THERMOLUMINESCENCE DATING OF POTTERY AND ANTARCTIC METEORITE

Masaomi Ohota[1] and S. Miono[2]

1. **Kinki University, Higashi-Osaka, Japan**
2. **Department of Physics, Osaka City University, Osaka 558, Japan**

Thermoluminescence (TL) dating technique is a useful method when combined with appropriate modifications. The authors applied this technique to the dating of pottery excavated from the Kinki area of Japan and also to determine the terrestrial ages of Antarctic meteorites.

The chronology of the "Oshigatamon" pottery in the Kinki area, as generally accepted by archaeologists is: Jinguji-Oko type- Kozenji. TL dating using the quartz inclusion technique has been carried out and from the results obtained it was found that the transition may be in the sequence type- Jinguji- Kozenji type. The terrestrial age of an Antarctic meteorite has been studied by means of thermoluminescence, gamma-ray counting and Accelerator Mass Spectrometry (AMS). Typically terrestrial ages obtained by the use of a TL technique have been derived from the peak height ratio of TL intensity at low temperature to high temperature in the glow curve. One of the authors developed a new TL method with the use of fusion crust. It is shown that there is a good correlation between the acquired dose and terrestrial age, which was previously measured by cosmogonic radionuclide abundance.