

THE ANNUAL REPORT FOR 2006

Additional Annex Information

Table A20. Coordinated research projects completed in 2006

Nuclear Power

- Economic research on, and assessment of, selected nuclear desalination projects and case studies (2001–2006)
- Intercomparison of techniques for pressure tube inspection and diagnostics (1998–2006)

Nuclear Fuel Cycle and Materials Technologies

- Data processing technologies and diagnostics for water chemistry and corrosion control in nuclear power plants (DAWAC) (2001–2006)
- Improvement on the models used for fuel behaviour simulation (FUMEX II) (2002–2006)

Nuclear Science

- Corrosion of research reactor aluminium clad spent fuel in water (2001–2006)
- Evaluated nuclear data for the thorium–uranium fuel cycle (2002–2006)
- Improvement of the standard neutron cross-sections for light elements (2002–2006)
- Nuclear data for production of therapeutic radionuclides (2002–2006)
- Tritium inventory in fusion reactors (2002–2006)

Food and Agriculture

- Developing, validating and standardizing methodologies for the use of PCR and PCR-ELISA in the diagnosis and monitoring of control and eradication programmes for trypanosomiasis (2000–2006)
- Evaluation of the use of nuclear techniques for the colonization and production of natural enemies of agricultural pests (1998–2006)
- Improvement of tropical and subtropical fruit trees through induced mutations and biotechnology (2000–2006)
- Integrated soil, water and nutrient management for sustainable rice–wheat cropping systems in Asia (2001–2006)
- Irradiation to ensure the safety and quality of prepared meals (2002–2006)
- Quality control of pesticide products (2001–2006)

Human Health

- Aspects of radiobiology applicable in clinical radiotherapy — Increase of the number of fractions per week (1998–2006)
- Comparative evaluation of radiopharmaceuticals for radiosynovectomy (2002–2006)
- Doctoral CRP on isotopic and complementary tools for the study of micronutrient status and interactions in developing country populations exposed to multiple nutritional deficiencies (2001–2006)
- Doctoral CRP on management of liver cancer using radionuclide methods with special emphasis on transarterial radioconjugate therapy and internal dosimetry (2000–2006)
- Harmonization of radionuclide procedures and protocols in the management of neonatal hydronephrosis (2001–2006)
- Nitrate augmented myocardial imaging for assessment of myocardial viability (2002–2006)
- Radiobiological and clinical study on viral induced cancers' response to radiotherapy (2004–2006)
- Radiopharmaceutical imaging to predict and evaluate the response of breast cancer to neoadjuvant chemotherapy (2001–2006)
- Role of teletherapy (TT) supplementary to intraluminal high dose rate (ILHDR) brachytherapy (BT) in the palliation of advanced oesophageal cancer (2002–2006)

Water Resources

- Nuclear and isotopic techniques for the characterization of submarine groundwater discharge (SGD) in coastal zones (2002–2006)

Radioisotope Production and Radiation Technology

- Controlling of degradation effects in radiation processing of polymers (2003–2006)
- Development of Tc-99m based small biomolecules using novel Tc-99m cores (2003–2006)
- Industrial process gamma tomography (2003–2006)
- Remediation of polluted waters and wastewaters by radiation processing (2002–2006)

Safety of Nuclear Installations

- Assessment of the interfaces between neutronic, thermal-hydraulic, structural and radiological aspects in accident management (2002–2006)
- Safety significance of near field earthquakes (2002–2006)
- Safety significance of postulated initiating events for different research reactor types and assessment of analytical tools (2002–2006)

Radiation and Transport Safety

- Accident severity during air transport of radioactive material (1997–2006)
- Avoidance of unnecessary dose to patients while transitioning from analogue to digital radiology (CAURB) (2002–2006)
- Dose reduction in computed tomography while maintaining diagnostic confidence (2002–2006)
- Evaluate quantitatively and promote patient dose reduction approaches in interventional radiology (2002–2006)

Management of Radioactive Waste

- Disposal aspects of low and intermediate level decommissioning waste (2002–2006)

Table A21. Coordinated research projects initiated in 2006

Nuclear Power

- Analyses of and lessons learned from the operational experience with fast reactor equipment and systems (2006–2009)

