MSc Animal Biotechnology curriculum at SVU, Tirupathi
- Responsible for development of MSc Aquaculture, PG Diploma in Sustainable Aquaculture, Certificate Course in Aquaculture
- Responsible for Development of Innovative programs in Pharmaceutical Biotechnology

### **Academic and Administrative Activities involved with Centre for Distance Education**

- Member of Advisory Board, Centre for Distance Education, ANU
- Member of Core Board of Studies
- Convener, Examination Centres
- Convener, ICT-CDE Education
- Member, Software Development Committee
- Course Convener of MSc Zoology, PG Diploma in Aquaculture Management, PG Certificate course in Sustainable Aquaculture Management, PG Diploma in Biotechnology, PG Diploma in Bioinformatics and Editor of Course material

**Subjects taught:** Biochemistry, Physiology, Animal Biotechnology, Cellular Molecular Biology, Environmental Science, Aquaculture

**Research areas:** Environmental Toxicology & Physiology, Environmental & Aquaculture Biotechnology, Fermentation Technology

### **International Conferences Attended**

- Participated in Bioavailability 2001 in Adelaide, Australia, organized by CSIRO, Australia (2001)
- Participated in FASEB Annual Meeting and the XXXV International Congress of Physiological Sciences at San Diego, CA USA, organized by FASEB during April 2-6 (2005)
- Participated in 3<sup>rd</sup> International Conference on Medicinal Plants and Herbal Products, held at University of Colombo, Sri Lanka during 19-21 December (2011)
- Participated in 5<sup>th</sup> World Education Leaders Forum conference held at Busan, Korea during 2-7 July, 2017

### **International Advisory Body Memberships**

- Member of International Advisory Body in International Conference organized at Coimbatore, Tirupathi
- Adjunct Professor and Advisory Body member of Academic Programs being run at INDICASAT, Republic of Panama

### **International Evaluation/Examiner**

- Member of Evaluation for promotion of Faculty at King Saudi University
- Member of Evaluation Committee for PhD candidates at INDICASAT, Repub. of Panama

### **Research Experience**

- 35 Years of Research Experience in the fields of Environmental Toxicology & Physiology, Environmental & Aquaculture Biotechnology, Fermentation Technology
- During the stay at DNA Sequencing Core Facility, Emory University, Atlanta, USA research work has been carried out in the fields of Gene Chip Technology and DNA Sequencing during December 1999 to April 2000
- During the stay at Wood Biotechnology Division, Georg-Augusta University of Gottingen, worked on cloning and expression of laccase genes in fungal species *Coprinus cereus* during May to August, 2003
- At Dept. of Physiology and Medicine, Virginia Commonwealth University, USA worked on Molecular Signal Transduction Mechanisms in smooth muscles during April to July, 2005.
- Presently continuing research in the field of Biotechnology relating to Molecular Biology, Environmental Biotechnology, Fermentation Technology and Aquaculture Biotechnology

### **Research Guidance**

: 22 Ph. Ds. and 20 M. Phil(s) & 7 Ph.Ds. under process

### **Projects Ongoing and Completed**

1. UGC Project on Prostate Specific antigen – A New Diagnostic Marker for Breast Cancer
2. DBT Project Studies on Isolation, Cloning and production of industrially important Cold adaptive Enzymes from Marine Extremophiles
3. UGC Project Analysis and production of a constructed multifunctional chimeric thrombolytic therapeutic molecule
4. DST Project Biodiversity of subterranean ground-waters of India, with special reference to Copepoda and Bathynellacea (as Co-investigator)
5. Completed one UGC-Minor Research Project – Studies on Predator-Prey relationship in Fish culture ponds
6. Completed UGC-Minor Research – Studies on anti-oxidative mechanisms in toxicity induced animals
7. DBT project Neem seed powder unit and Neem trees plantation and Maintenance to increase the earnings of SC/ST population in Tenali Mandal (as Co-investigator)

**Projects completed with private Industry:**

1. One Project has been undertaken with Aqua Prime, Nellore in investigating the diagnosis and control of ADS
2. One project has been undertaken with Shrimp Care Centre, Nellore in investigating genetic variants of WSSV

<b>Research Publications:</b>	Research papers -	<b>226</b>
	Patent Filed -	<b>7</b>
	Gene Bank Submissions -	<b>6</b>
	General Scientific articles -	<b>23</b>
	Papers presented in symposia -	<b>68</b>
	Books as Author/coauthor/editor/ contributions in books	<b>15</b>
	Books written to Centre for Distance Education as Editor	<b>10</b>

**Sambasiva Rao K.R.S. Citations (Scopus, Web of Science, ICI, Google Scholar & Research Gate) (Total Citations – 13039)**

S.No	Indexing	Total Citations	H-Index
1.	SCOPUS	2634	21
2.	Web of Science	1378	18
3.	Indian Citation Index	1645	-
4.	Google Scholar	5390	32
5.	Research Gate	1992	34.77(RG Score)

