

Brief Profile

- 1. Full Name** : Dr. K. Venkatacharya Swamy
- 2. Residential Address** : 55-8/1-4
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New CTRI Road, Rajahmundry – 533105.
A. P., India.
- 3. Designation** : Associate Professor
- 4. Office Address** : Dept. of Geosciences
Adikavi Nannaya University
Rajaraja Narendra Nagar, NH-16
Rajahmundry – 533296. (AP)
- 5. Nationality** : Indian

6. Qualifications:

(i) Doctor of Philosophy

- University : Andhra University, Visakhapatnam – 530 003 (AP)
Specialisation : Geophysics
Date of Award : April, 2000.
Title : Inversion of gravity and magnetic anomalies of three-dimensional density interfaces, vertical polygonal cylinders and faults.
Name of the Guide : Prof. I. V. Radhakrishna Murthy.

*The thesis was adjudicated as **best thesis for the year 2000** by Andhra University and been awarded **Sri. V. B. V. Reddy research gold medal**.*

(ii) Master of Science

- Degree : M. Sc. (Tech.)
University : Andhra University, Visakhapatnam – 530 003 (AP).
Specialisation : Geophysics
Year of Pass : 1993
Class/Division : First Class

7. Professional Appointments

Sl. No	Position held	Institution/University	Period
1.	Junior Research Fellow (University Grants Commission)	Department of Geophysics Andhra University Visakhapatnam – 530 003.	July 1994 – June 1996
2.	Senior Research Fellow (University Grants Commission)	Department of Geophysics Andhra University Visakhapatnam – 530 003.	July 1996 – April 1999
3.	Post-Doctoral Fellow	Department of Geophysics Andhra University Visakhapatnam – 530 003.	May 2000 – July 2001
4.	Young Scientist (Dept. of Science and Technology)	Department of Geophysics Andhra University Visakhapatnam – 530 003.	Aug. 2001 – July 2004

5.	Scientist C	Legal Continental Shelf Program National Centre for Antarctic and Ocean Research Head Land Sada Vasco-da-Gama Goa – 403 804, India	Dec. 2004 – Oct. 2005
6.	Teaching Associate	Department of Geophysics Andhra University Visakhapatnam – 530 003.	Nov. 2005 – May 2007
7.	Assistant Professor	Dept. Of Geology Adikavi Nannaya University Rajahmundry – 533105. (AP)	19 th May 2007 – 18 th May 2019
8.	Associate Professor	Dept. of Geoscience Adikavi Nannaya University Rajahmundry – 533105. (AP)	19 th May 2019 – Till date
9.	Special Invitee, Joint Board of Studies	Adikavi Nannaya University, Rajahmundry	2010-11
10.	University representative, Academic Council	Sir C. R. Reddy College (A), Eluru, West Godavari District	2013-15
11.	Member, UG Board of studies in Foundation Course II	Sri. Y. N. M. College (A), Narsapur, West Godavari District.	2013-15
12.	University representative, Academic Council	D. N. R. (A) College, Bhimavaram, West Godavari District.	2013-15
13.	University representative, Academic Council	Sri. Y. N. M. College (A), Narsapur, West Godavari District.	2015-17
14.	Member, PG Board of studies in Geology and Applied Geology.	Adikavi Nannaya University, Rajahmundry	2016-till date
15.	Member, PG Board of studies in Geophysics.	Adikavi Nannaya University, Rajahmundry	2017- till date
16.	Member, UG Board of studies in Geology	Govt. College (A), Rajahmundry	2018 onwards
17.	University representative, Academic Council	Govt. College (A), Rajahmundry	2018 onwards
18.	University representative, Academic Council	A.S. D. Govt. Women's College (A), Kakinada	
19.	University representative, Academic Council	Ch. S. D. St. Theresa's College for Women (A), Eluru, W. G. Dt.	18.2.2020 to 17.2.2022
20.	University representative, Academic Council	P. R. Govt. College (A), Kakinada	9.6.2020 to 8.6.2022
21.	Member, NAAC core committee	Adikavi Nannaya University, Rajahmundry	16.6.2020 to till date

