

Opening Remarks

It is my great pleasure to have an opportunity to deliver the welcome address at the International Workshop on High Energy Earth Science: Muon and Neutrino Radiography. I would like to offer a warm welcome to all participants, in particular to those who have traveled from abroad to Japan.

Firstly, please let me introduce briefly about our Earthquake Research Institute (ERI). The institute was established in 1925, 2 years after the great Kanto earthquake (M7.9) in 1923 taking 100,000 lives around Tokyo. Sowe were committed from the beginning in doing unified and comprehensive studies on earthquakes and volcanic eruptions. The field of research covers wide areas of geosciences, for instance, seismology, volcanology, geology, rock mechanics and earthquake engineering, which are mostly based on classic physics and chemistry. Up to this date, we have rarely needed quantum physics or particle physics. But time has changed! Recently, muon radiography has clearly imaged the shape of a volcanic conduit. Both neutrino and muon physics will be major foci in geophysical research in a few years. It is likely that several crucial questions concerning geodynamics and related fields will be answered by radiography. Although the final goal of radiography still appears to be in a dense fog, it is nonetheless very attractive and we hope that it will lead to an important outcome.

On this occasion, we are celebrating the successful launches of two major projects on high energy earth science, namely muon and neutrino radiography.

Finally, on behalf of the host institute ERI, I look forward to the great success of the workshop and symposium. Thank you.

Shuhei Okubo
Director of ERI