

## From the Editor's Desk



Dear readers,

Wish you all a very happy days ahead.

Good technical papers always provide input to think something new for the quest of future oil & gas.

This time it was decided to publish six very good papers, many of which presented in last conference including best oral and poster papers. Technical content of these papers are high, all of which are dealing with diversified topics of interest like, Multi-component seismic, Sub basalt imaging, Mud volcano concept, Offset vector tile technology, Euler deconvolution in potential field data etc. There will be definitely something new to learn from each of these papers in this issue.

Multi-component seismic, though not fully matured as yet, gaining its momentum and effectiveness in the industry very fast. In the paper “Enhancing gas field discovery by multicomponent imaging and joint inversion”, Xiao-gui Miao et al. Of CGG Veritas have shown how effectively an objective oriented and situation driven processing workflow has brought out very acceptable data quality in spite of complex near surface geology in Sulige gas field of China. The PP/PS data processed by this unique workflow resulted in meaningful joint inversion output validating 81% of wells in the area reducing the drilling risk considerably.

Dr. Ian Frederick Jones' paper “Offset vector tile anisotropic tomography and PreSDM of the Hild OBC” describes an innovative approach of model building and 3D PreSDM on P-wave data from a 3D OBC survey using offset vector tile (OVT) processing. In conventional processing, effects due to azimuthal variation are practically ignored. By introducing azimuthal classes in sorting along with offset, the azimuthal dimension of the data volume is preserved which resulted in improved migrated image. Azimuthal variation of velocity, thus derived, is an invaluable piece of information for identification of fracture direction. This technique also offers the possibility of enhanced resolution of overburden heterogeneity and better imaging of deeper targets.

Euler's homogeneity relation has attracted sporadic interest from geophysicists over the years. Euler deconvolution of both profile and gridded magnetic data has found wide application. However, application to gravity is fewer. In the paper “Application of Euler Deconvolution of Gravity and Magnetic data for Basement Depth Estimation in Mizoram Area”, G. K. Ghosh et al. have rightly chosen to apply this technique on gravity and magnetic data as it is a viable alternative in this particular case where proper seismic data acquisition is difficult due to logistic problem and complex terrain.

The paper “Flow unit characterization in a Fluvial Sedimentary Environment from High Resolution Image Facies Analysis” by Somnath Kar et al. Introduces an innovative methodology in Kharsang field for identifying the best reservoirs in terms of its flowing capacity by means of borehole images, dips, core and wireline open logs. This is otherwise a very challenging task for Miocene clastic sediments in this field of North East India. This is an inter disciplinary methodology to identify sand dispersal pattern and establish reservoir quality of sand along with their flowing capacity.

Pinaki Basu et al. in their paper “Mud volcanoes in deep water of Andaman Forearc Basin” have made an attempt to find out the role of Mud Volcano in petroleum systems of Andaman Forearc basin given the fact that they are often associated with petroleum seeps and has an intimate relationship with the

petroleum reservoirs in sedimentary basins. A model has also been proposed to explain their evolution with this basin.

“Modern Sub-Basalt Seismic Imaging-Deepwater Realm Offshore Southwest India” by Roberto Fainstein et al. is a Sub-Basalt seismic imaging case history. The DISCover technology is applied in the data acquisition of Kerala Konkan Basin which consisted of an Over-Under seismic acquisition technique. This processing sequence consists of mixing the band width of upper and lower cable followed by other modern processing steps including isotropic Kirchhoff Migration, Demultiple and amplitude inverse Q adjustment etc. This modern technique reveals many distinct characteristics within Tertiary and Sub-Basalt Mesozoic sections.

Besides the technical papers we also present several news items and conference pictures with update of various technical activities of the society.

  
(Shyam Mohan)