Nuclear Fuel Cycle and Materials Technologies

- Optimization of water chemistry technologies and management to ensure reliable fuel performance at high burnup and in ageing plants (2006–2010)

Capacity Building and Nuclear Knowledge Maintenance for Sustainable Energy Development

- Comparative analysis of methods and tools for nuclear knowledge preservation (2006–2009)
- Greenhouse gas mitigation strategies and energy options (2006–2010)

Nuclear Science

- Conversion of miniature neutron source research reactors to low enriched uranium (2006–2009)
- Development and application of the techniques of residual stress measurements in materials (2006–2009)
- Improved production and utilization of short pulsed, cold neutrons at low and medium energy spallation neutron sources (2006–2010)
- Pathways to energy from initial fusion: An integrated approach (2006–2010)
- Unification of nuclear spectrometries: Integrated techniques as a new tool for material research (2006–2009)

Food and Agriculture

- Control of contagious bovine pleuro pneumonia (2006–2010)
- Early and rapid diagnosis of transboundary animal diseases: Phase I — avian influenza (2006–2010)
- Integrated analytical approaches to assess indicators of the effectiveness of pesticide management practices at a catchment scale (2006–2011)
- Selection and evaluation of food (cereal and legume) crop genotypes tolerant to low nitrogen and phosphorus soils through the use of isotopic and nuclear related techniques (2006–2011)

Human Health

- Application of FDG–PET and molecular gene profiling for risk stratification of diffuse large B-cell non-Hodgkin's lymphoma in different ethnic populations (2006–2010)
- Clinical/radiobiological study on viral induced cancers' response to radiotherapy, with comprehensive morbidity assessment (2006–2011)
- Improving outcomes in radiotherapy using new strategies of treatment delivery (2006–2010)
- Role of nuclear cardiology techniques in ischaemia assessment with exercise imaging in asymptomatic diabetes (2006–2009)

Water Resources

- Geostatistical analysis of spatial isotope variability to map the source of water for hydrological studies (2006–2009)
- Isotopic techniques for assessment of hydrological processes in wetlands (2006–2009)

Radioisotope Production and Radiation Technology

- Development of therapeutic radiopharmaceuticals based on lutetium-177 for radionuclide therapy (2006–2010)

Safety of Nuclear Installations

- Evaluation of uncertainties in best estimate safety analysis (2006–2009)

Table A22. Training courses, seminars and workshops in 2006

Funded by the regular budget

Nuclear Power

- Workshop on desalination system modelling: Technology and economics — Abdus Salam ICTP, Trieste

Nuclear Fuel Cycle and Materials Technologies

- Workshop on role of partitioning and transmutation (P&T) in the mitigation of the potential environmental impacts of the nuclear fuel cycle — Abdus Salam ICTP, Trieste

Capacity Building and Nuclear Knowledge Maintenance for Sustainable Energy Development

- School of nuclear knowledge management — Abdus Salam ICTP, Trieste
- Workshop on competitiveness of nuclear power and other energy technologies in restructured electricity markets — USA
- Workshop on designing sustainable energy systems using MESSAGE — Ecuador
- Workshop on options for post-Kyoto regimes and their implications for sustainable energy development — Abdus Salam ICTP, Trieste

Nuclear Science

- School of ion beam analysis and accelerator applications — Abdus Salam ICTP, Trieste
- Second experts meeting in materials irradiation — Poland
- Second joint experiment in materials irradiation — Poland
- Workshop on atomic and molecular data for fusion energy research — Abdus Salam ICTP, Trieste
- Workshop on HEU minimization — Norway
- Workshop on nuclear structure and decay data: Theory and evaluation — Abdus Salam ICTP, Trieste
- Workshop on research reactor modernization and refurbishment — Netherlands
- Workshop on technical and administrative preparations for shipping research reactor fuel to the Russian Federation (lessons learned from Uzbekistan spent fuel shipments) — Serbia

