

Report on Zoom Global Conference on “Provenance analysis of sediments” January 9-10, 2021, Beijing, China

Dear SEPM MEMBERS, as SEPM Ambassador for Italy, I am pleased to present a short report on the 1st Zoom Global Conference entitled “*Provenance analysis of sediments*” on January 09, 2021. The convention was organized under the patronage and sponsorship with the China University of Petroleum (Beijing) that cordially invited the academics, scholars, experts and PhD students, to present their research contributions in this online Global Conference. The number of registered delegates was 65 from 11 countries, and the meeting was attended by researchers and students from universities and research institutes, as well as professionals from industries like oil and natural gas and many others. The Organizing Committee of the conference were as follows:

Conference Managers: dr. Liu-Di Fan and dr. Yuan Wang

Conference Host:

Prof. Santanu Banerjee (Indian Institute of Technology, Bombay)

Prof. Chang-Song Lin (China University of Geosciences, Beijing)

Prof. John S. Armstrong-Altrin (National Autonomous University of Mexico, Mexico)

Prof. Emilia Le Pera (Department of Biology, Ecology and Earth Sciences, University of Calabria, Italy)

Prof. Long-Yi Shao (China University of Mining and Technology)

The main topic of the conference dealt with clastic sediments and rocks provenance, tectonic environment, sediment distribution and evolution of sedimentary processes, basin analysis, and source-to-sink transport processes of sediments.

The quantitative assessment of source to sink systems has been achieved through multidisciplinary approaches, with contributions focusing on:

- Sedimentary rocks petrography and geochemistry
- Sedimentology and petrology of clastic strata
- Zircon chemistry and U-Pb geochronology
- Diagenetic controls on provenance signatures

Most of the scientific contributions focused on arenite petrology and the source to sink paleogeography interpretations by using detrital signatures of these clastic rocks. Many keynotes provided significant contributions in ancient sedimentary basins in the world. These studies highlighted the record of tectonics in sedimentary siliciclastic archives and dispersal pathways within sedimentary basins, quantifying sedimentary budgets, useful for paleogeographic and paleotectonic reconstructions, as well as in petroleum and mineral exploration. Other contributions focused on modern clastic sedimentary systems processes. These case-histories proved the broad range of applications of modern sand and clay mineralogy and geochemistry in modern sedimentary environments from a variety of geological settings.

Best regards

Emilia Le Pera