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Location of the Conference

Austria Center Vienna (ACV)
Bruno-Kreisky-Platz
1220 Vienna, Austria

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TIMETABLE

Sunday, 12 November 2006

15:00–18:00 Registration ACV

Monday, 13 November 2006

08:00 Registration ACV
 09:30–10:10 Session 1: Opening Addresses
 10:10–12:30 Session 2: QA: Looking to the Future
 Plenary I
 12:30–14:00 *Lunch Break*
 14:00–15:50 Session 3: 3a: Clinical Aspects of
 Parallel Sessions Treatment Planning
 and New Technologies
 3b: X ray Computed
 Tomography QA
 3c: Impact of Quality
 Management on Clinical
 Nuclear Medicine Practice
 15:50–16:10 *Coffee Break*
 16:10–18:00 Session 4: 4a: Clinical Impact of QA
 Parallel Sessions 4b: Mammography
 4c: Patient Specific
 Dosimetry in Nuclear
 Medicine
 18:00–19:00 *Reception*

Tuesday, 14 November 2006

08:30–10:20 Session 5: QA Programmes and
 Plenary II Comprehensive Audits in
 Radiation Medicine
 10:20–10:40 *Coffee Break*
 10:40–12:30 Session 6: 6a: QA for Emerging
 Parallel Sessions Technologies
 6b: X ray Digital Imaging
 6c: Dual Modality and
 Emerging Imaging
 Technologies
 12:30–14:00 *Lunch Break*
 - "Meet the Experts" MAESTRO Workshop
 - Lunch Forum I: Brachytherapy
 14:00–15:50 Session 7: Technology Relevant to the
 Plenary III Needs
 15:50–16:10 *Coffee Break*
 16:10–18:00 Session 8: 8a: QA of Treatment
 Parallel Sessions Planning and Dose Delivery
 8b: Bone Densitometry and
 Dosimetry for Diagnostic
 X rays
 8c: QA of Radiopharma-
 ceuticals and Radioactivity
 Measurements
 18:00–19:00 Parallel Poster Radiation Treatment *Hall D*
 Sessions Diagnostic Radiology *Hall GH*
 Nuclear Medicine *Hall IK*

Wednesday, 15 November 2006

08:30–10:20	Session 9: Plenary IV	Education and QA-related Activities
10:20–10:40	<i>Coffee Break</i>	
10:40–12:30	Session 10: Parallel Sessions	10a: Dosimetry Audits in Radiotherapy 10b: QA for Diagnostic Radiology 10c: EANM Perspectives on Quality Management in Nuclear Medicine Practice
12:30–14:00	<i>Lunch Break</i> - Lunch Forum II:	Refresher Course on Radiobiology
14:00–15:50	Session 11: Parallel Sessions	11a: Applications of Dosimetry and QA in Radiotherapy 11b: Interventional Radiology 11c: National QA Implementation in Nuclear Medicine
15:50–16:10	<i>Coffee Break</i>	
16:10–17:50	Session 12: Plenary V	Closing Session
17:50–18:00		Closing of the Conference

Working language:

English

Resolutions:

No resolutions may be submitted for consideration on any subject; no votes will be taken.

Display of posters:

Monday to Wednesday, 13–15 November 2006
All poster presenters are requested to attend to their respective posters during the Parallel Poster Sessions at 18:00–19:00, on Tuesday.

Commercial exhibits:

Will be shown in the Foyer on Level U2 "Blue Level" from Monday to Wednesday, 13–15 November 2006.

Meeting rooms:

Plenary sessions including opening:	<i>Hall D</i>
Stream a (Radiation Treatment) sessions:	<i>Hall D</i>
Stream b (Diagnostic Radiology) sessions:	<i>Hall GH</i>
Stream c (Nuclear Medicine) sessions:	<i>Hall IK</i>

SUNDAY, 12 NOVEMBER 2006

15:00–18:00 Registration and distribution of
conference material

Set-up of posters

MONDAY, 13 NOVEMBER 2006

08:00 Registration and distribution of
conference material

09:30–10:10 **SESSION 1: OPENING ADDRESSES**

Hall D **W. Burkart, IAEA**

A.-M. Cetto, IAEA

P. Andreo, IAEA

10:10–12:30 **SESSION 2: PLENARY I**

Hall D **Quality Assurance (QA):
Looking to the Future**

Chair: A.D.A. Maidment, USA

Vice-Chair: K.R. Shortt, IAEA

Rapporteur: J. Drew, IAEA

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
001 (invited)	J. Czernin	USA
002 (invited)	J. Debus	Germany
003 (invited)	W. Schlegel	Germany
004 (invited)	P. Dawson	UK