Food and Agriculture

- Course on analytical and radioisotope techniques for pesticide residue analysis — Costa Rica
- Course on introduction to QA/QC measures in pesticide residue analytical laboratories — Agency's Laboratories, Seibersdorf
- FAO/IAEA interregional course on the use of the sterile insect and related techniques for the integrated area-wide management of insect pests — USA
- FAO/IAEA regional course on principles of baseline data collection for integrated area-wide tsetse and trypanosomiasis intervention projects with a sterile insect component — Kenya
- OIRSA (International Regional Organization for Plant and Animal Health) workshop on control of veterinary drug residues in food — El Salvador
- Regional workshop on certification of irradiation as a phytosanitary treatment for fresh fruits and vegetables — Thailand
- Second IAEA-FAO-International Union of Pure and Applied Chemistry workshop on pesticide management — Republic of Korea
- Seminar on research and capacity building in animal science and food safety in developing countries — Germany
- Sixth FAO/IAEA interregional course on mutant germplasm characterization using molecular markers — Agency's Laboratories, Seibersdorf
- Workshop on INFOCRIS compendium on agrochemicals — Japan
- Workshop on new trends in food irradiation — Republic of Korea
- Workshop on the use of nuclear techniques in addressing soil-water-nutrient issues for sustainable agriculture — USA

Water Resources

- Course on groundwater hydrology and the use of isotopes — Uruguay
- Course on use of isotopic tools to support transboundary water management — Spain
- Regional training of trainers workshop on application of models and new techniques in groundwater management in arid and semi-arid regions — Islamic Republic of Iran

Assessment and Management of Marine and Terrestrial Environments

- Course on analysis of heavy metal pollution by atomic absorption spectrometry — IAEA Marine Environment Laboratories, Monaco
- Course on heavy metal analysis — South Africa
- Course on organic compounds analysis — South Africa
- Course on organic compounds pollution — IAEA Marine Environment Laboratories, Monaco
- Course on regional advanced training course on the sampling, sample preparation and analysis for the measurement of radionuclides in the marine environment — Croatia
- Course on the analysis of chlorinated pesticides and PCBs — South Africa; IAEA Marine Environment Laboratories, Monaco
- Lead auditor course following ISO17025 — Agency's Laboratories, Seibersdorf
- Seminar on quantum statistics and the Cofino model: Applications in laboratory performance studies — IAEA Marine Environment Laboratories, Monaco
- Seminar on radionuclide analysis — An important tool in coastal research — IAEA Marine Environment Laboratories, Monaco
- SHOTS workshop 2006 — Japan
- Workshop on analytical methods for characterization of hot particles and their impact on environment — Abdus Salam ICTP, Trieste
- Workshop on comparison of the applicability of two portable radon monitors for on-site determination of radon in air and water — IAEA Marine Environment Laboratories, Monaco
- Workshop on measurements of short-lived radium isotopes using the RaDeCC delayed coincidence system — IAEA Marine Environment Laboratories, Monaco

Safety of Nuclear Installations

- International workshop on the safety of nuclear fuel cycle — Brazil
- PROSPER seminar — Russian Federation
- Regional seminar on facts of nuclear power for electricity generation — Thailand
- Workshop on low level events and near misses — Ukraine
- Workshop on the conduct of seismic hazard analyses for critical facilities — Abdus Salam ICTP, Trieste
- Workshop on the use of probabilistic safety assessment for evaluation of impact on ageing effects on nuclear power plants — Romania

Management of Radioactive Waste

- Workshop on monitoring of radionuclides in foodstuffs traded internationally — Headquarters
- Workshop on planning and design considerations for geological disposal of high level long lived waste and/or spent nuclear fuel — Headquarters

Safeguards

- Coordinated expert meeting on numerical modelling concepts for IAEA safeguards — Headquarters
- International course on implementation of State systems of accounting for and control of nuclear material (SSAC) — Russian Federation
- Regional course on State systems of accounting for and control of nuclear material — Japan
- Safeguards traineeship programme — Headquarters; Germany; Hungary
- Technical meeting on bulk analysis and high-resolution gamma spectrometry of environmental samples for safeguards — Headquarters
- Technical meeting on application of laser spectrometry techniques in IAEA safeguards — Headquarters
- Workshop on IAEA analytical capabilities for safeguards requirements — The Safeguards Analytical Laboratory: To 2010 and Beyond — Agency's Laboratories, Seibersdorf
- Workshop on nuclear material accountancy and control — Headquarters

