



Prof.S.VIJAYA BHASKARA RAO

DIRECTOR, UGC-SVU CENTRE FOR MST RADAR APPLICATIONS

DEAN, Research & Development

Sri Venkateswara University,

Professor of Physics

Co-ordinator, RUSA 2.0 project

Co-ordinator, DST-PURSE Centre

My Strengths:

- Visionary leadership with vast administrative experience.
- Transparent, value-based and non-corrupt characteristics.
- Critical analytical qualities with high motivation in addressing student and employee problems.
- Sincere, hardworking with the highest commitment to thrive for positive output in all endeavours undertaken.
- Hard push for positive administrative reforms in Higher education.
- In-depth knowledge of the latest technologies and initiatives of state and central government.
- Highly concerned with societal problems and look to service society through higher educational institutions.

My Vision:

- To transform any institute of higher learning into a “Knowledge-based Platform” with the latest technologies to train students.
- To transform the Institution from a “National outlook” to an “International outlook” with robust teaching and research.
- Reform the curriculum and introduce education 4.0 with an emphasis on practical domain knowledge rather than a conventional theoretical approach.
- To create an entrepreneurship-friendly environment with liberal administrative reforms to establish start-ups and incubation facilities.
- Incentive-based merit rewards/awards and financial assistance to staff and research students to strengthen international collaboration to establish “Centres of research excellence”.
- To explore revenue generation through spin-off companies and consultancy to become self-sustained in the future.
- To provide quality infrastructure facilities to students.
- To envisage a “green energy campus” with energy auditing and eco-friendly initiatives.

Name	SARANGAM VIJAYA BHASKARA RAO
Date of Birth	01/07/1963
Nationality	INDIAN
Father / Spouse Name	SARANGAM KRISHNA MURTHY
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Educational qualifications (in chronological order):

- ❖ **M.Sc (Physics) with Electronics specialization securing 66.9% from S.V. University in 1986.**
- ❖ **M.Phil awarded with securing 71% from S.V. University, in 1988.**
- ❖ **Ph.D (Physics – Atmospheric Science) awarded in S.V. University, in 1991.**
- ❖ **Asst professor in Physics from 1992-2001**
- ❖ **Associate professor from 2001-2009**
- ❖ **Professor from 2009 to till date**

Research Projects: (Annexure-I)

Ongoing Research Projects: 4 (ongoing) : Total: Rs.110 crore

Completed Research Projects: 10: Total: Rs.226.58 lakhs

Collaborative Projects: 2: Total Rs.453.44 lakhs

No. of Papers published (Annexure-II)

International Journals:176

National Journals:23

No. of Seminars/Conferences/Workshops Organized: **32 (Annexure-III)**

No. of Seminars/Conferences/Workshops Attended

- International: 22
- National: 55

No. of Seminars/Conferences/Workshops in which

Served as resource person: 13

Administrative Experience

- **Dean**, Research and Development, S V University, Tirupati since Jan 2016. Responsible and coordinated with University Rankings like NIRF, THE, and QS. Streamlined PhD admissions and processes. Introduced 14 credits in PhD system, Plagiarism, and foreign examiner as per UGC guidelines. Played a Key role in NAAC-2019.
- **Organising Secretary for the 104th Indian Science Congress conducted at SVU in 2017 which was held with grandeur. Helped SVU get NAAC A+ grade.**
- **Director**, UGC-SVU Centre for MST radar applications, SVU, Tirupati. Established the first Meteor Radar in the country in the SVU campus. The centre is recognized as a Major national Facility by UGC, New Delhi, and NAAC committee appreciates it as a distinguished facility in the University. The centre also coordinates and provides data to ISRO and NARL, Gadanki are also to other national and International scientific organisations. The centre is running for the last 25 years.
- Prepared a research proposal for 100 crore and presented it before the National committee and got approval for the RUSA 2.0 at SVU for Rs.100 Crore. Developed infrastructure viz., Girls hostels, boy's hostels and Innovation and Incubation center for the first time in the SVU Campus. 15 start-up companies are in the pipeline and Centres of Excellence in Virtual production and Drone technologies, health sciences, and small satellite projects are under pipe line.
- Coordinator for the DST-PURSE Centre, which is the sophisticated instrumentation facility in the campus. Responsible for organizing experimental facilities for staff and research students. 15 crore equipment is available in the center and recently TEM with a cost of 5/5 crore is procured with DST support.
- **Coordinator**, Centre with Potential for Excellence in Particular Area, S V University, Tirupati. SVU was one of the ten Universities in the country to get this status and the project was successfully implemented at SVU.

- **Co-ordinator**, Advanced Centre for Atmospheric Sciences, S.V. University, Tirupati. Sponsored by ISRO an ARFI (Aerosol Radiative forcing over India) was being carried out in pursuance of climate change.
- Served as Head of the Physics department and presently Chairman, BoS PG) in Physics
- **Served as Co-ordinator**, M.Tech Space Technology Program, S.V. University, Tirupati.
- **Served as a Deputy Co-ordinator**, Centre for Advanced Study, S.V. University, Tirupati.
- **Served as a Honorary Director**, Center for Disaster and drought management, S.V. University, Tirupati.