8. Administrative appointments

Sl. No.	Position held	Institution/University	Period
1	Course Co-ordinator M. Sc. Geoinformatics	Adikavi Nannaya University Rajahmundry – 533296	2007-2009
2	Course Co-ordinator – M. S. Petroleum Exploration (5 Year Integrated)	Adikavi Nannaya University Rajahmundry – 533296	2008-2009
3	Liaison Officer	Adikavi Nannaya University Rajahmundry – 533296	2010-2013

4	Coordinator, Statistics Cell	Adikavi Nannaya University Rajahmundry – 533296	2010-2012
5.	Nodal Officer, All India Survey on Higher Education	Adikavi Nannaya University Rajahmundry – 533296	2011-2013 & 2016- till date
6.	Director, IQAC	Adikavi Nannaya University Rajahmundry – 533296	17.9.2016 to 16.6.2020
7.	Asst. Director, Directorate of Admissions	Adikavi Nannaya University Rajahmundry – 533296	2016-2019
8	Head, Dept. of Geology	Adikavi Nannaya University Rajahmundry – 533296	2015-2018
9.	Associate Director, Directorate of Admissions	Adikavi Nannaya University Rajahmundry – 533296	2019-till date
10.	Executive Coordinator, IQAC and NAAC	Adikavi Nannaya University, Rajahmundry – 533296	16.6.2020 to till date

9. Experience

Teaching: 20 Yrs at PG level;

Post Doctoral Research: 20 Yrs

10. Research projects handled

(As Principal Investigator)

1. “Magnetic surveys across Eastern Ghat Mobile Belt and Prakasam Alkaline Province in Prakasam and Guntur districts, Andhra Pradesh”. (**Young Scientists Scheme**)

Funding Agency : Dept. of Science and Technology, New Delhi

Total Grant : Rs.9.25 Lakhs

Period : 3 Years (2001-2004).

2. Web-enabled Geographical Information System for e-governance of Rajahmundry Municipal Corporation: An open source GIS, remote sensing and GPS approach.

Funding Agency : Dept. of Science and Technology, New Delhi & Rajahmundry
Municipal Corporation, AP.

(No. NRDMS/11/1626/2011(G) dt, 28.9.2011)

Total Grant : Rs. 23, 61, 000/-

Period : 2 1/2 Years (2011-2014).

(As Co-Principal Investigator)

3. “Magnetotelluric studies in Eastern Ghat Mobile Belt and the adjoining Dharwar/Bastar Cratons”.

Funding Agency : Dept. of Science and Technology, New Delhi

Total Grant : Rs. 5, 01, 062/-

Period : 2 Years (2002-2004).

(As a Visiting Teacher Fellow)

4. Marine Geophysical Studies of the Central Eastern Margin of India.

Sponsored by the Indian Academy of Sciences

Period: Three months (May – July 2003).

5. Basement structure and tectonics of parts of EGMB in Krishna and Guntur districts of Andhra Pradesh through magnetic and remote sensing techniques.

Funding Agency : Ministry of Earth Sciences, Govt. Of India
(No.MoES/P.O.(Seismo)/1(247)2014, dt.18.01.2017.
Total Grant : Rs.34,51,600/-
Period : 3 Years (2017-2020).

11. Memberships of professional bodies

1. Life member of the Indian Geophysical Union.
2. Life member of the Indian Society of Applied Geochemistry.
3. Life member of India Society of Remote Sensing (L-3421).
4. Life member of Indian Society of Geomatics (ISG-L-1311).
5. Fellow of Geological Society of India.
6. Life Associate Fellow of Andhra Pradesh Akademi of Sciences.
7. Member of European Association of Geoscientists and Engineers.
8. Member, Executive Council, Indian Society of Applied Geochemists.