12:30–14:00 *Lunch Break*

Title of Paper

Molecular imaging in quality health care

Innovative technologies in radiation oncology

The role of imaging in radiation oncology

Recent developments of significance in medical imaging

14:00–15:50

SESSION 3: PARALLEL SESSIONS

Hall D

**3a: Radiation Treatment
Clinical Aspects of Treatment Planning
and New Technologies**

Chair: P.J. Hoskin, UK
Vice-Chair: B. Jeremic, IAEA
Rapporteur: A. Trotti, USA

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
005 (invited)	M. Martel	USA
006 (invited)	L. Marks	USA
007	H. Urbanczyk W. Majewski I.L. Hawrylewicz L. Misztal I.J. Ciechowicz et al.	Poland
008	A. Shiu C. Wang S. Woo H. Wang	AAPM
009	F. Ataman P. Poortmans B. Davis	Turkey

Title of Paper

Treatment planning and delivery

Clinical impact of new radiation therapy techniques

Bladder and prostate movement

Image-guided non-invasive stereotactic
radiosurgery/radiotherapy

The EORTC Emmanuel van de Schueren Fellowship for QA in
radiotherapy: Final report for the QA programme 2002 to 2004

Monday, 14:00–15:50, SESSION 3, cont'd.

Hall GH **3b: Radiation Imaging**
X ray Computed Tomography QA

Chair: **J. Gray, USA**
Vice-Chair: **J. Le Heron, IAEA**
Rapporteur: **P. Dawson, UK**

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
010 (invited)	S. Edyvean	UK
011	J. Karppinen H. Järvinen	Finland
012	C.-L. Chapple J. Willis A. Shemilt S. Willis	EFOMP
013	H.E.H.I. Gibreel	Sudan
014	J.E. Ngaile P. Msaki R. Kazema	United Republic of Tanzania
015	W. Ślusarczyk- Kacprzyk W. Skrzyński J. Tołwiński	Poland

Title of Paper

The impact of MDCT on optimization and QA of CT scanners

A practical method to the users of radiation for the determination of patient doses in computed tomography

Assessment and reduction of radiation dose in pediatric computed tomography

Computed tomography quality control (QC) status in Sudan

Evaluation of performance of computed tomography scanners in Tanzania

Doses in computed tomography

Monday, 14:00–15:50, SESSION 3, cont'd.

Related POSTERS, 3b

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
130P	F. Shannoun C. Back N. Harpes A. Schreiner- Karoussou C. Bokou et al.	Luxembourg
131P	J. Ziliukas	Lithuania
132P	M.R. Deevband R. Hossein M.R. Kardan N. Rastkhah N. Ahmadi Geshvaghani	Iran, Islamic Republic of Malaysia Iran, Islamic Republic of
133P	V. Bairac M. Sofroni	Republic of Moldova
273P	D. Stoyanov J. Vassileva	Bulgaria

Title of Poster

An action plan for dose reduction from computed tomography in Luxembourg

Experience of Lithuania in creating quality systems in computed tomography

Quality control in computed tomography system

The first experience of application of spiral computer tomography (SCT) in oncology

Quality control of computed tomography systems in Bulgaria

Monday, 14:00–15:50, SESSION 3, cont'd.

Hall IK **3c: Radiation Imaging
Impact of Quality Management on
Clinical Nuclear Medicine Practice**

Chair: **A. Bischof-Delaloye, Switzerland**

Vice-Chair: **M. Dondi, IAEA**

Rapporteur: **L.T. Massardo, Chile**

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
016 (invited)	R. Giubbini	Italy
017	R. Jaimovich L.T. Massardo D. Gutiérrez H. Lavados C. Aqueveque L. Quevedo	Chile
018	L.T. Massardo R. Jaimovich D. Gutierrez H. Lavados R. Alay et al.	Chile
019	R.C. Cabrejas A.C. Zarlenga J.G. Arashiro M.L. de Cabrejas	Argentina
020	S.M. Carpintiero L. Boanova M.L. de Cabrejas	Argentina
021	A. Ellmann S. Bouyouchef K. Solanki	South Africa Algeria IAEA
15:50–16:10	<i>Coffee Break</i>	

Title of Paper

Impact of quality management on clinical nuclear medicine practice

Influence of extracardiac activity and perfusion abnormalities on the results of myocardial gated SPECT with commercial software

Comparison of SPECT and Planar techniques in multigated equilibrium radioventriculography (MUGA): Analysis of ejection fraction and ventricular volumes