**Books:**

- Biologically Important Quinazoline “Ones” and “Thions”** Theivendren Panneer Selvam, K.R.S. Sambasiva Rao and Bhaskara R. Jasti, Lambert Academic Publishing, Germany (2013)
- Endemic Diseases of Litopenaeus vannamei and Panaeus monodon in India** A.Ravi Kumar and K.R.S.Sambasiva Rao, Lambert Academic Publishing, Germany (2013)
- A Text Book on Regenerative Medicine: Stem cells and their applications,** KRSS Rao and KA Krishna, IK International, New Delhi, India (2010)
- A Text Book of Aquaculture,** M.S.Reddy and KRS Sambasiva Rao, Discovery Publishing House, New Delhi, India (1999)
- Current Trends in Indian Education** DB Rao and KRSS Rao, Discovery Publ. House, New Delhi (1996)
- Advanced Biotechnology** DB Rao, D.Harshitha and K.R.S. Sambasiva Rao, Editors, Discovery Publishing House, New Delhi (1990).
- Pesticide Impact on Fish Metabolism** Sambasiva Rao, K R S, Discovery Publishing House, New Delhi (1999)
- Biotechnology Text Book,** Telugu Akademy, Hyderabad (2010)
- Emerging Trends in Biomedical Research,** Department of Biotechnology, ANU (2010)
- Zoology Text Book** Telugu Akademy, Hyderabad, (2010)

### **Emerging Trends in Modern Biology**

Centre for Biotechnology, ANU (2009)

Contributor for "**Teaching of Biology**" for B. Ed. Course, Nagarjuna Publishers, Guntur (1994)

Contributor for NCERT, Govt. of India, New Delhi, **Source book on Aquaculture** (1996)

Contributor for NCERT, Govt. of India, New Delhi,

**Source book on Environment** (1996) **KK Pulicherla** and KRS Sambasiva Rao- a chapter on "Psychrozymes: Marine Biocatalysts and their stability in a book publishing by **Oxford Press** (2013).

**KK Pulicherla** and KRS Sambasiva Rao- a chapter on "Marine Psychrophiles - Source of Future Industrial Enzymes" in a book publishing by **Lambert Academic Publishing, Germany** (2013).

Edited 10 Books in Centre for Distance Education for MSc Zoology, PG Diploma in Biotechnology and Bioinformatics of Acharya Nagarjuna University

4 Books -**B.Sc. Biochemistry and B.Sc. Zoology** books

### **Membership in Editorial Board of Journals:**

- Editor, Current Trends in Biotechnology and Pharmacy
- Associate Editor, International Journal of Pharmacology and Biological Sciences
- Member Editor, Journal of Applied Biosciences
- Member Editorial Board, Research Journal of Biological Science
- Member Editorial Board, Bioscan
- Member, Editorial Board, International Journal of Pharmagenesis
- Member Editorial Board, The Journal of Genetics

### **Reviewer for Journals**

- Applied Biochemistry and Biotechnology
- Process Biochemistry
- Bioresource Technology
- African Journal of Biotechnology
- Iranian Journal of Biotechnology

### **Awards/Fellowships Received:**

- Fellow of Association of Biotechnology and Pharmacy
- Elected Fellow of Andhra Pradesh Academy of Sciences
- Received Panama National Award from Republic of Panama for service in education and research in Panama
- Received Talented Biotechnologist Award at ISCEPH, University of Colombo, Sri Lanka
- Best Research Article Award from Intas Polivet published in 2004, vol.5(2), 87-93
- Honorary Fellow of Society for Regenerative Medicine
- Honorary Fellow of Society for Applied Biotechnologists
- Lion's International President Appreciation Award for 2007-08 from Lions Club International, USA for participating in Lions activities
- Received AP State Best Teacher Award for the year 2013

### **Professional Positions**

- ❖ General Secretary, Association of Biotechnology and Pharmacy
- ❖ Hon. Secretary, Andhra Pradesh Akademi of Sciences

- ❖ Vice-President of Indian Society of Comparative Animal Physiology (ISCAP)
- ❖ Hon. Secretary, Andhra Pradesh Akademi of Sciences
- ❖ Vice-President, Akshara, Scientific Voluntary Organization
- ❖ Member, Scientific Advisory Committee, Nireekshana (NGO) working on the molecular aspects of infectious diseases, Hyderabad

### **Membership in Professional bodies**

- Life member, Asian Fisheries Society, Philippines
- Life member, Asian Fisheries Society, Indian branch, Mangalore
- Life member, Indian Science Congress Association
- Life member, Assoc. for Indian Society for Comparative Animal Physiologists, India
- Life Member, National Oil Palm Research Association, India
- Life Member, Indian Assoc. for Nuclear Chemists and Allied Sciences (IANCAS), India
- Life Member, Indian Society of Applied Biology, Lucknow, India
- Life Member, Biotech Research Society of India, Trivandrum, India
- Life Member, Association of Biotechnology and Pharmacy
- Life Member, Society for Science and Environment
- Life Member, Society for Biotechnologists (India)

