

KEYNOTE LECTURE**Symposium 8: SEDIMENTARY FEATURES OF SEISMITES, SEISMO-TURBIDITES AND TSUNAMIITES****T. Shiki (1), M. B. Cita (2) & B. G. Jones (3)****(1) Kyoto University, Japan, (2) University of Milano, Italy, (3) Wollongong University, Australia**

Lately, three- to four-dimensional structural patterns of nature (For example, linear patterns, rhythms, episodic changes, explosion, chaos, fluctuation, fractals) of various levels have received great attention in various fields of sciences. Sedimentary records of some of these phenomena have recently attracted the interest of many geologists. The drastic growth of sequence stratigraphy has rekindled special interest in cyclicity.

Great significance of catastrophic and episodic sedimentation in geohistory also should not be overlooked. Studies of the earthquake generated sedimentary records are important, not only for comprehensive understandings of the four-dimensional patterns of the earth but also for disaster prevention problems. For example, find of the tsunamiites, induced by meteorite impacts have recently raised much interest as catastrophic events in geohistory.

The difficulty of reading of these sedimentary records concerns the difference in patterns between natural sedimentary processes and their resulting sediments. Thereupon, we wish to focus the discussion on examining the sedimentographic features of trigger-known, earthquake generated, sediments. This must be the most fundamental and orthodox way to find the key to the sedimentary records of geohistorical earthquakes and tsunamis and their sedimentological character. Studies of sediments, of which threshold and its trigger, transportation and deposition mechanism are known, are highly welcomed. Special attention should be given to mutual relation among sedimentary structures, grain-size composition, mineral and fossil composition, facies succession, and sedimentary setting of these sediments. Theoretical discussion will be made also on genesis of these sedimentographic features.

The future goal of our struggles is to clarify «what are the sedimentographic features of seismites, seismic turbidites, and tsunamiites to be noticed, observed, and described».

