

Dr. K. Jagadeesh M.Sc., Ph.D.

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- ❖ **Career Objective:** To dedicate myself to the field of teaching and motivate moral, social and ethical values in youngsters along with high caliber academics.
- ❖ **Personal Qualities:** Honesty, Cooperative, Disciplined, Principled, Innovative, Self-confident, Hard working, Team builder.
- ❖ **Current Position:** Working as an **Assistant Professor of Physics in Sri Vasavi Engineering College, Tadepalligudem, from July 2015 to till date.**

Academic Profile:

Name of the Course	Duration	Aggregate Marks	School/College	Board/University
Ph. D. (Atmospheric Physics)	2011-15	Awarded	Department of Physics	Andhra University
Post Graduation (M.Sc., Physics)	2008-10	79.3%	Department of Physics	Andhra University
Graduation B.Sc., (Maths. Physics. Chemistry)	2005-08	70%	BHSR & VLM Degree college, Devarapalli.	Andhra University
Intermediate (Maths. Physics. Chemistry)	2002-04	67.4%	Triveni Junior College, Jami, Jangareddygudem.	Board of Intermediate Education

Research field and focus:

Study of **Atmospheric Boundary Layer(ABL)** is a vital problem in current environmental research due to its importance in Atmospheric weather predictions, Energy budget of earth(solar incoming and outgoing radiation) , Boundary layer theory found application in aerodynamics, hydraulics, fluid mechanics, physical oceanography, numerical weather prediction, climate models and atmospheric science (*White et al. 2009*). The ABL thermodynamic fluxes, turbulence, friction velocities, and clouds are of great practical importance for ABL parameterization processes (*Van de Wiel et al., 2001*). In reality no climate model can succeed without the consideration of ABL processes. Because of the heterogeneity involved in the field of ABL with large spatial and temporal variability, reduction in uncertainties in ABL quantification is a challenging task in atmospheric sciences.

Thesis Title: Atmospheric Boundary Layer Studies over Eastern Indian Coast – A Case Study of Visakhapatnam**Thesis work and results:**

Thesis comprises results from seasonal variation in the characterization of ABL properties using suite of in-situ measurements and vertical distribution using SODAR, SONIC ANEMOMETER, PISHAROTY SONDES measurements over a coastal urban location and day to day variations over supposed clean maritime environment which are exceptionally sparse. Three dimensional winds and virtual temperature observed using sonic anemometers(25Hz) at two levels (10m & 18m) altitudes and Doppler Sodar observations are used to investigate the Coastal ABL over Visakhapatnam(17.7⁰N

83.10⁰E) during 2012-2013. Boundary layer dynamics at this location during winter is dominated by sea breeze circulation. Diurnal variations of sensible heat flux, Turbulent kinetic energy, Momentum flux are very significant and almost in phase and attain their peak magnitudes at 13:00 IST. Very sharp variations are shown in seasonal and monthly plots. Hence the study could be considered important and can contribute to the field of atmospheric studies.

Publications in Peer Reviewed Journals:

1. Satellite Derived Aerosol Optical Depth Climatology over Tropical Coastal Station Machilipatnam, India, A.S. Madhusudanacharyulu, K. Samatha, K. S. Kumar, **K. Jagadeesh**, S. Rani, International Letters of Chemistry, Physics and Astronomy, Vol 50, pp. 188-198, May. 2015.
2. Synthesis and Characterization of AG-CDS Nanostructures, **K. Jagadeesh**, Ch. Prasad, P. Sreenivasa Rao, D. L. Sastry, Subin Jose, K. Vijayababu, International Journal of Advances in Engineering and Technology, [(Accepted), the volume and page number will come].
3. General characteristics of Atmospheric Boundary Layer over Visakhapatnam, India: **K. Jagadeesh**, K. Niranjan, N.V.P. Kiran Kumar and K.Rajeev *communicated to Annales Geophysicae (under review)*.
4. Turbulent characteristics of Atmospheric Surface layer over Visakhapatnam, India: K. Niranjan **K. Jagadeesh**, N.V.P. Kiran Kumar and K.Rajeev *communicated to Atmospheric Environment (under review)*.
5. Thermal internal boundary layer characteristics using Sodar under synoptic condition regimes over Visakhapatnam, India: N.V.P. Kiran Kumar, **K. Jagadeesh** K. Niranjan, and K.Rajeev *communicated to Annales Geophysicae (under review)*.

Papers Presented In National/International Symposia:

1. Wintertime Surface boundary layer characteristics over the East coast of Peninsular India, **K.Jagadeesh**, K. Niranjana, N.V.P. Kiran Kumar and K.Rajeev *18th National Space Science Symposium, 2014, Dibrugarh, ASSAM (Poster)*.
2. Preliminary results from atmospheric measurements using Pisharoty sondes in a Pilot studies during W_ICARB campaign, **K.Jagadeesh**, B. Spandana, T. Anjana Devi and K. Niranjana, *17th National Space Science Symposium, 2012, Tirupathi (Poster)*.
3. K. Niranjana, **K. Jagadeesh**, N.V.P. Kiran Kumar and K. Rajeev, Surface layer characteristics over the east coast of Peninsular India, Proceedings of the ARFI, ICARB, RAWEX and NOBLE project review meeting, 8-9 January, 2014.

