

#### **The Radiation Chemistry of Polysaccharides**

provides the background and compiles the most recent research findings and details activities relating to the development of radiation processed products made of natural polymers. Successes clearly indicate that the radiation processing of natural polymers has emerged as an exciting area where the unique characteristics of these polymeric materials can be exploited for a variety of practical applications in agriculture, healthcare, industry and the environment.

Non-serial Publications; ISBN:978-92-0-101516-7; English Edition; 75.00 euro; 2016 www-pub.iaea.org/books/iaeabooks/10843/Poly





presents the results of an IAEA coordinated research project on nanoscale radiation engineering of advanced materials for potential biomedical applications, summarizing the achievements of the participating institutions.

IAEA Radiation Technology Reports No. 5; ISBN:978-92-0-101815-1; English Edition; 49.00 euro; 2015 www-pub.iaea.org/books/IAEABooks/10641/Nano



# Utilization of Accelerator Based Real Time Methods in Investigation of Materials with High Technological Importance

presents the state of the art in the development and application of various accelerator based real time techniques to materials investigation. It reports examples of multidisciplinary scientific topics and challenges where application of accelerator based methods would bring significant benefits in terms of research data and further understanding of the scientific issues. The research activities that can profit from real time material characterizations using synchrotron radiation, neutron, ion and electron beams, and simultaneous combinations of different techniques are also briefly discussed. A recurrent theme emerging from the presented papers is that further work is needed to develop more robust and longer working life materials for energy applications.

IAEA Radiation Technology Reports No. 4; ISBN:978-92-0-102314-8; English Edition; 37.00 euro; 2015 www-pub.iaea.org/books/IAEABooks/10490/RTM



Guidelines for the Development, Validation and Routine Control of Industrial Radiation Processes

## Guidelines for Development, Validation and Routine Control of Industrial Radiation Processes

provides guidance that has been developed based on requests from Member States to provide guidance on fulfilling the requirements of the International Standard for Development, Validation and Routine Control for a Radiation Process, published by the International Organization for Standardization (ISO). While the ISO standard was developed for the sterilization of healthcare products, the present guidelines are generalized and are therefore relevant to any radiation process. This is possible since the principles involved in regulating a radiation process for achieving quality products are generally the same for any product or application. In several places, additional information has been included to provide insight into the radiation process that could help irradiator operators and their quality managers to provide better services to their customers.

IAEA Radiation Technology Series No. 4; ISBN:978-92-0-135710-6; English Edition; 29.00 euro; 2013 www-pub.iaea.org/books/IAEABooks/8676/Industrial



## **Radiotracer Generators for Industrial Applications**

provides a unique source of information pertaining to the development of radiotracer generators and their use in troubleshooting and optimizing industrial processes. It describes the results of research undertaken on the characterization of 68Ge/68Ga, 137Cs/137mBa, 99Mo/99mTc and 113Sn/113mIn radiotracer generators and their validation in industrial process investigations. Looking at trends in the industrialization process of developing countries, there is evidence that radiotracer techniques will continue to play an important role in industry for many years to come, and the findings of this research project will help Member States to make larger use of radiotracer technology for problem resolution in industry and environment.

IAEA Radiation Technology Series No. 5; ISBN:978-92-0-135410-5; English Edition; 34.00 euro; 2013 www-pub.iaea.org/books/IAEABooks/8921/Radiotracers

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