Awards Received:

- Andhra Pradesh Scientist Award (APSA)-2012
- IETE- Prof. K. Sreenivasan Memorial Award (2012)
- Elected as Fellow of Andhra Pradesh Academy of Sciences, Hyderabad
- Participated in the *Indian scientific expedition to Antarctica*
- Fellow of Institute of Electronics & Telecommunication Engineers, New Delhi.
- Biography cited in the Marquis **Who's Who** in the world, 2010 edition.
- **Teacher of Excellences award from S.V. University, in the year 2009.**

Professional Experience

(Membership in Professional Bodies) :

- ✓ **Fellow** of Andhra Pradesh Akademi of Sciences, Amravati.
- ✓ **Council Member** of Andhra Pradesh Akademi of Sciences, Amravati.
- ✓ **Fellow** of Institute of Electronics & Telecommunication Engineers (IETE), New Delhi.
- ✓ **Member, Board of Studies**, Dept. of Meteorology and Oceanography, Andhra University, Visakhapatnam.
- ✓ **Member of Local Advisory Committee**, Visvesvaraya Industrial and Technological Museum (2014)
- ✓ **Member Board of Studies** in Physics, Sri Padmavathi Mahila Visva Vidyalayam, Tirupati (2013-2014)
- ✓ **Member of Board of Studies**, Yogi Vemana University, Kadapa
- ✓ **Biography cited in** the Marquis **Who's Who in the world**, 2010 edition.
- ✓ **Member**, Institute of Electrical and Electronics Engineering (IEEE), U.K.
- ✓ **Member**, Indian Aerosol Science and Technology Association, Mumbai.
- ✓ **Member of the Advisory Committee** for Srinivasa Institute of Technology and Management studies, Chittoor.
- ✓ **Member of the Advisory Committee** for NBKR Institute of Science & Technology, Vidyanagar, Nellore (Dist).
- ✓ **Member of the Advisory Committee** for Sri Sai Institute of Technology and Science, Rayachoti.

Visits Abroad:

Visited Nanyang Technological University, Singapore from 31-5-2002 to 31-7-2004 as a visiting research fellow. During the two years worked on the DTV project in Singapore, which first of its kind at NTU.

Got advanced training in Abroad:

- “Third ICTP-URSI College on Theoretical and Experimental Radio Propagation Physics” " organized by the International Centre for Theoretical Physics, *Trieste, Italy* during 1 – 26 Feb. 1993.
- “Workshop on Scientific aspects of Rural Communications in developing countries” " organized by the International Centre for Theoretical physics, *Trieste, Italy*, from 1 – 5 March 1993.
- Workshop on Physics of mesosphere-Stratosphere-Troposphere interactions with special emphasis on MST Radar Techniques, Organised by the International Centre for Theoretical Physics, *Trieste, Italy*, from 13 – 24 November 2000.

International conferences:

1. Participated in the “Progress in the Electromagnetics Research Symposium (PIERS 1997), held at *City University of Hong Kong, Hong Kong* during 6-9 January 1997.
2. Participated in ‘Millennium Conference on Antennas & Propagation (AP-2000)’ held in *Davos, Switzerland*, during 9 – 14 April, 2000.
3. Participated in ‘Asia – Pacific Radio Science Conference (AP-RASC’01) held in *Tokyo University, Japan*, 1-4 August, 2001.
4. 4th International conference on Information and Communications Security, ICICS, 9-12 December 2002, Singapore.
5. International convention on “Spatial Data infrastructure and its role in disaster Management”, Chennai, 24-26 October 2005, Sponsored by IFIFC.
6. International convention of “Amateur Radio Operators – HAMFEST-06” April 18-20, 2006, Port Blair, Andaman & Nicobar Islands.

Details of the previous or present employment held, if any, in chronological order:

30 Years as Assistant Professor, Associate Professor and Professor. Taught subjects like Atmospheric Science, communication electronics, Digital and mobile communications, Atmospheric Instrumentation, Atmospheric Dynamics.

Details of Research / Professional Experience:

Research Work carried out:

During the Ph.D work, extensive studies were carried out on Radio climatology over Southern India for Radio wave propagation and developed a monostatic SODAR with the help of NPL, New Delhi and studied the PBL characteristics and correlated with radio propagation and fading of the signals. A similar SODAR was installed by me in **Antarctica** during 1990-91.

After Ph.D, studies were conducted on Atmospheric sciences using Indian MST Radar especially on turbulence parameters and gravity waves and also on mobile and Radio communications. Extensive studies on “Digital Video Broadcasting” were carried out for two years in Nanyang Technological University, Singapore during 2012-2014.

Involved in developing research activities in the area of Atmospheric sciences by nurturing the UGC-SVU Centre for MST Radar applications, which is now recognized as a

Major National Facility at SV University and an Advanced Centre for Atmospheric Sciences by ISRO. An M.Tech program on “Space Technology” was carried out with the help of ISRO.

Many students are working jointly at SVU in collaboration with NARL. The state of the art “Meteor Radar” facility was established for the first time in the Indian Universities. A Lidar & HPC facilities were also augmented to strengthen the research activities.

Published more than 150 research publications and guided 41 students for Ph.D. Several research projects were completed and many are ongoing.

Through the UGC-SVU centre, facilities were extended to user scientists from different Universities across the country. Several workshops/ winter schools were conducted to promote atmospheric sciences research. NSSS-2012 was organized successfully and 104th Indian Science Congress organized during 3-7 January 2017, witnessed the organizational capability of me as an Organizing secretary.

Research Guidance and Supervision

Ph.D. Guidance: 48

- Guide Awarded :30
- Co Guide :18