QA teaching needs for non-nuclear professionals using gamma probes

Brain image fusion: Co-registration error

Initial report back of the audit of nuclear medicine units in Africa

16:10–18:00

SESSION 4: PARALLEL SESSIONS

Hall D

**4a: Radiation Treatment
Clinical Impact of QA**

Chair: J. Debus, Germany
Vice-Chair: B. Jeremic, IAEA
Rapporteur: L. Marks, USA

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
022 (invited)	P.J. Hoskin	UK
023 (invited)	F. Macbeth	UK
024 (invited)	A. Trotti	USA

Hall GH

**4b: Radiation Imaging
Mammography**

Chair: M. Yaffé, Canada
Vice-Chair: I.D. McLean, IAEA
Rapporteur: K. Faulkner, EFOMP

025 (invited)	M. Rickard	Australia
026	K. Faulkner M.G. Wallis F. Neilson	EFOMP
027	M. Horváthová D. Nikodemová M. Příkazská	Slovakia
028	E. Fabiszewska I. Jezierska K. Jankowska W. Bulski	Poland
029	A.E. Pineda Castillo R. Bedoya M. de Infante M. de los Angeles Fernandez	Panama
030	D. Bor O. Aykol T. Olgar	Turkey

Title of Paper

Educational requirements and quality assurance in modern radiotherapy delivery

Treatment process - Clinical decision making

Developments in toxicity and QOL reporting in oncology clinical trials

National QA in BreastScreen Australia

Evaluation of the population dose to the UK population from the national health service breast screening programme

Implementation of QA into daily practise of mammography departments in Slovakia

Radiation risk in mammography examinations

QA of mammography systems in Panama: Seven year experience

A regional survey for mammographic systems

Monday, 16:10–18:00, SESSION 4, cont'd.

Related POSTERS, 4b

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
134P	P.A. Kaplanis G. Christodoulides D. Charalambous S. Christofides M. Kouzali	EFOMP
135P	D. Bor S. Tukul T. Olgar T. Toklu E. Aydin O. Aykol	Turkey

Hall IK

**4c: Radiation Imaging
Patient Specific Dosimetry in
Nuclear Medicine**

Chair: E. Busemann-Sokole, Netherlands
Vice-Chair: M. Bardies, EANM
Rapporteur: B.E. Zimmerman, USA

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
031 (invited)	M.G. Stabin	USA
032	G.M. Deluca A.M. Rojo M. Cabrejas A. Fadel	Argentina
033	L.A. Torres M.A. Coca N. Cornejo	Cuba
034	M. Blaickner P. Kindl	Austria

18:00–19:00 Reception hosted by the IAEA

Title of Poster

QA of all mammography facilities in Cyprus

The accuracy of retrospective dose estimation based on the mean glandular dose compressed breast thickness relationship

Title of Paper

Patient-specific internal dose assessment: Methods, models, and associated uncertainties

Evaluation of red marrow absorbed dose in patients treated with I-131 for differentiated thyroid cancer

A software package for tridimensional patient-specific dosimetry in ^{188}Re labelled h-R3 loco-regional RIT

New specific absorbed fractions for annihilation radiation as a step towards a more individual dosimetry in nuclear diagnostics

TUESDAY, 14 NOVEMBER 2006

08:30–10:20

SESSION 5: PLENARY II

Hall D

QA Programmes and Comprehensive Audits in Radiation Medicine

Chair:

P. Scalliet, Belgium

Vice-Chair:

J. Izewska, IAEA

Rapporteur:

H. Järvinen, Finland

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
035 (invited)	L. Lau	IRQN
036	J. Izewska P. Scalliet V. Levin H. Järvinen E. Lartigau et al.	IAEA Belgium IAEA Finland France
037	M. Dondi K. Solanki	IAEA
038	S. Soimakallio H. Järvinen A. Ahonen T. Wigren T. Lyyra-Laitinen et al.	Finland
039	J. Malicki H. Järvinen P. Scalliet H. Stankusova J.W. Leer et al.	ESTRO

Title of Paper

A continuum of quality in radiology

QA team for radiation oncology (QUATRO)

“QUANUM” – IAEA guidelines for comprehensive self-appraisal of nuclear medicine practices

Impact of clinical audit on the quality of radiological practices — Experiences from a national audit programme supported by a national steering committee

Clinical audit guidelines in radiotherapy - preliminary results of the ESTRO working group

Tuesday, 08:30–10:20, SESSION 5 (Plenary I), cont'd.

