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Nota di contenuto	Part 1 Introduction -- 1 Outline of the Environmental Monitoring of TEPCO's Fukushima Daiichi Nuclear Power Plant Accident (Tomoyuki TAKAHASHI) -- 2 Outline of the Radiation Dose Estimation of Residents After the Fukushima Daiichi Nuclear Power Plant Accident (Sentaro TAKAHASHI) -- Part 2 Overview -- 3 Accident of Fukushima Daiichi Nuclear Power Plant: Sequences, FP Released, Lessons Learned (Jun SUGIMOTO) -- 4 Some Comments on Dose Assessment for Members of the Public After the Fukushima Daiichi Nuclear Power Plant Accident (Jiro INABA) -- Part 3 Radiation Survey of the Environment -- 5 Environmental Radiation Status in and Around Tokyo Immediately After the TEPCO Fukushima Daiichi Nuclear Power Plant Disaster (Takeshi IIMOTO) -- 6 Radiation Survey Along Two Trails in Mt. Fuji to

Investigate the Radioactive Contamination Due to TEPCO's Fukushima Daiichi Nuclear Plant Accident (Kazuaki YAJIMA) -- 7 Development of a Carborne Survey System, KURAMA (Minoru TANIGAKI) -- 8 Radiation Measurement in East Japan in 2011 After the Fukushima Nuclear Accident (Takumi KUBOTA) -- Part 4 Environmental Radioactivity -- 9 Distribution of Plutonium Isotopes in Marine Sediments Off Japan Before and After the Fukushima Daiichi Nuclear Power Plant Accident: A Review (Jian ZHENG) -- 10 Time Trend Change of Air Dose Rate on Paved Area in Fukushima City After the Fukushima Daiichi Nuclear Power Plant Accident (Shin-ya HOHARA) -- 11 Observation of Radionuclides in Marine Biota off the Coast of Fukushima Prefecture After TEPCO's Fukushima Daiichi Nuclear Power Plant Accident (Tatsuo AONO) -- Part 5 Transfer Models and/or Parameters -- 12 Evaluating Removal of Radionuclides from Landfill Leachate Using Generally Practiced Wastewater Treatment Processes (Nao ISHIKAWA) -- 13 Studies on Radiocesium Transfer in Agricultural Plants in Fukushima Prefecture (Takashi SAITO) -- Part 6 Source Estimation -- 14 Investigation of Uncertainty in the Release Rates of I 131 and Cs 137 from Fukushima Daiichi Nuclear Power Station Estimated from Environmental Data (Shigekazu HIRAO) -- 15 Source Term Estimation of 131I and 137Cs Discharged from the Fukushima Daiichi Nuclear Power Plant into the Atmosphere (Haruyasu NAGAI) -- Part 7 Dose Assessment -- 16 NIRS's Activities for the Reconstruction of Early Internal Exposure in the TEPCO Fukushima Daiichi Nuclear Power Station Accident (Osamu KURIHARA) -- 17 Internal Radiation Dose of KURRI Volunteers Working at Evacuation Shelters After TEPCO's Fukushima Daiichi Nuclear Power Plant Accident (Yuko KINASHI) -- 18 Probabilistic Assessment of Doses to the Public Living in Areas Contaminated by the Fukushima Daiichi Nuclear Power Plant Accident (Shogo TAKAHARA) -- 19 Reduction of External Exposure for Residents Owing to the Fukushima Nuclear Accident by Weathering and Decontamination (Hiroko YOSHIDA).

Sommario/riassunto

This book provides comprehensive research findings related to the environmental monitoring of radiation, levels of radioactive nuclides in various environments, and dose estimation in residents after the Fukushima nuclear power plant accident caused severe environmental contamination with radioactive nuclides. At the beginning of the book, a technical review written by a leading researcher of nuclear reactor technology explains what happened at the power plant. The review is followed by a commentary from a former member of the International Commission on Radiological Protection, providing the reader with easily understandable information about the concept of radiation dosage. In the main part of the book, a series of scientific reports presents valuable data on the radiation surveys of the environment, environmental radioactivity, transfer models and parameters of radioactive nuclides, and dose assessment among residents. These reports present a wide range of findings from the research carried out in a variety of activities by large governmental organizations as well as by small private groups and individuals. The reader thus will find a large collection of valuable and interesting data related to the environmental contamination by radioactive nuclides after the Fukushima accident. Although earlier reports on this issue have been made public, this book is the only publication to fully depict the actual situation by providing comprehensive data obtained by diverse organizations and individuals.