




DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE Affiliated to JNTU Kakinada)

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FACULTY PRPOFILE

Name of the Faculty	N. Umakanth	
Designation	Assistant Professor	
Date of Joining	10-04-2021	
Nature of Association	Regular	
Email & Phone No	nandivadaumakanth@gmail.com & 8019909824	
Department	Electronics and Communication Engineering	
Educational Background	1. PhD from K L University 2. M.Tech from Andhra University, Visakhapatnam 3. B.Tech (ECE) from JNTU, Kakinada	
Areas of Specialization	Satellite communication and remote sensing	
Research Areas	Satellite communication and remote sensing, Digital Image Processing	
Experience	0 Years	

List of Publications (National and International Journals):

1. **Umakanth, N.**, Satyanarayana, G. C., Naveena, N., Srinivas, D., and Bhaskar Rao, V. D Statistical and dynamical based thunderstorm prediction over southeast India. Journal of earth system science, 2021, Article in Press. [Springer, Science Citation Index, Journal]
2. **Umakanth, N.**, Satyanarayana, G. C., Simon, B., Prashant Kumar and Rao, M. C Impact of convection and stability parameters on lightning activity over Andhra Pradesh, India. ACTA GEOPHYSICA, 2020, Article in Press. [Springer, Science Citation Index,Journal]
3. **Umakanth, N.**, Satyanarayana, G. C., Simon, B., Rao, M. C., M. TanoojKumar & Babu, N. R. Analysis of various thermodynamic instability parameters and their association with the rainfall during thunderstorm events over Anakapalle (Visakhapatnam district), India. ACTA GEOPHYSICA, 2020, Article in Press. [Springer, Science Citation Index,Journal]
4. **Umakanth, N.**, Satyanarayana, G. C., Simon, B., Rao, M. C., & Babu, N. R. Long-term analysis of thunderstorm-related parameters over Visakhapatnam and Machilipatnam, India. ACTA GEOPHYSICA, 2020, Article in Press. [Springer, Science Citation Index,Journal]