Executive Management, Policy-Making and Coordination

Legal Activities

- Course for lawyers on nuclear security — Headquarters
- Workshop for diplomats on nuclear law — Headquarters
- Regional meeting for senior government officials on the international legal framework governing nuclear safety, security and safeguards — Malaysia
- Regional seminar for Africa on the assessment of national nuclear legislation — Headquarters"

Funded by extrabudgetary sources

Nuclear Power

- Workshop on issues for the introduction of nuclear power — Headquarters

Nuclear Fuel Cycle and Materials Technologies

- CEG workshop on isolation and disposal of radioactive waste — Finland
- CEG workshop on strategic aspects of radioactive waste management and remediation of nuclear sites — Sweden

Capacity Building and Nuclear Knowledge Maintenance for Sustainable Energy Development

- INIS seminar — Ghana
- Workshop on planning for sustainable energy development — Ethiopia

Nuclear Science

- Workshop on operational aspects of molybdenum-99 production — Headquarters

Food and Agriculture

- Asia–Pacific food safety summit — Singapore
- Course on molecular diagnostics and polymerase chain reaction — South Africa
- Food safety colloquium — Czech Republic
- Food safety seminar — Thailand
- Summit on Middle East food safety — United Kingdom

Assessment and Management of Marine and Terrestrial Environments

- Meeting presentation of the SHOTS project — IAEA Marine Environment Laboratories, Monaco
- Seminar on application of inductively coupled plasma–mass spectrometry for the analysis of long lived radionuclides — IAEA Marine Environment Laboratories, Monaco
- Seminar on citizen environmental conflict, Carlos Anwandter sanctuary, a RAMSAR site: An opportunity for atoms for peace — IAEA Marine Environment Laboratories, Monaco
- Seminar on recent changes of environmental conditions in Batabano Gulf (Cuba) — IAEA Marine Environment Laboratories, Monaco
- Seminar on results and achievements in technical cooperation RAF projects — IAEA Marine Environment Laboratories, Monaco

Nuclear Safety and Security

- Course on knowledge management and the Asian Nuclear Safety Network — Vietnam

Safety of Nuclear Installations

- Course for Asian Nuclear Safety Network information technology support — Malaysia
- Course in nuclear technologies for young professionals — Italy
- Course on root cause analysis (RCA) — China
- OECD/NEA–SEGHOFF workshop on future control station designs and human performance issues in nuclear power plants — Norway
- Professional course on human factors and safety culture — Slovakia
- Regional course on safety assessment and verification for nuclear reactors — Republic of Korea
- Regional seminar on the installation of a new research reactor — Vietnam
- Regional workshop on the management of research reactor ageing — China
- Seminar on defects depth sizing techniques in stainless steel and dissimilar metal welds ultrasonic testing — China
- Seminar on the occasion of Bohunice V-1 nuclear power plant unit 1 shutdown — Slovakia
- Third national basic professional course in nuclear safety — Vietnam
- Workshop on ageing assessment methodologies and remaining life estimation of nuclear power components — China

- Workshop on degradation mechanism of the PWR reactor coolant system, Qinshan Nuclear Power Company — China
- Workshop on improvement of reactor physics test methods — China
- Workshop on integrity assessment technology for the nuclear components — China
- Workshop on management of safety and safety culture — Spain
- Workshop on operational safety performance processes — China
- Workshop on optimizing the water chemistry mode of the secondary circuit with ETA (NH₂CH₂CH₂OH) in WWER-1000 unit of the Tianwan nuclear power plant — China
- Workshop on probabilistic safety assessment — Indonesia
- Workshop on regulations and practice of containment in-service surveillance and test — China
- Workshop on safety management of research reactors — China
- Workshop on verification and validation technology for advanced control room of nuclear power plants — China

Radiation and Transport Safety

- Training for regulators on authorization and inspection of radiation sources — Czech Republic
- Training for regulators on authorization and inspection of radiation sources — Lithuania
- Workshop on authorization, inspection and regulatory management of sources — Jordan
- Workshop on the Regulatory Authority Information System — Headquarters
- Workshop on the Regulatory Authority Information System — Tunisia
- Workshop on the Regulatory Authority Information System — Argentina

