



# NEWSLETTER

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## Geohorizon'23: A Three-Day Journey of Insight and Discovery

**8th - 10th May, 2023**

Society of Geoinformatics Engineers conducted their national symposium - Geohorizon from May 8 to May 10. Students from regional campus of Anna University had participated in the events and workshops along with the students of Anna University - main campus.

Marking the inauguration of Geohorizon, Dr. S. Jayalakshmi, President, SGE honoured the dignitaries - Dr. K. P. Jaya, Professor and Head, Civil Engineering, Dr. D. Thirumalaivasan, Professor and Director, IRS and the chief guest with her energetic inspiring speech. Following the inauguration, events and workshops were conducted. WelcomeTech's workshop LandXplorer covered the basic introduction of DGPS technologies and highlighted the merits and demerits.

On the second day, Trimble conducted a workshop where they explained their remarkable works in the geospatial applications. On the third day, GEO CONNECT was conducted where the alumni from all over the world had participated and interacted with the students of Institute of Remote Sensing. Following the interactive event, valediction ceremony was conducted in the afternoon where the dignitaries distributed prizes to the winners and runners of the events conducted on the first and second day.

Participants left the events and workshops equipped with new skills, knowledge, and potentially valuable professional connections. Overall, Geohorizon aims to inspire, educate, and drive forward the application of geospatial technologies to solve real-world problems innovatively.



## SOCIETY MEMBERSHIPS

- Dr. R. Murugasan, Professor, IRS has become a life member in Indian Society of Geomatics (ISG).
- Dr. S. Jayalakshmi renewed her membership in IEEE Madras Chapter.
- Dr. R. Kanmani Shanmuga Priya renewed her membership in ISRS Society.

## NEW PROJECTS

Craters in Mare - Highland boundary and their role in understanding the evolution of Moon.

- Principle Investigator: Dr. R. Kanmani Shanmuga Priya, Assistant Professor, IRS.

## Integrating ML with Hyperspectral Remote Sensing

Machine learning (ML) has revolutionized hyperspectral data processing, enabling efficient extraction of valuable information from complex datasets. Hyperspectral imaging generates vast amounts of data with hundreds of spectral bands, posing challenges in classification, feature extraction, and anomaly detection. ML techniques, particularly deep learning models like Convolutional Neural Networks (CNNs) and Support Vector Machines (SVMs), have proven effective in handling the high dimensionality and spectral-spatial characteristics of hyperspectral data. These approaches enhance accuracy in tasks such as land cover classification, mineral mapping, and vegetation monitoring.

Additionally, ML algorithms can be integrated with traditional methods to improve processing speed and robustness, making them indispensable tools in advancing hyperspectral remote sensing applications across various fields.

## Industrial Visit to French Institute of Pondicherry

**27th March, 2023**

Students of 4th semester went to the French Institute of Pondicherry on March 27th, accompanied by Dr. K. Srinivasa Raju, Professor, Institute of Remote Sensing and Mrs. M. Navamuniyammal, Assistant Professor, Institute of Remote Sensing.

Dr. G. Muthusankar from IFP, welcomed the students and emphasized the historical importance of the Institute. Dr. Julien Andrew and Dr. Ganesh explained the research projects done by IFP. Their researches were based on Indology, Ecology and Social sciences using Satellite data and GIS from transvers topics of forest, coast, water and heritage.