Participations:

- i. Participated in the international conference **ACCLINT** held at PRL, Ahmedabad, India, December 2011.
- ii. Participated in **16th National Space Science Symposium 2011** held at Rajkot, India.
- iii. Participated in National Symposium on Empowering Rural India through Space Technology (ISRS-2011) held at Bhopal, Nov-2011.
- iv. Participated in **17th National Space Science Symposium 2012** held at Tirupathi, India.
- v. Participated in **ISRO - NASA MODIS Workshop** held at Dehradun, India May 2012.
- vi. Participated in **SERB School** at S V University, Tirupathi, India June 2013.
- vii. Participated in **ICARB-W** on board of ORV Sagarkanya Cruise over Bay of Bengal, 27th December, 2012 to 30th January, 2013.

- viii. Participated in Workshop on ‘Climate Modelling: Simulations and Analysis Centre for Atmospheric Sciences, IIT Delhi 2013.
- ix. Participated in **18th National Space Science Symposium 2014** held at Dibrugarh, Assam, India
- x. Participated and presented a paper in the **Indian Aerosol Science and Technology Association, IASTA-2014** held at Mumbai during 11-13th November 2014.
- xi. Participated and presented a paper in the “**IGBP Symposium**” held at Bangalore on 7th April 2014.
- xii. Participated in National work shop on “GPS RO” Technique held at SRM University, Tamilnadu, India, March 2015.

MEMBERSHIP: Life time member in INDIAN SOCIETY OF REMOTE SENSING with membership no-L3670.

Attended to Solid State Physics Seminars/Workshops/Conferences:

- i. National Seminar on Recent Advances in Molecular Structures (NCMS-2012) 19-20th July 2012 at Chennai. Tamilnadu.
- ii. National Seminar on Nanotechnology and Consumer Products 10-11th August 2012 at Thanjavur, Tamilnadu, India.
- iii. International Conference on Recent trends in Nanostructured Materials and their Applications (ICRNM-2013) 19th – 20th December 2013 at Department of Physics, Osmania University, Hyderabad, India.
- iv. "**100th Indian Science congress**" 3rd-7th January 2013 at Calcutta University, Kolkata, India.
- v. National Conference on Emerging Materials, Devices and Technologies (EMDT-2014) 24th – 25th February 2014 at Department of Physics, Sri Venkateswara University, Tirupati, India
- vi. Participated in "**National seminar on Advanced Materials and their Applications**", Department of Physics, Osmania University, Hyderabad.

- vii. Participated in **2nd National Seminar on Computational Techniques for Engineering Applications** (NSCTEA-12) (8th-10th November 2014), Corporate group of Institutions, Hataikheda, Raisen Road, Bhopal-462 022 (M.P.).

Teaching Experience:

- i. Worked as an Asst. Prof. in Engineering Physics for One Academic Year [2010-2011] in RIET Engineering College, Rajahmundry, East Godavari (Dt), Andhra Pradesh, India
- ii. Undertaking classes for M.Sc. Physics and Space Physics students in Andhra University since last four years.
- iii. Undertaking practical lab classes for M.Sc. Physics and Space Physics students in Andhra University since last four years.
- iv. Working as a Asst. Prof. in Engineering Physics July **2015 to Till date**, in Sri Vasavi Engineering College, Tadepalligudem, West Godavari (Dt), Andhra Pradesh, India.

Scholarships:

- i. Joined as a JRF (Junior Research Fellow) in NOBLE (Network of Boundary Layer Experiments) Project sponsored by ISRO (Indian Space Research Organization) India in 2011.
- ii. Enhanced from JRF (Junior Research Fellow) to SRF (Senior Research Fellow) in 2013.

Project work in M.Sc (Physics)

- i. Synthesis and properties Nano [Nickel-Zinc ($\text{Ni}_{1-x}\text{Zn}_x\text{Fe}_2\text{so}_4$) $x = 0.1$ to 1] Ferrites

Computer Proficiency: PGDCA, MATLAB, ORIGIN, SURFER.

Personal Profile:

Name : K. Jagadeesh
Date of Birth : July 22nd 1986
Marital Status : Single
Mother's Name : K. Ganga Ratnam
Father's Name : K.Suryanarayana(Late)
Educational Status : M.Sc., Ph.D.
Languages Known : English, Telugu.
Hobbies : Organizing and participating in extracurricular activities,
listening to music, Reading books.

REFERENCE:

- 1) Prof K. Niranjan,
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<http://www.andhrauniversity.edu.in/andhrauniversity/Resume.php?var=E1101>

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Declaration:

I hereby declare that the information furnished above is true and authentic and I shall be an asset to my employer.

Date:
Place: Tadepalligudem



(K. Jagadeesh)
M.Sc., Ph.D.