

Application of Compound Specific Isotopic Analysis to Fine tune Oil-Oil, Oil-Source Correlations in KG Basin, India

R. K. Saxena, A. Raina, H. C. Pandey, A. K. Bhatnagar, T. Gaba, and H. Singh
saxenarajk_1@yahoo.com

The compound specific stable carbon isotopic analysis (CSIA) is a state-of-the-art geochemical technique for finer oil-oil and oil-source correlations. There is a great variability in the isotope composition of the sedimentary lipids and it has been suggested that compound specific isotopic data could improve source characterization of oils. Krishna-Godavari Basin is a unique and lucrative petroliferous basin of India with enormous hydrocarbon generating potential, both on-land and offshore with occurrence of oils in different reservoir ages varying from Cretaceous to Pliocene. These reservoirs have been charged at different maturity levels of corresponding sources within different stratigraphic sequences.