

RADIOMETRIC DATING

N. R. DAS*

Since the discovery of natural radioactivity in uranium, in the last decade of the nineteenth century, the nuclear property of radioactive decay of radionuclides at immutable rates has been effectively utilized in dating of varieties of naturally occurring geological matrices and the organisms which constantly replenish their ^{14}C supply through respiration when alive on earth. During the period, applications of radiometric dating techniques have been extensively diversified and have enabled the geologists to indicate the absolute time scales of geological formations and the evolution of the solar system, the earth, meteorites, lunar rocks, etc. and the archaeologists to record the facts of history of several important events like dinosaur era, Iceman, the Shroud in Turin and many other ancient artefacts. In the development of dating methods, varieties of naturally occurring radio-isotopic systems with favorable half-lives ranging from about 10 years to over 100 billion years have been used as radiometric clocks.