Management of Radioactive Waste

- Course on recovery and conditioning of spent neutron sources — Australia
- Course on source recovery and conditioning in Africa — USA
- Workshop on technical procedures for the recovery, conditioning and storage of lightning rod sources — Croatia

Safeguards

- Comprehensive training on CANDU systems — Headquarters
- Course on advanced plutonium verification techniques — USA
- Course on design information verification at bulk handling facilities — United Kingdom
- Course on digital Cerenkov viewing device — Sweden
- Course on enhanced communication skills — Headquarters
- Course on enhanced observational skills — Headquarters
- Course on ground penetrating radar technology — France
- Course on IAEA safeguards activities for States with comprehensive safeguards agreements and with small quantities protocols — Tajikistan
- Course on NMA in action — Czech Republic
- Course on non-destructive assay techniques — USA
- Course on nuclear fuel cycle and proliferation indicators — Headquarters
- Course on nuclear fuel cycle facilities — United Kingdom
- Course on radiation review software — Headquarters
- Course on solution monitoring — Italy
- Course on spent fuel verification — Sweden
- Course on SSAC activities and responsibilities — Headquarters; Australia
- Course on tank calibration — Italy
- Course on uranium mines — Czech Republic
- Exercise on inspection at bulk facilities — Headquarters; United Kingdom
- National course on implementation of State systems of accounting for and control of nuclear material for States with safeguards agreements, small quantities protocols and additional protocols — Singapore
- National course on implementation of State systems of accounting for and control of nuclear material — Republic of Korea
- Regional seminar on additional protocol implementation — Lithuania

- Regional seminar on verifying compliance with nuclear non-proliferation commitments — Ecuador
- Regional workshop on nuclear material accounting and control at facilities — China
- Seminar on small quantities protocols — Headquarters
- VXi integrated fuel monitor — Headquarters
- Workshops on additional protocol — Finland; Hungary; USA

Public Information and Communication

- Lecture at the forum for nuclear cooperation in Asia and workshop for nuclear communicators — Indonesia
- Seminar on the facts of nuclear power for electricity generation — Thailand
- Workshop on communicating with stakeholders on nuclear power plants' operations and safety — Slovenia
- Workshop on crisis communications — Sweden
- Workshop on issues and challenges for nuclear communicators — Argentina; Panama
- Workshop on public information material exchange — Headquarters

Executive Management, Policy-Making and Coordination

Legal Activities

- Regional workshop on liability for nuclear damage — Peru

Table A23. Publications issued in 2006

Nuclear Power

- Advanced nuclear power plant design options to cope with external events — IAEA-TECDOC-1487
- Application of the management system for facilities and activities — IAEA Safety Standards Series No. GS-G-3.1
- Authorization of nuclear power plant control room personnel: Methods and practices with emphasis on the use of simulators — IAEA-TECDOC-1502
- Basic infrastructure for a nuclear power project — IAEA-TECDOC-1513
- Competency assessments for nuclear industry personnel — Miscellaneous publication
- Consideration of early closure or continued operation of a nuclear power plant — IAEA-TECDOC-1514
- Desalination Economic Evaluation Program (DEEP-3.0), Users manual — Computer Manual Series No. 19
- Economic performance indicators for nuclear power plants — Technical Reports Series No. 437
- Fast reactor database: 2006 update — IAEA-TECDOC-1531
- Guidelines for the upgrade and modernization of nuclear power plant training simulators — IAEA-TECDOC-1500
- Human resource issues related to an expanding nuclear power plant programme — IAEA-TECDOC-1501
- INDAG Newsletter — No. 6, September 2006
- Indicators for management of planned outages in nuclear power plants — IAEA-TECDOC-1490
- Integrated approach to optimize operation and maintenance costs for operating nuclear power plants — IAEA-TECDOC-1509
- Intercomparison of techniques for inspection and diagnostics of heavy water reactor pressure tubes flaw detection and characterization — IAEA-TECDOC-1499
- Knowledge management for nuclear industry operating organizations — IAEA-TECDOC-1510
- Management of continual improvement for facilities and activities: A structured approach — IAEA-TECDOC-1491
- Material degradation and related managerial issues of nuclear power plants — Proceedings Series
- Nuclear Power Newsletter — Vol. 3, Nos 1–4 April, June, September and December 2006
- Nuclear power plant life management processes: guidelines and practices for heavy water reactors — IAEA-TECDOC-1503
- Nuclear power reactors in the world — IAEA-RDS-2/26
- Operating experience with nuclear power stations in Member States in 2005
- Plant life management for long term operation of light water reactors — Technical Reports Series No. 448
- Potential for sharing nuclear power infrastructure between countries — IAEA-TECDOC-1522
- Status of innovative small and medium sized reactor designs 2005 — Reactors with conventional refuelling schemes — IAEA-TECDOC-1485
- The management system for facilities and activities — IAEA Safety Standards Series No. GS-R-3
- Theoretical and experimental studies of heavy liquid metal thermal hydraulics — IAEA-TECDOC-1520
- Thermophysical properties database of materials for light water reactors and heavy water reactors — IAEA-TECDOC-1496