12. No. of Ph. Ds guided

Awarded: 3; Submitted: 0; Under progress: 3

13. List of Publications

1. Gravity anomalies of a vertical cylinder of polygonal cross-section and their inversion, 1996, I. V. Radhakrishna Murthy and **K. V. Swamy**, *Computers & Geosciences*, V.22, No.6, pp. 625-630.
2. Geophysical surveys at the Buddhist site on Bavikonda, Visakhapatnam district, AP, 1998, E. V. Gangadharam, I. V. Radhakrishna Murthy, P. Rama Rao and **K. V. Swamy**, *Visakha Science Journal*, V.2, No.2, pp.103-108.
3. Intercomponent transformation of magnetic anomalies by equivalent source technique, 1999, I. V. Radhakrishna Murthy and **K. V. Swamy**, *AEG Journal of Geophysics*, V.2, no.1, pp.37-44.
4. Inversion of gravity anomalies of three-dimensional density interfaces, 1999, P. Rama Rao, **K. V. Swamy** and I. V. Radhakrishna Murthy, *Computers & Geosciences*, V.25, pp.887-896.
5. Use and Abuse of Werner deconvolution technique, 2000, I. V. Radhakrishna Murthy, **K. V. Swamy** and P. Rama Rao, *Journal of Indian Geophysical Union*, Vol.4, No.2, pp.97-102.
6. Automatic inversion of magnetic anomalies of faults, 2001, I. V. Radhakrishna Murthy, **K. V. Swamy** and S. Jagannadha Rao, *Computers & Geosciences*, V.27, pp.315-325.
7. Deep Crustal structure across Krishna-Godavari basin from gravity data, 2005, L. V. Ramana, **K. V. Swamy** and C. Visweswara Rao, *Jour. Indian Geophysical Union*, V.9, No.4, pp.249-254.
8. Magnetic anomalies and basement structure of the Eastern Ghat Mobile Belt and Southwest Krishna Basin in parts of Prakasam district, Andhra Pradesh, 2008, **K. V.**