Related POSTERS, 5 – Plenary II

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
136P	A. Rosi V. Viti	Italy
137P	A. Rosi M.A. Tabocchini V. Viti	Italy
138P	I. Horáková I. Pavlíková J. Valenta J. Petera P. Šlampa H. Stankusová	Czech Republic
139P	R. Parkkinen H. Järvinen	Finland
140P	W. Parker H. Patrocinio R. Ruo G. Shenouda E. Podgorsak	AAPM
128P	C. Beckett	Canada
129P	E. Salminen P. Sipilä	Finland
10:20–10:40	<i>Coffee Break</i>	

Title of Poster

Guidelines of the Italian National Institute of Health on QA in interoperative radiotherapy

QA in conformal radiotherapy

Components of QA of radiotherapy process - setup in the Czech Republic

Implementation of QA in medical radiological practices: A national cooperation model

Comprehensive QA for IMRT: The role of internal and external audits

Emerging Canadian QA standards for radiation therapy

Development of cancer care and use of radiotherapy equipment in a small country - the Finnish model

10:40–12:30

SESSION 6: PARALLEL SESSIONS

Hall D

**6a: Radiation Treatment
QA for Emerging Technologies**

Chair:

L.J. Schreiner, Canada

Vice-Chair:

S. Vatnitsky, IAEA

Rapporteur:

H. Amols, AAPM

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
040 (invited)	H. Shirato R. Onimaru Y. Ohsaka H. Aoyama M. Ishikawa	Japan
041	J. Van Dyk S. Yartsev G. Bauman T. Kron G. Rodrigues et al.	Canada Australia Canada
042	L.J. Schreiner A. Kerr G. Salomons J. Darko C. Joshi et al.	Canada
043	R. Hammoud S. Yoo H. Guan	AAPM
044	J.-P. Bissonnette D.J. Moseley T.G. Purdie E. White D.A. Jaffray	Canada
045	H. Amols	AAPM

Title of Paper

Image-guided radiotherapy (IGRT) and four-dimensional radiotherapy (4DRT)

Helical tomotherapy: A review of early experience at the London Regional Cancer Program, London, Canada

Cobalt-60 based IMRT with image guidance: Is it possible?

On board imaging and cone beam computed tomography: QA procedures

A QA programme for a radiographic image-guidance system

Poster review: Summary of posters on related topic

Tuesday, 10:40–12:30, SESSION 6, cont'd.

Related POSTERS, 6a

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
141P	R.M. Mlambo M.W. Swanepoel J.J. Nieto-Camero J.E. Symons	South Africa
143P	P. Oiko G. Cuttone Ł. Czopyk T. Kajdrowicz J. Lesiak et al.	Poland Italy Poland
144P	J.M. Lárraga Gutiérrez O.A. García-Garduño M. Hernández M.A. Celis	Mexico
145P	A. Sen M.K. West A. Movahed	AAPM
146P	S.M. Jaywant	AAPM
147P	D.D. Deshpande P. Reena T. Gupta S.V. Swamidas Jamema R. Pai et al.	India
148P	D. Georg M. Stock K. Kontrisoova K. Dieckmann J. Bogner R. Pötter	Austria
124P	J. Van Dyk E. Lechtman S.V. Black T. Kron S. Gaede	Canada Australia
275P	H. Patrocinio W. Parker R. Ruo M. Evans E. Podgorsak	AAPM

Title of Poster

Neutron and proton therapy QA at iThemba Labs

Application of novel thermoluminescence foils (2D) for QA of proton eye radiotherapy beams

Tolerance limits of leaf accuracy positioning for a micro-multileaf collimation system used for 3D conformal radiosurgery

A method for quick alignment check of MLC leaves in tomotherapy Hi-Art II for QA

Impact of emerging technologies on stereotactic techniques

Performance evaluation of indigenous telecobalt machine Bhabhatron-I at ACTREC, Mumbai, India

Development and pre-clinical evaluation of a real time monitoring and feedback system for deep inspiration breath hold for stereotactic body radiotherapy

A QA phantom for motion adaptive radiation therapy

Five year results of an IMRT QA programme

Tuesday, 10:40–12:30, SESSION 6, cont'd.

Hall GH **6b: Radiation Imaging
X ray Digital Imaging**

Chair: **A.D.A. Maidment, USA**
Vice-Chair: **P. Ortiz-Lopez, IAEA**
Rapporteur: **P.A. Hiles, UK**

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
046 (invited)	M.J. Yaffé	Canada
047	E. Vano Carruana J.M. Fernandez J.I. Ten C. Prieto D. Martinez	Spain
048	J. Gimeno-Olmos V. González P. Gras J.I. Villaescusa	Spain
049	C. Walsh D. Gorman P. Byrne A. Larkin J.F. Malone	EFOMP
050	J.-W. Yoon N.-K. Chung T.-S. Suh H.-K. Lee	Korea, Republic of
051	N. Jamal K.-H. Ng M. Aminah L.-K. Tan	Malaysia

Title of Paper

Development of a QC programme for digital mammography

Real time patient dose and QC in digital radiology using DICOM headers

Comparative study of image quality and imparted dose with SF, CR and DR for mammography systems

Acceptance testing of CR and DR systems

A mechanical method to remove Moire patterns of an X ray antiscatter grid with a fixed type of grid in digital radiography

QC of direct radiography and computed radiography mammography systems: Image quality and average glandular dose

Tuesday, 10:40–12:30, SESSION 6, cont'd.