Nuclear Fuel Cycle and Materials Technologies

- Data processing technologies and diagnostics for water chemistry and corrosion control in nuclear power plants (DAWAC) — IAEA-TECDOC-1505
- Data requirements and maintenance of records for spent fuel management: A review — IAEA-TECDOC-1519
- Uranium production and raw materials for the nuclear fuel cycle — Supply and demand, economics, the environment and energy security — Proceedings Series
- Viability of inert matrix fuel in reducing plutonium amounts in reactors — IAEA-TECDOC-1516

Capacity Building and Nuclear Knowledge Maintenance for Sustainable Energy Development

- A Model for Analysis of Energy Demand (MAED-2) — IAEA/CMS/18
- Brazil: A country profile on sustainable energy development — Miscellaneous publication
- Energy, electricity and nuclear power estimates for the period up to 2030 — IAEA-RDS-1/26
- INIS Authority List for Journal Titles — IAEA-INIS-11 (Rev. 32)
- Knowledge management for nuclear industry operating organizations — IAEA-TECDOC-1510
- Managing nuclear knowledge — Proceedings Series
- Managing nuclear knowledge: Strategies and human resource development — Proceedings Series
- Nuclear information and knowledge Newsletter — Nos 1 and 2, April and September 2006
- Risk management of knowledge loss in nuclear industry organizations

Nuclear Science

- Decommissioning of research reactors: Evolution, state of the art, open issues — Technical Reports Series No. 446
- Energetic particles in magnetic confinement systems — Proceedings Series (CD-ROM)
- First generation of fusion power plants: Design and technology — Proceedings Series (CD-ROM)
- Handbook for calculations of nuclear reaction data, RIPL-2: Reference Input Parameter Library-2 — IAEA-TECDOC-1506
- IAEA Nuclear Data Newsletter — Nos 41 and 42, May and September 2006
- International Bulletin on Atomic and Molecular Data for Fusion — No. 65, July 2006
- International Reactor Dosimetry File 2002 (IRDF-2002) — Technical Reports Series No. 452
- ITER ITA Newsletter — Nos 26–34
- Negative ion based neutral beam injectors — Proceedings Series (CD-ROM)
- Neutron reflectometry: A probe for materials surfaces — Proceedings Series
- Small angle neutron scattering — IAEA-TECDOC-1486
- Spent fuel management options for research reactors in Latin America — IAEA-TECDOC-1508
- Theory of plasma instabilities: Transport, stability issues and their interaction — Proceedings Series (CD-ROM)
- Understanding and managing ageing of material in spent fuel storage facilities — Technical Reports Series No. 443
- Use of chlorofluorocarbons in hydrology, A guidebook
- Utilization of accelerators — Proceedings Series (CD-ROM)
- X ray fluorescence in the IAEA and its Member States Newsletter — Nos 11 and 12, July and September 2006