- Swamy**, P. Rama Rao and I. V. Radhakrishna Murthy, *Current Science*, V.94, No.2, pp.262-268.
9. Magnetic anomalies of off shore Krishna-Godavari basin, eastern continental margin of India, 2009, **K V Swamy**, I V Radhakrishna Murthy, K S Krishna, K S R Murthy, A S Subrahmanyam and M M Malleswara Rao, *Journal of Earth System Sciences*, V.118, No.4, pp.405-412.
 10. FOSSGIS Study on Extending Corporation Limits of Rajahmundry in East Godavari District of Andhra Pradesh, India, 2013, D.V.S. Sarma, M. Ajay Kumar, **K.V. Swamy** and V. Ravi Kumar, *Indian Cartographer*, V.33, pp.169-173.
 11. Basement configuration of the KG offshore basin from magnetic anomalies, April. 2016, V. Subrahmanyam, **K. V. Swamy** and Neetha Raj, *Journal of Earth System Sciences*, V. 125, No. 3, pp. 663-668.
 12. A web GIS tool for rural development: A case study, 2016, O. Srinivas, D. V. S. Sarma, P. Venkateswara Rao and **K. V. Swamy**, *International Journal of Engineering and Technical Research*, Vol.5, No.3, pp.44-47.
 13. Gravity anomalies and basement structure below Deccan traps in Gondwana basins of Eastern Maharashtra, India, **K. V. Swamy**, Neetha Raj, S. K. G. Krishnamacharyulu and I. V. Radhakrishna Murthy, January 2017, *J. Ind. Geophy. Union*, Vol. 21(1), pp.17-24.
 14. Development of land and water resource action plan using remote sensing and GIS – A case study of Zaheerabad, Medak District, Telangana, India, July 2017, S. Jagadeesh Babu and **K. V. Swamy**, *International Journal of Scientific Research*, vol.6, No.7, pp.27-28.
 15. An analysis of land use/land cover mapping using remote sensing and GIS techniques – A case study, August 2017, S. Jagadeesh Babu and **K. V. Swamy**, *Indian Journal of Applied Research*, Vol.7, No.8, pp.10-11.
 16. Quantitative assessment of tectonic activity in northern Sourashtra, western India, 2019, Raj Sunil Kandregula, Girish Ch. Kothiyari, **K. V. Swamy** and Suman Rawat, *J. Ind. Geophy. Union*, Vol. 23(6), pp.542-558.
 17. Palaeoseismic investigations along the Kachchh Mainland Fault: A comprehensive review and new insights of the past earthquakes in the Kachchh basin, Western India, 2020, Girish Ch Kothiyari, Raj Sunil Kandregula, Bhadur Singh Kotlia, Abhishek Lakhote, **K. V. Swamy**, Vamdev Pathak, Gaurav Chauhan and M. G. Thakkar, *Quaternary International*, <https://doi.org/10-1016/j.quaint.2020.08.042>.
 18. Evaluating the seismic hazard in the Kachchh Region, Western India using the river gradient length anomaly technique, September-2020, Raj Sunil Kandregula, Girish Ch Kothiyari, Gaurav Chauhan, Vasu Pancholi, **K. V. Swamy**, Abhishek Lakhote, Sneha Mishra and M. G. Thakkar, *Journal of Earth System Science*, V. 129, 193 (2020) <https://doi.org/10.1007/s12040-020-01449-2>.
 19. Quaternary landform development in the central segment of tectonically active Kachchh mainland fault zone, Western India, November 2020, Girish Ch Kothiyari, Raj Sunil Kandregula, Gaurav Chauhan, Bhawanisingh G Desai, Ajay Kumar Taloor, Vamdev Pathak, **K.V. Swamy**, Sneha Mishra and M. G. Thakkar, *Quaternary Science Advances*, <https://doi.org/10.1016/j.qsa.2020.100018>.
 20. Estimation of Regional Surface Deformation post the 2001 Bhuj Earthquake in the Kachchh Region, Western India Using RADAR Interferometry, 2021. *Raj Suni Kandregula*, Kothiyari, G.C., **Swamy, K.V.**, Taloor, A.K., Lakhote, A., Chauhan, G., Thakkar, M.G., Pathak, V., Malik, K. *Geocarto International*, doi.org/10.1080/10106049.2021.1899299.

21. Geodetic characterization of active Katrol Hill Fault (KHF) of Central Mainland Kachchh, western India, 2022, Donupudi Suribabu, Rakesh K Dumka, Joydeep Paikray, Girish Ch Kothyari, Mahesh Thakkar, **K V Swamy**, Ajay K Taloor, Sandip Prajapati, *Geodesy and Geodynamics*, Vol.13, pp.247-253.

14. Papers published in seminar proceedings

- (i) Urban crime mapping and analysis using open source GIS tools: A case study from Rajahmundry municipal area, Andhra Pradesh, India. **Proceedings of FOSS4G - India 2012: First National Conference on Open Source Geospatial Resources to Spearhead Development and Growth**, October 25-27, 2012, P.21 (<http://lsi.iiit.ac.in/foss4gindia>).
- (ii) Slums in Municipal Corporation of Rajahmundry with respect to public amenities: A preliminary study using Open source GIS tools. **Proceedings of FOSS4G - India 2012: First National Conference on Open Source Geospatial Resources to Spearhead Development and Growth**, October 25-27, 2012, P.23 (<http://lsi.iiit.ac.in/foss4gindia>).
- (iii) Degradation of water bodies due to rapid urbanisation – A case study of Ranga Reddy District, Telangana state using remote sensing and GIS techniques: **Proceedings of 4th international conference on Hydrology and Watershed Management-Ecosystem Resilience, rural and urban water requirements**, October 29th to November 1st, 2014, p.463-469.

