

of the Department of Geology and Geophysics handed over the certificates to the participants

The main objective of the course was to familiarize the participants with different aspects of fluid inclusion research, with major emphasis on microthermometry. Apart from lecture notes, photocopies of necessary additional material was given to the participants. The participants were also given a chance to evaluate the efficacy of the course through a questionnaire. Summing up, it was a rewarding

experience and we sincerely hope that the course will have a multiplier effect in their departments/organizations in arousing interest in the vital area of the study of fluids in geological systems and processes

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THE NATURE OF EARTH'S INNER CORE - WHAT THE METEORITES TEND TO TELL US

John A Wood, while delivering the Harold Masursky Lecture (Kerr, 2001) has recently mentioned that "We still don't understand what the meteorites are trying to tell us" and "Many meteoritists are not given to trying to interpret data and (are) suspicious of people who do"

The present author (Sen, 1984, 1989 and 1992) who is endeavouring to understand the nature of interior of the earth and the total earth system, based on the authentic and monumental studies of John Wood and others, finds that the stumbling blocks that resist progress in earth science studies are some premature and wrong notions which have been taken as axioms

On the basis of actual data obtained from crustal layer and uppermost part of the mantle, temperature and pressure of earth's inner core have been assumed to be extremely high. That part of the earth, which has been proved to be solid on the basis of seismic data, nevertheless, behaves as the fountain-head of terrestrial magnetism. Based on density data of earth and its surface rocks and analogy drawn from iron meteorites, the inner core has been considered to be composed principally of iron and nickel. All these meteorites are found in fragmented condition evincing their origin from solid part or relatively low temperature zone of a preexisting planet. In case of high temperature, after fragmentation of the planet, a melt would have been produced from its interior part which on rapid cooling in space would have given rise to globular bodies with glassy texture instead of broken fragments with crystalline structures.

The fact that Neuman lines, found in some iron meteorites, are destroyed at elevated temperatures of 800°C, strongly supports the view that these objects were never

exposed to very high temperature after their solidification to form the core of an earth-like planet. If this concept is correct, the iron meteorites are very strongly magnetic (Murthy, 1968) a property that has not been acquired during and after their fragmentation - proves beyond doubt that the inner core which is solid, composed of iron and nickel and emanates magnetic lines of force, is itself a huge dipolar permanent magnet. Occurrence of low temperature minerals, minerals with water, hydrocarbon compounds and amino acids in the matrix of some chondrites of stony meteorites having sharp globular outlines (Wood, 1969) strongly corroborate that a major portion of the interior of the earth was never exposed to very high temperature-pressure condition.

The author draws attention of the earth and planetary scientists to look into the matter so that a thorough investigation in this regard could be undertaken for establishing the truth.

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