

THE APPLICATION OF RADIO-CARBON TECHNIQUES TO ENVIRONMENTAL MONITORING

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The radio-carbon technique, commonly used in measurements of cosmogenic isotope abundances in order to solve problems of cosmic significance, may also be very useful for monitoring the global environment. We show how the fossil carbon abundance in the atmosphere can be determined and will present an example of the environmental monitoring which we have carried out in Japan during the past 4 years: we have found that the CO₂ content of the atmosphere originating from petrol combustion (mainly by cars) in central Tokyo is more than 8% of that of natural origin.