

Neutron Generators for Analytical Purposes

IAEA Radiation Technology Reports No. 1

This publication addresses recent developments in neutron generator technology. It presents information on compact instruments with high neutron yield, to be used for neutron activation analysis and prompt gamma neutron activation analysis in combination with high count rate spectrometers. (145 pp., 74 figs; 2012) • ISBN 978-92-0-125110-7 • STI/PUB/1535 • €41.00



Design, Development and Optimization of a Low Cost System for Digital Industrial Radiology

IAEA Radiation Technology Reports No. 2

Systems for digital industrial radiology are currently quite expensive and, therefore, often unaffordable for many institutes and non-destructive testing groups worldwide. This publication provides guidance on the development of such systems at a relatively lower cost. (89 pp., 69 figs; 2013) • ISBN 978-92-0-129310-7 • STI/PUB/1561 • €40.00

Development of Novel Adsorbents and Membranes by Radiation Induced Grafting for Selective Separation in Environmental and Industrial Applications

IAEA Radiation Technology Reports No. 3

This publication summarizes the results of a coordinated research project that used gamma rays, electron beams and swift heavy ions to graft various monomers onto natural and synthetic polymers by radiation-induced grafting to develop novel adsorbents and membranes for environmental and industrial applications. The publication provides a summary of the project results and includes reports by the participants. (278 pp., 285 figs; 2012) • ISBN 978-92-0-134010-8 • STI/PUB/1572 • €18.00

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

IAEA Radiation Technology Reports No. 4

This publication presents the state of the art in the development and application of various accelerator based real time techniques to materials investigation (104 pp., 66 figs; 2015) • ISBN 978-92-0-102314-8 • STI/PUB/1649 • €37.00

Nanoscale Radiation Engineering of Advanced Materials for Potential Biomedical Applications

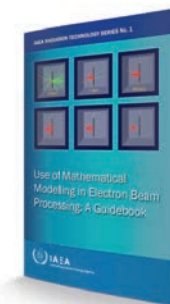
IAEA Radiation Technology Reports No. 5

Radiation techniques can modify materials at the nanoscale level and so can be used to develop advanced materials in the area of biomaterials with enhanced functionalities such as improved biocompatibility and better interface adhesion. This publication presents the results of an IAEA coordinated research project on the topic. (214 pp., 176 figs; 2015) • ISBN 978-92-0-101815-1 • STI/PUB/1684 • €49.00

Use of Mathematical Modelling in Electron Beam Processing: A Guidebook

IAEA Radiation Technology Series No. 1

This guidebook is an introductory tutorial on the use of mathematical modelling (mostly Monte Carlo methods) in electron beam processing. Typical irradiation problems are presented with solutions (117 pp., 57 figs; 2011) • ISBN 978-92-0-112010-6 • STI/PUB/1474 • €42.00



Nuclear Techniques for Cultural Heritage Research

IAEA Radiation Technology Series No. 2

This publication highlights the role of nuclear techniques for cultural heritage research (205 pp., 72 figs; 2011) • ISBN 978-92-0-114510-9 • STI/PUB/1501 • €58.00

Application of Radiotracer Techniques for Interwell Studies

IAEA Radiation Technology Series No. 3

Based on the key findings of an IAEA coordinated research project in this area, this publication describes the principles and the state of the art of radiotracer techniques for interwell investigations and provides practical guidance on the design and implementation of tracer experiments as well as on the interpretation of the results. (231 pp.; 2012) • ISBN 978-92-0-125610-2 • STI/PUB/1539 • €54.00

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

IAEA Radiation Technology Series No. 4

This publication provides guideline on fulfilling the requirements of the International Standard for Development, Validation and Routine Control for a Radiation Process. Further, 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. (129 pp., 15 figs.; 2013) • ISBN 978-92-0-135710-6 • STI/PUB/1581 • €29.00

Radiotracer Generators for Industrial Applications

IAEA Radiation Technology Series No. 5

This publication 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 $^{68}\text{Ge}/^{68}\text{Ga}$, $^{137}\text{Cs}/^{137\text{m}}\text{Ba}$, $^{99}\text{Mo}/^{99\text{m}}\text{Tc}$ and $^{113}\text{Sn}/^{113\text{m}}\text{In}$ radiotracer generators and their validation in industrial process investigations. (203 pp., 96 figs.; 2013) • ISBN 978-92-0-135410-5 • STI/PUB/1579 • €34.00

Uses of Ionizing Radiation for Conservation for Tangible Cultural Heritage

IAEA Radiation Technology Series No. 6

This publication provides state of the art knowledge on radiation technology applied to the conservation and consolidation of items of cultural heritage. Radiation techniques have demonstrated significant success in the disinfestation and preservation of cultural heritage artefacts, and national and international research programmes have developed harmonized methodologies for such radiation treatment. (Forthcoming) • ISBN 978-92-0-103316-1 • STI/PUB/1747 • €50.00