Related POSTERS, 6b

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
149P	P.R. Trueb T. Theiler	Switzerland
150P	D. Salat D. Nikodemova V. Lehotska	EFOMP
151P	D. Freitas J. Isidoro M. Ferreira A. Canelas M. Seco et al.	Portugal
127P	S.G. Strocovsky D. Otero	Argentina
272P	A.A. Dimov J. Vassileva	Bulgaria

Title of Poster

Optimization of the image receptor dose of digital radiographic units in clinical practice

Optimization of image quality and patient dose for chest examinations in digital radiology

Standard digital radiography: Dose optimization using an anthropomorphic phantom

New monoenergetic X ray medical digital imaging system based in gamma sources and low radiation dose

Assessment of image quality and radiation dose on a modern flat panel angiography system

Tuesday, 10:40–12:30, SESSION 6, cont'd.

Hall IK **6c: Radiation Imaging
Dual Modality and Emerging
Imaging Technologies**

Chair: **H. Bergmann, Austria**

Vice-Chair: **M. Marengo, Italy**

Rapporteur: **R. Nicoletti, Austria**

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
052 (invited)	G. El Fakhri	USA
054	A. Celler	Canada
055	L. Modolo R. Linder P. Trueb S. Baechler M. Kosinski et al.	Switzerland
056	K. Knešaurek M. Muzinic A. Rafique Z. Zhuagyu J. Machac	USA
057	D. Grošev S. Lončarić	Croatia

12:30–14:00 *Lunch Break*

Hall GH **“Meet the Experts” MAESTRO Workshop**

068	J. Mills	UK
	C. Talamonti	Italy
	I. Gomola	Germany
	M.P.R. Waligorski	Poland
	G. Cuttone	Italy
	A. Du Sautoy	UK
	J. Philippe Nicolai	France

Hall IK **LUNCH FORUM I: Brachytherapy**

269	E. Rosenblatt	IAEA
271	K. Baier J. Richter M. Flentje	Germany

Title of Paper

Acceptance testing and quality assurance and control in PET/CT

QC of the attenuation correction method for SPECT using attenuation maps based on CT data or transmission scans

The Swiss project for PET units: Acceptance and status testing

Quality assessment and QC in SPECT/CT and PET/CT

Performance assessment of the triple head coincidence gamma camera

About MAESTRO — Methods and advanced equipment for simulation and treatment in radio oncology

Brachytherapy for cervical cancer

Use of ^{60}Co as an alternative to ^{192}Ir for remote afterloading

14:00–15:50

SESSION 7: PLENARY III

Hall D

Technology Relevant to the Needs

Chair:

J.A. Casas-Zamora, IAEA

Vice-Chair:

A. Meghziene, IAEA

Rapporteur:

R. Fulton, IAEA

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
059 (invited)	H.D. Banta	France
060 (invited)	N. Ndlovu	Zimbabwe
061 (invited)	C. Malamut	Brazil
062 (invited)	L. Souhami	Canada
121	M. Dondi	IAEA

Panel Discussion

15:50–16:10

Coffee Break

16:10–18:00

SESSION 8: PARALLEL SESSIONS

Hall D

**8a: Radiation Treatment
QA of Treatment Planning and
Dose Delivery**

Chair:

W. Schlegel, Germany

Vice-Chair:

S. Vatnitsky, IAEA

Rapporteur:

G.H. Hartmann, EFOMP

063 (invited)	J. Van Dyk	Canada
064	R. Mackie	IOMP
065	M. Martel	USA
066	G.H. Hartmann	EFOMP
067	J. Izevska	IAEA

Title of Paper

Issues in health technology assessment

Running radiotherapy services in a limited resource setting

The introduction of PET to regional centres in Brazil

Evaluation of IMRT as a treatment modality: Recommendations of an IAEA expert panel

Positron emission tomography (PET): Current achievements and survey of diffusion in IAEA Member States

QA of computerized radiation treatment planning systems

Review of posters on different aspects of QA RTPS (acceptance testing, commissioning and algorithms verification - Part I)

Review of posters on QA of IMRT, IMRS and SRS/RT (verification of specific IMRT applications using data measured at various treatment machines having an IMRT option – Part II)

Review of posters on use of software and tools for independent MU calculation as a part of QA procedure (Part III)

Review of posters on in vivo dosimetry technique as a tool for dose delivery verification (Part IV)

Tuesday, 16:10–18:00, SESSION 8, cont'd.