Food and Agriculture

- Animal Production and Health Newsletter — No. 44, July 2006
- Designing and implementing a geographical information system: A guide for managers of area-wide management programmes — Miscellaneous publication
- Food and Environmental Protection Newsletter — Vol. 9, Nos 1 and 2
- Food irradiation clearances database — Miscellaneous publication
- Improving animal productivity by supplementary feeding of multinutrient blocks, controlling internal parasites and enhancing utilization of alternate feed resources — IAEA-TECDOC-1495
- Improving farmyard poultry production in Africa: Interventions and their economic assessment — IAEA-TECDOC-1489
- Insect Pest Control Newsletter — Nos 66 and 67
- Management practices for improving sustainable crop production in tropical acid soils — Proceedings Series
- Mutational analysis of root characters in food plants — IAEA-TECDOC-1493
- Plant Breeding and Genetics Newsletter — Nos 16 and 17, January and July 2006
- Plant Mutation Reports — Vol. 1, No. 1, and 2, May and December 2006
- Soils Newsletter — Vol. 28, No. 2 January 2006; Vol. 29, No. 1, July 2006, Vol. 29, No. 2 December 2006

- Status and risk assessment of the use of transgenic arthropods in plant protection — IAEA-TECDOC-1483
- Use of irradiation to ensure the hygienic quality of fresh, pre-cut fruits and vegetables and other minimally processed food of plant origin — IAEA-TECDOC-1530

Human Health

- Beyond the visible: Managing heart disease and cancer with nuclear science — IAEA/PI/A.91/06-29901
- Nuclear medicine resources manual — Miscellaneous publication
- Organization of a radioisotope based molecular biology laboratory — IAEA-TECDOC-1528
- Quality assurance for radioactivity measurement in nuclear medicine — Technical Reports Series No. 454
- Screening of newborns for congenital hypothyroidism: Guidance for developing programmes
- SSDL Newsletter — No. 52, July 2006

Water Resources

- Isotopic assessment of long term groundwater exploitation — IAEA-TECDOC-1507
- Water and Environment News — Issues 20 and 21, March and September 2006

Assessment and Management of Marine and Terrestrial Environments

- Isotopes in environmental studies: Aquatic Forum 2004 — C&S Papers Series No. 26
- Classification of soil systems on the basis of transfer factors of radionuclides from soil to reference plants — IAEA-TECDOC-1497
- Marine Environment News — Vol. 3, No. 2, Vol. 4, No. 1, December 2005 and June 2006

Radioisotope Production and Radiation Technology

- Development of radioimmunoassays and kits for non-clinical applications — IAEA-TECDOC-1498
- Directory of cyclotrons used for radionuclide production in Member States, 2006 update — Miscellaneous
- Production techniques and quality control of sealed radioactive sources of palladium-103, iodine-125, iridium-192 and ytterbium-169 — IAEA-TECDOC-1512

Nuclear Safety and Security

- Fundamental safety principles — IAEA Safety Standards Series No. SF-1
- Stakeholder involvement in nuclear issues — INSAG 20
- Strengthening the global nuclear safety regime — INSAG 21

Safety of Nuclear Installations

- A system for the feedback of experience from events in nuclear installations — IAEA Safety Standards Series No. NS-G-2.11
- Code of Conduct on the Safety of Research Reactors — Miscellaneous publication
- Commissioning of research reactors — IAEA Safety Standards Series No. NS-G-4.1
- Determining the quality of probabilistic safety assessment (PSA) for applications in nuclear power plants — IAEA-TECDOC-1511
- Development and review of plant specific emergency operating procedures — Safety Reports Series No. 48
- Effective nuclear regulatory systems: Facing safety and security challenges — Proceedings Series
- Guidelines on pressurized thermal shock analysis for WWER nuclear power plants (Rev. 1) — IAEA-EBP-WWER No. 8 (Rev. 1)
- IAEA-OCED/NEA Fuel Incident Notification and Analysis System (FINAS) guidelines — IAEA Services Series No. 14
- Maintenance, periodic testing and inspection of research reactors — IAEA Safety Standards Series No. NS-G-4.2
- Topical issues in nuclear installation safety — Proceedings Series

- Trending of low level events and near misses to enhance safety performance in nuclear power plants — IAEA-TECDOC-1477