5. Satyanarayana, G. C., Naidu, CV, Bhaskar Rao, DV, **Umakanth, N.**, Naveena, N. Medium-range forecasts of extreme rainfall events during the Indian summer monsoon. *Mausam*, 71 (July 2020). 10. (2020).
6. **Umakanth, N.**, Satyanarayana, G. C., Simon, B., Rao, M. C., & Babu, N. R. (2020, May). Factors influencing lightning flashes and convective systems over Srilanka. In *AIP Conference Proceedings* (Vol. 2220, No. 1, p. 140062). AIP Publishing LLC. [Web of Science, Scopus Indexed Journal]
7. **Umakanth, N.**, Satyanarayana, G. C., Simon, B., Rao, M. C., & Babu, N. R. (2020, May). Analysis of lightning flashes over Bangladesh. In *AIP Conference Proceedings* (Vol. 2220, No. 1, p. 140041). AIP Publishing LLC. [Web of Science, Scopus Indexed Journal]
8. **Umakanth, N.**, Satyanarayana, G. C., Simon, B., Rao, M. C., & Babu, N. R. (2020, May). Climatological analysis of lightning flashes over Kerala. In *AIP Conference Proceedings* (Vol. 2220, No. 1, p. 140040). AIP Publishing LLC. [Web of Science, Scopus Indexed Journal]
9. **Umakanth, N.**, Satyanarayana, G. C., Simon, B., Rao, M. C., & Babu, N. R. Satellite based interpretation of stability parameters on convective systems over India and Srilanka. *Asian journal of atmospheric environment*, 2020, Article in Press. [Web of Science, Scopus Indexed Journal]
10. Naveena, N., Satyanarayana, G. C., Dharma Raju, A., Sivashankar rao, K., umakanth, N., Spatial and statistical characteristics of heat waves impacting India. *AIMS Environmental Science*, 8(2), 117-134, March (2021). [Web of Science, Scopus Indexed Journal]
11. G. Ch. Satyanarayana, **N. Umakanth**, K. S. Ramesh, S. M. Basha, N. Naveena, A. Dharma Raju and K. Siva Sankar "Periodicities of winter monsoon rainfall over Rayalaseema using Maximum Entropy Method" In *Solid state technology*, vol. 63, no. 2, 2020. [Scopus Indexed Journal]
12. **Umakanth, N.**, Satyanarayana, G. C., Simon, B., Rao, M. C., & Babu, N. R. (2020, May). A study of thunderstorm features over Srikakulam region on 26th April, 2020, In *Journal of Critical Reviews*. [Scopus Indexed Journal]
13. **Umakanth, N.**, Satyanarayana, G. C., Simon, B., Rao, M. C., & Babu, N. R. (2019, December). INFLUENCE OF CONVECTIVE WEATHER RELATED PARAMETERS ON RAINFALL OVER VIRAJPET REGION ON 26 APRIL 2013, In *Journal of Critical Reviews*. [Scopus Indexed Journal]
14. **Umakanth, N.**, Satyanarayana, G. Ch., Simon, B., Rao, M. C. and Babu, N. R. (2020). Influence of Pressure Level based Parameters on Lightning and Rainfall over Nepal. *International Journal on Emerging Technologies*, 11(2): 571-576. [Scopus Indexed Journal]
15. **Umakanth, N.**, Satyanarayana, G. Ch., Simon, B., Rao, M. C., Babu, N. R., Nveen. R, Satyanarayana. T. Manikya Rao. Gand Seshu Kumar. M (2020). Severe Thunderstorm Event over Hindol Region on 22nd April, 2012. *Test Engineering & Management*, 83:917-922. [Scopus Indexed Journal].
16. **Umakanth, N.**, Satyanarayana, G. Ch., Simon, B., Rao, M. C., Babu, N. R., and Satyanarayana. T. (2019). Impact of Atmospheric Stability Indices on Convective Systems Over India and Srilanka. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(4), 3142 - 3146. [Scopus Indexed Journal]
17. **Umakanth, N.**, Satyanarayana, G. Ch., Ch. Lakshmi Harika, Ch. Shweta, N. Akhil Chowdary. (2019). Satellite and AWS Based Scrutiny of Heat Wave over A.P. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(4), 4719 -4722. [Scopus Indexed Journal]
18. **Umakanth, N.**, Satyanarayana, G. Ch., D. Puneet Kumar, L. Ram Gopal, K. Kranthi Mahesh. (2019). Thunderstorms over A.P using INSAT- 3D Satellite Data. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(4), 4591 -4594. [Scopus Indexed Journal]
19. **Umakanth, N.**, Satyanarayana, G. Ch., I. V. S. S. K. Kiran, V. Kartheek Sai, D. Mercy. (2019). ANN and ARMA based thunderstorm prediction over Andhra Pradesh using INSAT 3D

Satellite. International Journal of Recent Technology and Engineering (IJRTE), 8(4), 4723 -4726. [Scopus Indexed Journal]

20. **UmaKanth, N.**, Satyanarayana, G. C., Simon, B., & Rao, M. C. (2019). Some Climatological Aspects of Convective Systems at Five Major Cities of West Bengal, India. *Earth Science India*, 12(2). [Google Scholar Indexed Journal]
21. **UmaKanth, N.**, Satyanarayana, G. C., & Rao, D. B. (2019) Analysis and Prediction of Thunderstorms over Andhra Pradesh using INSAT 3D and MODIS Satellite Data. Vayumandal, Journal. [Google Scholar Indexed Journal]
22. Rao, M. C., R. V. S. S. N. Ravikumar, M. Seshu Kumar, **N. Umakanth**, SkShahenoorBasha, and B. RanjitKumar. "Effect of ZrO₂ nanofiller on ionic conductivity studies of PVP- CH₃COONa. 3H₂O polymer electrolyte films." In *AIP Conference Proceedings*, vol. 1992, no. 1, p. 030011. AIP Publishing LLC, 2018.

