

# SPG-Jorhat Chapter Organises SEG Honorary Lecture on 'Passive Seismic Tomography'

Society of Petroleum Geophysicists, Jorhat Chapter conducted a lecture on **“Passive Seismic Tomography (PST), QC and application of PST-derived velocity for seismic imaging”** by SEG honorary lecturer Dr. JVSSN Murty at Conference hall, LUIT Bhawan, ONGC, Jorhat on 12th May, 2017.

Session started with brief introduction about the objective of the program by President SPG Jorhat Chapter, Shri S.K. Sharma, GM (GP). In his welcome address he told that this program was an initiative for Knowledge Sharing. He welcomed Dr. J.V.S.S.N. Murty and he recalled and appreciated the contribution of Dr. J.V.S.S.N. Murty in the field of Processing and Programming in ONGC.

Shri M. Ayyadurai, ED-Basin Manager, A&AA basin, Patron SPG India, Jorhat chapter, in his keynote address stated that it is a wonderful day for G&G executives especially Geophysicists to hear from one of the domain expert. He communicated to the house that Dr. Murty developed many software for the benefit of organisation. He indicated that Dr. Murty is contributing a lot to ONGC even after his superannuation. He advised the audience to make the lecture more interactive and extract as much as possible information from the speaker. He also thanked SPG, Jorhat Chapter for arranging such a nice lecture.

During his lecture Dr. J.V.S.S.N. Murty, explained that Passive Seismic Tomography (PST) method uses both P-wave and S-wave travel times from naturally occurring low-intensity earthquakes recorded over a period of time. He stated that due to low cost and relative ease in operation, PST has made inroads into hydrocarbon exploration, especially in difficult terrains, by inferring structural and lithological information from the  $V_p$  and  $V_p/V_s$  volumes as well as incorporating the velocity models in seismic imaging projects in areas of poor quality seismic data where determining the initial velocity is difficult. He specified that the success of PST depends on the natural seismicity in the area and sufficiency of data recorded for estimating depths of the hypocentres and velocity fields using tomographic inversion. He also exhibited the results of PST survey, earlier carried out in of Cachar Fold Belt area.

In the feedback session, it was perceived that the knowledge imparted through presentation and deliberations in the session were of great importance. The participants were very keen and interactive throughout the program.

At the end, the meeting was concluded with a vote of thanks by Shri Chakradhar Rao Basa, Treasurer of SPG Jorhat Chapter.



Shri M. Ayyadurai, ED-Basin Manager A&AA Basin, Shri S.K. Sharma, President SPG, NE Chapter and other senior officers during the presentation.



Dr. JVSSN Murty and participants during the lecture