15. Papers presented at Seminars/Workshops

- (i) “**Inversion of gravity anomalies of three-dimensional density interfaces**”, In the National Symposium on Oceanography and Coastal Zone Management held on 23rd and 24th April, 1997 organised by National Institute of Oceanography at Visakhapatnam.
- (ii) “**Automatic inversion of magnetic anomalies of faults**”, in the National seminar on geophysical education; Prospect and Retrospect held on 10-11 January, 2000 organised by the Dept. of Geophysics, Andhra University, Visakhapatnam.
- (iii) “**Magnetic anomalies and basement structure of EGMB around Ongole, Prakasam district, Andhra Pradesh**”, in the Annual convention of Indian Geophysical Union held at Chennai during 16-18 December, 2003.
- (iv) “**Magnetic anomalies of the Nizampatnam Bay over Eastern Continental margin of India: A supporting evidence for the theory of Volcanic emplacement of 85^o E Ridge**”, in the Annual convention of Indian Geophysical Union held at Chennai during 16-18 December, 2003.
- (v) “**Magnetotellurics – A plausible way to unravel the interaction between EGMB and adjacent Archean Cratons**”, in 17th International workshop on “Electromagnetic Induction in the Earth”, 18-23 Oct. 2004.
- (vi) “**Infrastructure of the Mesoproterozoic Mafic-Ultramafic plutons of Southern Prakasam Alkaline Province, Eastern Ghats Belt, India: Evidence from Magnetic Anomalies**” in the National Seminar on *Geochemistry And Geophysics of Earth Materials And Environment* organised by the School of Earth Sciences Swami Ramanand Teerth Marathwada University, Nanded, Maharashtra 431606, India during 28th – 29th January, 2011 and presented a paper entitled
- (vii) **Regional magnetic surveys for the structure and tectonics in parts of eastern ghat mobile belt (EGMB)** in the National Seminar on *Geochemistry And Geophysics of Earth Materials And Environment* organised by the School of Earth Sciences Swami Ramanand Teerth Marathwada University, Nanded, Maharashtra 431606, India during 28th – 29th January, 2011.
- (viii) **Development of multi-utility urban information systems using Remote Sensing and GIS: A case study for Rajahmundry Municipal Corporation., E.G. Dt., AP., India** in the National Conference on *Geosciences & Water Resources for sustainable*

- development* organised by the Department of Geophysics, Andhra University, Visakhapatnam -530003, India during 11-12 February, 2011.
- (ix) **Geographical Information System: Closed and Open** in the Short term course on Remote Sensing and GIS Applications, organised by Dept. of Geology and Dept. of Computer Science, Sri Venka-teswara University, Tirupathi during 23-26 March 2013.
 - (x) **Gravity anomalies and basement structure below Deccan traps in Gondwana basins of Eastern Maharashtra, India**, Annual convention of Indian Geophysical Union held at ISM Dhanbad, 5-8 November, 2016.
 - (xi) **Guest speaker** at Mission Eco NEXT-third National Training Program on Eco AIR: Developing Eco Educators, sponsored and organized by National Council for Science and Technology Communication, Dept. of Science and Technology, Govt. of India, New Delhi and Science City of Andhra Pradesh, Amaravathi, Govt. of Andhra Pradesh during August 26-30, 2019.
 - (xii) **Identification of flood prone areas and vulnerable transport segments using geospatial tools in Krishna river delta, Andhra Pradesh, India**, International conference on recent advances in civil engineering for sustainable development (RACESD-2021) organised on line by Department of civil engineering, Moulana Ajad National Institute of Technology, Bhopal (MP), India, February 13-14, 2021.

16. Professional recognition, awards and fellowships received

- (i) Junior Research Fellowship by University Grants Commission, India for the period 1994-1996.
- (ii) Senior Research Fellowship by University Grants Commission, India for the period 1996-1999.
- (iii) Sri. V. B. V. Reddy Research Gold Medal, Andhra University for the year 2000.
- (iv) Best thesis award for the year 2000, Andhra University, Visakhapatnam.
- (v) Young Scientist's Scheme Fellowship of the Dept. of Science and Technology, Ministry of Science and Technology, New Delhi for the period 2001-2004.
- (vi) Summer Research Fellowship of Indian Academy of Sciences, Bangalore for the year 2003.

17. Countries visited on academic pursuit/activities: NIL