### **Consultancy activities**

- 1) Consultant on honorary basis to SPC Biotech Private Limited, Hyderabad in handling the projects related to Biopolymers and Biofuels with ecofriendly nature
- 2) Consultant on honorary basis to BMR Industries Pvt Ltd., Nellore in handling the projects related to Hatchery and Farm management
- 3) Consultant on honorary basis to Alpha Hatcheries Pvt. Ltd., Nellore in handling the projects related to Hatchery management

### **Extension activities**

- Lions Mega service Camp for the Establishment a Permanent Project of Lions Blood Bank for serve the Poor and Needy People as committee member
- Lions Mega service camp conducted on 15-08-2007 for distribution of Sewing Machines and wet Grinders for 1000 poor women under self employment scheme.
- Lions Mega Eye camp for screening and operations for poor and needy people participated nearly 1200 people and screened 1200 people and distribution of medicines and spectacles to 620 poor people and 148 cataract surgeries conducted on 20-09-2007
- Participated in Mega Medical Camp on 01-07-2008 conducted by Zed Foundation, about 650 people participated and distribution of medicines was performed at Tenali
- Zed Foundation Conducted a Green Revolution camp on 05-6-2008 to 12-6-2008 and performed 16000 Tree plantation at different areas of Guntur district

### **Seminars, Conferences, Symposia and Workshops organized**

- National Seminar on Environmental Biotechnology during 21-23 December 2002
- National Seminar on Modern Biology during 28-30 August, 2003
- National symposium on Regenerative Medicine and Tissue Engineering during 28-29 April, 2004
- National Seminar on Bioprocesses and Production Technologies during 21-23 December, 2004
- National Seminar on Aquaculture Biotechnology during 17-18 December, 2005
- Annual Convention of Andhra Pradesh Akademi of Sciences and symposium on Agricultural, Pharmaceutical and Environmental Biotechnology during 22-23 February, 2005 at Bapatla Engineering college
- Public Debate on Biotechnology on 21<sup>st</sup> February, 2005

- National Seminar on Cord Blood Stem Cells and their applications, Oct. 18-20, 2007
- Annual Convention of Association of Biotechnology and Pharmacy and National Seminar on Pharmacy and its scope and perspectives, 6-7 December, 2007
- National Seminar on Emerging Trends in Modern Biology, 18-20 October, 2008
- Annual Convention of Association of Biotechnology and Pharmacy and National Seminar on Pharmacogenomics & its applications in Drug Discovery, Jan.24-25, 2009
- International Symposium on Emerging Trends in Biomedical and Nanobiotechnology: Relevance to Human Health, December 19-21, 2009
- National Seminar on Biomedical Applications of Nanobiotechnology, February 5, 2010
- Seminar on 'Awareness on Bt crops and their Significance April 14, 2010
- National Seminar on Recent Trends in Biotechnology September 24-26, 2011
- Andhra Pradesh Akademi of Scienc. Young Scientist Convention-2011 Oct. 27-28, 2011
- International Symposium on Innovations in Free Radicals Research and Experimental Therapeutics & 5<sup>th</sup> Annual Convention of ABAP held at Karunya University, Coimbatore, during 7-9 December, 2011
- International Conference on Environmental Impact and Therapeutic Challenges & 6<sup>th</sup> Annual Convention of ABAP held at SV University, Tirupathi, during 20-22 Dec., 2012
- Andhra Pradesh Science Congress-2012 at AcharyaNagarjunaUniversityNovember 14-16,2012
- International Conference on Plant Biotechnology, Molecular Medicine and Human Health & 7<sup>th</sup> Annual Convention of ABAP at University of Delhi during 18-20 Oct., 2013
- International Conference on Emerging Challenges in Biotechnology, Human Health and Environment & 8<sup>th</sup> Annual Convention of ABAP at University of Delhi during 18-20 Dec., 2014.
- International Conference on Recent Advances in Biosciences and Applications of Engineering in Production of Biopharmaceuticals& 9<sup>th</sup> Annual Convention of ABAP at KL University during 14-16 Dec. 2015

### **Refresher Courses**

- UGC-Refresher course in Biotechnology during 11-11-2002 to 1-12-2002
- UGC-Refresher course in Biotechnology during 26-12-2003 to 15-1-2004
- UGC-Refresher course in Biotechnology during 21-12-2005 to January 10, 2006
- UGC Interdisciplinary Refresher course in Pharmaceutical Science during 22-12-2014 to January 11, 2015.

### **Workshops organized**

- ❖ Workshop on Molecular Biology & Immunology during 19-21 August, 2005
- ❖ Workshop on Advances in Molecular Biology during 29-31 July, 2006
- ❖ Workshop on Cell culture and Stem Cell culture Techniques, 29, 30 September and 1 October, 2008
- ❖ BRNS-IANCAS Workshop on Applications of Radiation Biology and Chemistry during 2-10 February, 2004
- ❖ Workshop on Cell culture Techniques in collaboration with SR Biotechnology, Bangalore during 30<sup>th</sup> September to 1<sup>st</sup> October, 2008
- ❖ National Workshop on SAS and its Applications in Pharmacy and Biotechnology March 10-15, 2010
- ❖ DST- Awareness Program on Coastal Aquifer Monitoring and Management 19-24 June, 2012.

**(K.R.S. SAMBASIVA RAO)**