Related POSTERS, 8a – PART I

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
152P	J.N. Chang S.N. Huh S.C. Yoon T.S. Suh	Korea, Republic of
154P	M. Budanec T. Bokulić I. Mrčela Z. Knežević B. Vekić Z. Kusić	Croatia
155P	J.T. Álvarez S. Loaiza B. Salinas de León V.M. Tovar	Mexico
156P	P.R.T.L. Camargo L.N. Rodrigues L. Furnari G. Menegussi R.A. Rubo M.A. Silva	Brazil
157P	S. Vatnitsky K.R. Shortt E. Gershkevitsh R. Schmidt G. Velez et al.	IAEA Estonia Germany Argentina
158P	E. Goerlitz D. Albers F. Cremers R. Schmidt	Germany
159P	N. Gesheva- Atanasova A. Balabanova	Bulgaria
160P	C.M. Able	AAPM
161P	M. Hejazy N. El-Sherbini	IOMP
162P	Y. Ülgen F. İşbakan Z. Özen	Turkey

Title of Poster

Dose verification using the pelvic phantom in high dose rate (HDR) brachytherapy

Radiation treatment planning system verification

Pilot QC dosimetric verification of LDR and HDR brachytherapy sources at Mexican hospitals

Commissioning and acceptance tests of Eclipse at Clinicas Hospital according to TRS-430

Pilot study of the IAEA protocol for clinical commissioning of treatment planning systems

Influence of the CT calibration process on the dose computation in radiotherapy treatment planning

Pre-clinical tests of the virtual wedge option of a linear accelerator Primus-HE and verification of dose calculation algorithm in TPS Helax TMS

New phantom design testing magnetic resonance image transmission integrity and image fusion in radiotherapy treatment planning

A comparison of different stereotactic radiosurgery treatment techniques for extra-cranial lesions

3D dose distribution in gamma knife treatment near tissue inhomogeneities

Tuesday, 16:10–18:00, SESSION 8, cont'd.

Related POSTERS, 8a – PART II

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
163P	B. Allgaier	Germany
164P	S. Suriyapee I. Israngkul Na Ayuthaya T. Sanghangthum S. Oonsiri C. Vannavijit C. Jumpangern	Thailand
165P	P. Haering B. Rhein S. Klemm E. Janisch	Germany
166P	O.A. García- Garduño M. Rodríguez- Villafuerte J.M. Lárraga- Gutiérrez L. Celis	Mexico
167P	M. Todorovic M. Fischer R. Schmidt	Germany
168P	V. Swamidas- Jamema S. Dayananda S. Sherly J.P. Agarwal G.L. Sarbani et al.	India
169P	G. Králik E. Boljesikova	Slovakia

Title of Poster

Patient plan-related beam verification in IMRT
Analysis of pre-treatment QA in dynamic IMRT fields

A leaf positioning accuracy test derived from measured IMRT
fluence distributions

Dosimetry verification using radiochromic film for intensity-
modulated radiation surgery

External beam dose verification with GafChromic EBT film

Dosimetric comparison and QA of 3D conformal and intensity-
modulated radiotherapy (IMRT) for para nasal sinus carcinoma

MIMiC IMRS and IMRT delivery system

Tuesday, 16:10–18:00, SESSION 8, cont'd.

Related POSTERS, 8a – PART II

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
170P	B. Rhein P. Häring S. Klemm E. Janisch G.H. Hartmann	Germany
171P	A.P. Hoffmann	Germany
173P	M.P.R. Waligórski E. Byrski L. Czopyk M. Klosowski D. Kozyra et al.	Poland
176P	G.H. Hartmann F. Sánchez-Doblado M. Paiusco	EFOMP Spain Italy
177P	M.E. Castellanos H.G. Barreto	Colombia

Related POSTERS, 8a – PART III

178P	J. Satti M. Hoffman M. Qureshi	USA
179P	J.W. Andrew G.S. MacNevin J.I. Hale	Canada
180P	I.N. Neycheva M.P. Yaneva V.G. Andreev M.V. Sopadjeva	Bulgaria
181P	I. Nogueira Smith	AAPM
182P	O.A. Sauer J. Wilbert	Germany
183P	R. Bar-Deroma O. Keren A. Kuten	Israel