National/International Conferences ((National and International):

1. I attended a School on **Computational Meteorology** sponsored by **Science and Engineering Research Board, Govt.of.India** which was held at K L university during October 23rd – November 15th 2017.
2. I attended a SMART training programme on INSAT – 3DR satellite products which was held at **SAC, ISRO Ahmedabad Bhopal campus** during February 14th – February 17th 2017.
3. I attended a training programme on Monsoon School on **Urban Floods** which was held at **IISC Bangalore** during January 02nd – 07th July 2018.
4. I attended an training programme on **Recent Advances in Observations and Data Assimilation Techniques for Severe Weather Forecasting** Which was held at **SV university** during March 23rd – March 24th 2017.
5. **N. Umakanth**, G. Ch. Satyanarayana, D. V. Bhaskar Rao and L Malleswara Rao "Analysis and Prediction of Thunderstorms over Andhra Pradesh" TROPMET-2019 to be held at AU, Visakhapatnam, on December 11-14, 2019.
6. G. Ch. Satyanarayana, N. Naveena, **N. Umakanth**, D. V. Bhaskar Rao and L. Malleswra Rao "Extreme Rainfall events over the India during Monsoon - 2018" Annual Monsoon-20018 workshop and Prof. D. R. Sikka Memorial National Symposium on role of weather & climate observations and forecasting on increasing agricultural productivity & risk management organized by Indian meteorological society, Pune chapter, Pune on March 28-30, 2019.
7. **N. Umakanth**, G. Ch. Satyanarayana, N. Naveena and D. V. Rao. "Stability Indices Based Thunderstorm Prediction Over A.P Using INSAT- 3D & 3DR Data" International Conference on Thunderstrm& Lighting in Tropics to be held at Bhubaneswar, Odisha on 17-19 January 2019.
8. G. Ch. Satyanarayana, N. Naveena, **N. Umakanth**, D. Srinivas and D. V. Bhaskar Rao "Heat waves over India during the 20th and 21st century" TROPMET-2018 to be held at BHU, Varanasion on October 24-27, 2018.
9. N. Naveena, G. Ch. Satyanarayana, **N. Umakanth** and D. V. Bhaskar Rao "Frequencies of heat waves over India in the global warming era" TROPMET-2018 to be held at BHU, Varanasion on October 24-27, 2018.
10. R. H. Lucy Supriya, G. Ch. Satyanarayana, D. V. Bhaskar Rao, **N. Umakanth** and N. Naveena "Changes in the northeast monsoon rainfall over South Peninsular India in the recent three decades" TROPMET-2018 to be held at BHU, Varanasion on October 24-27, 2018.
11. **N. Umakanth**, G. Ch. Satyanarayana, N. Naveena and D. V. Rao. " Stability Indices Based Thunderstorm Prediction over Andhra Pradesh " in FIGA 2nd Triennial

Congress On Geosciences For Sustainable Development Goals held at CSIR NGRI, Hyderabad, Telangana on 13-16 October 2019.

12. I attended an workshop on Thunderstorm and lightning: Prediction, Detection & Awareness which was organized by **APSDMA** held at vijayawada, during December 18th – December 19th 2019.
13. **N. Umakanth**, G. Ch. Satyanarayana, D. V. Bhaskar Rao " Mesoscale convective systems over India using Satellite Data" TROPMET-2016 to be held at SOA University, Bhubaneswar, on December 18-21, 2016.
14. **N. Umakanth**, G. Ch. Satyanarayana, N. Naveena and D. V. Bhaskar Rao " Power Spectrum Analysis of Pre-monsoon Season Rainfall over Andhra Pradesh and Telangana" at Conference on advances in applied sciences and mathematics (NCASM-2020) to be held at Chitkara university, Punjab, on September 24-25, 2020.
15. **N. Umakanth**, G. Ch. Satyanarayana, D. V. Bhaskar Rao and L Malleswara Rao " Prediction of thunderstorms over southeast India using empirical methods" TROPMET-2020 to be held at NESAC, Mizoram, on December 11-14, 2019.
16. **N. Umakanth**, G. Ch. Satyanarayana, M. C. Rao and N. R. Babu " Factors influencing lightning flashes and convective systems over Srilanka" **International Conference on condensed matter and applied physics (ICC2019)** to be held at Govt. Engineering College, Bikaner, Rajasthan, on October 14-15, 2019.

Achievements / Awards etc.,

1. I was awarded CSIR SRF fellowship during 2018-2020.
2. I was awarded Gold Medal during my M.Tech study (2014 – 2016)
3. I was a NCC C Certificate holder.

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