Radiation and Transport Safety

- Applying radiation safety standards in diagnostic radiology and interventional procedures using X rays — Safety Reports Series No. 39
- Applying radiation safety standards in radiotherapy — Safety Reports Series No. 38
- Appraisal for Japan of the safety of the transport of radioactive material — IAEA Safety Standards Applications — TransSAS-7
- Assessing the need for radiation protection measures in work involving minerals and raw materials — Safety Reports Series No. 49
- Case studies in the application of probabilistic safety assessment techniques to radiation sources — IAEA-TECDOC-1494
- Dangerous quantities of radioactive material (D-values) — EPR-D-values, 2006
- Manual for first responders to a radiological emergency — EPR-First Responders
- Preparation, conduct and evaluation of exercises to test preparedness for a nuclear or radiological emergency — Training material
- Radiation protection in the design of radiotherapy facilities — Safety Reports Series No. 47
- Radiological protection issues in endovascular use of radiation sources — IAEA-TECDOC-1488
- Safe transport of radioactive material, Fourth edition — Training Course Series No. 1
- Safety and security of radioactive sources: Towards a global system for the continuous control of sources through their life cycle — Proceedings Series
- Safety of radiation generators and sealed radioactive sources — IAEA Safety Standards Series No. RS-G-1.10

Management of Radioactive Waste

- An international peer review of the programme for evaluating sites for near surface disposal of radioactive waste in Lithuania, Report of the IAEA International Review Team — Miscellaneous publication
- Applicability of monitored natural attenuation at radioactively contaminated sites — Technical Reports Series No. 445
- Application of thermal technologies for processing of radioactive waste — IAEA-TECDOC-1527
- Characterization, treatment and conditioning of radioactive graphite from decommissioning of nuclear reactors — IAEA-TECDOC-1521
- Decommissioning of facilities using radioactive material — IAEA Safety Standards Series No. WS-R-5
- Decommissioning of underground structures, systems and components — Technical Reports Series No. 439
- DeSa News — No. 2, April 2006
- Development of specifications for radioactive waste packages — IAEA-TECDOC-1515
- Environmental consequences of the Chernobyl accident and their remediation: Twenty years of experience, Report of the Chernobyl Forum Expert Group 'Environment' (EGE) — Radiological Assessment Reports Series
- Fuel Cycle and Waste Newsletter — Vol. 2, Nos 1–3, April, August and December 2006
- Geological disposal of radioactive waste — IAEA Safety Standards Series No. WS-R-4
- Improvements of radioactive waste management at WWER nuclear power plants — IAEA-TECDOC-1492
- Innovative waste treatment and conditioning technologies at nuclear power plants — IAEA-TECDOC-1504
- Management of long term radiological liabilities: Stewardship challenges — Technical Reports Series No. 450
- Management of problematic waste and material generated during the decommissioning of nuclear facilities — Technical Reports Series No. 441
- Radiological conditions in the Dnieper River basin — Radiological Assessment Reports Series
- Redevelopment of nuclear facilities after decommissioning — Technical Reports Series No. 444

- Regulatory and management approaches for the control of environmental residues containing naturally occurring radioactive material (NORM) — IAEA-TECDOC-1484
- Release of sites from regulatory control upon the termination of practices — IAEA Safety Standards Series No. WS-G-5.1
- Remediation of sites with mixed contamination of radioactive and other hazardous substances — Technical Reports Series No. 442
- Retrieval of fluidizable radioactive wastes from storage facilities — IAEA-TECDOC-1518
- Safety of radioactive waste disposal — Proceedings Series
- Storage of radioactive waste — IAEA Safety Standards Series No. WS-G-6.1

Nuclear Security

- Monitoring for radioactive material in international mail transported by public postal operators: — IAEA Nuclear Security Series No. 3
- Nuclear forensics support — IAEA Nuclear Security Series No. 2
- Technical and functional specifications for border monitoring equipment— IAEA Nuclear Security Series No. 1

Incidents and Emergency Preparedness Response

- IAEA response assistance network: Incident and Emergency Centre — EPR-RANET

Executive Management, Policy-Making and Coordination

- Amendment to the Convention on the Physical Protection of Nuclear Material — IAEA International Law Series No. 2
- Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management — IAEA International Law Series No. 1