Title of Poster

Dose verification for step-and-shoot IMRT and its feedback potential to improve the dose calculation with the treatment planning system by modifying the input for pencil beam kernels used in the TPS

In vivo QC of beam deliveries to patients in IMRT

Application of 2D LiF TLD foils to the QA programme of the M3 micro-multileaf collimator

Uncertainty estimation in IMRT dosimetry verification: measurements and Monte Carlo simulations

Multi-segment IMRT verification with a 2D ion chamber array: Dosimetric results

Window-based MU calculator for independent dosimetry check in routine radiation oncology practice

A method for carrying out backup QA calculations on plans produced using modern radiotherapy planning systems

QA tests and software tools relevant to accuracy of treatment planning taking into account inhomogeneity correction in dose computations

Evaluation of Argus IMRT for routine IMRT QA

Monitor unit calculation by means of a functional representation of output factors and tissue phantom ratios

Can record and verify systems eliminate radiotherapy delivery errors? The Rambam Medical Center experience

Tuesday, 16:10–18:00, SESSION 8, cont'd.

Related POSTERS, 8a – PART IV

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
184P	I. Mrčela M. Budanec Z. Kusić T. Bokulić	Croatia
185P	C.C.B. Viegas A. Viamonte A.M. Campos M.A. Leal S. Fernandes P. Clivland	Brazil
186P	J. Witych J. Miedzinska P. Kukolowicz	Poland
187P	Suming Luo Weiguo Zhu Zhijian He Jie Qiu Kaibao Li	China
188P	J.-B. Chung J.-W. Lee D.-H. Lee K.S. Choi Y.-L. Kim et al.	Korea, Republic of

Title of Poster

In vivo dosimetry with silicon diodes for Co-60 beams

In vivo entrance dose measurements with TLD in pelvis and head and neck cancer treatment in radiotherapy

In vivo dosimetry in HDR brachytherapy of prostate cancer - Preliminary results

Development of TLD procedure for in vivo dosimetry for photon beams in radiotherapy

Comparison of performance and development of the home made phantom for evaluating the characteristics of the standard MOSFET and microMOSFET

Tuesday, 16:10–18:00, SESSION 8, cont'd.

Hall GH **8b: Radiation Imaging
Bone Densitometry and Dosimetry
for Diagnostic X rays**

Chair: **R. Nowotny, Austria**
Vice-Chair: **L. Davidsson, IAEA**
Rapporteur: **B. Wall, UK**

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
068 (invited)	J. Shepherd	USA
069	W.T.K. Lee A. Cheung J. Lau L. Qin J.C.Y. Cheng	UK China
070	F. Pernicka G. Alm Carlsson D.R. Dance L.A. DeWerd H.-M. Kramer et al.	Czech Republic Sweden UK AAPM Germany
071	P. Toroi T. Komppa A. Kosunen	Finland
072	L. Novák	Czech Republic
073	A.D.A. Maidment	USA

Title of Paper

Quantitative measurements of body composition: State of the art and QA processes

Bone mineral density (BMD) composite index scores developed from bone densitometry (DXA and QCT) simplifies correlative and predictive analyses in adolescent's bone health

IAEA code of practice for dosimetry in diagnostic radiology

A tandem calibration method for kerma-area product meters

A proper method of kerma-length product measurement during QC procedures in panoramic radiography

Poster review: Summary of posters on bone densitometry and dosimetry for diagnostic X rays

Tuesday, 16:10–18:00, SESSION 8, cont'd.

Related POSTERS, 8b

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
189P	W.T.K. Lee Y.K. Tse C.S.K. Cheung W.W. Chau L. Qin J.C.Y. Cheng	UK China
190P	J. Gray C. Perks B. Markey M. Salasky R.C. Yoder	USA France USA
191P	P. Pöyry T. Komppa A. Kosunen	Finland
192P	L. Novák S. Trampotová L. Judas	Czech Republic
193P	J.G.P. Peixoto	Brazil
194P	M. Kostor	Malaysia
195P	M.P. Albuquerque Potiens L.V.E. Caldas	Brazil
196P	S. Zielinska- Dabrowska P.F. Kukolowicz	Poland
270P	A. Larkin N. Sheahan U. O'Connor L. Gray A. Dowling J. Malone	EFOMP

Title of Poster

Longitudinal tracking of bone mineral density (BMD) trajectory and its association with curve severity in adolescent girls (12–17 year old) with adolescent idiopathic scoliosis (AIS) - The use of DEXA and pQCT instruments

Optically stimulated luminescent dosimetry material for QA in radiation medicine

X ray beam quality specification for kerma area product meters

National standards of effective dose calculation for diagnostic and interventional radiology procedures

The Brazilian calibration network for radiodiagnostics

Patient dose measurements for establishing reference levels for medical exposure in diagnostic radiological procedures in Malaysia

Implementation of a QA programme at the diagnostic radiology calibration laboratory of IPEN

Evaluation of usefulness of a metal oxide semiconductor field effect transistor (MOSFET) dosimeters for the measurement of entrance surface dose in diagnostic radiology

Quality assurance of dual energy X ray absorptiometry (DEXA) systems

Tuesday, 16:10–18:00, SESSION 8, cont'd.

Hall IK **8c: Radiation Imaging
QA of Radiopharmaceuticals and
Radioactivity Measurements**

Chair: **S.J. Mather, UK**
Vice-Chair: **K. Solanki, IAEA**
Rapporteur: **B.E. Zimmerman, USA**

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
074 (invited)	S.J. Mather	UK
075	K. Solanki	IAEA
076	B.E. Zimmerman	USA
077	M.M. Ishfaq H. Nizakat M. Jehangir	Pakistan
078	M. Marengo S. Boschi D. Pancaldi G. Cicoria R. Zannoli C. Bergamini	Italy

**POSTERS related to QA of Nuclear Medicine Instrumentation,
Radiopharmaceuticals and Radioactivity Measurements**

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
197P	L. Torres Aroche M.A. Coca Pérez G.M. López A. López C. Varela et al.	Cuba
198P	T. Sontrapornpol P. Pasawang A. Krisanachinda	Thailand
199P	P. Monnin R. Linder P. Trueb S. Baechler J. Malterre et al.	Switzerland

Title of Paper

QA of radiopharmaceuticals

Strengthening radiopharmacy related quality programmes by the IAEA

Results of an international comparison of iodine-131 among national laboratories: Establishing measurement traceability for radioactivity in medicine

Preparation, QC and biological evaluation of ^{177}Lu -DOTA-Tyr3-octreotate

Installation of a biomedical cyclotron: Acceptance tests and QA procedures

Title of Poster

Establishment of a national programme for QC of nuclear medicine instruments in Cuba

QC of multiple detector SPECT systems at King Chulalongkorn Memorial Hospital

Swiss requirements concerning gamma camera acceptance and status testing

Tuesday, 18:00–19:00, PARALLEL POSTER SESSIONS

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
200P	S. Taştan K.M. Kır N.Ö. Küçük S. Tunca B. Şahin A. Akin	Turkey
201P	K. Kossert K. Thieme	Germany
202P	F.L.N. Marques D.P. Faria M.R.Y. Okamoto I.B. Mello A.S. Yamada C.A. Buchpiguel <i>Presented by:</i> C.C. Robilotta	Brazil
203P	A. Rivero Santamaria F. Zayas Crespo N. Mesa Duenas Y. Alfonso Marin	Cuba
204P	M. Avila J. Hernández X. Errazu R. Becerra	Chile
205P	F. Bonutti S. Bortulus E. Cataruzzi E. Cragolini M. Floreani et al.	EFOMP
206P	P. Oropesa M.J.Woods V. Olšovcová J.A. dos Santos	Cuba
207P	S. Rasaneh H. Rajabi A. Hajizade	Iran, Islamic Republic of
208P	B.Y. Narkevich S.V. Shiryayev <i>Presented by:</i> G.E. Gorlachev	Russian Federation

Title of Poster

Acceptance tests of a new gamma camera

Comparison for QA of ^{99m}Tc activity measurements with radionuclide calibrators

QC of $^{99}\text{Mo}/^{99m}\text{Tc}$ generator between 2003 and 2005 in two nuclear medicine laboratories in Brazil

Comparison of two systems of paper chromatography for a fast determination of radiochemical purity of ^{99m}Tc -MAG3

Radiopharmaceutical quality of ^{18}F -FDG QA/QC produced by the Cyclotron Laboratory, Chilean Nuclear Energy Commission

Count-rate analysis from clinical scans in PET with LSO detectors

Radionuclide calibrator comparisons and quality improvement in nuclear medicine

Alternative fast methods for calculation of non-uniformity in nuclear medicine images: Comparison with conventional method

Correlation of QA and radiation safety problems in nuclear medicine

Tuesday, 18:00–19:00, PARALLEL POSTER SESSIONS

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
209P	C.C. Robilotta F.L.N. Marques M.F. de Barboza M.T. Sapienza	Brazil
210P	W. Eschner F. Sudbrock M. Wild M. Dietlein C. Kobe et al.	Germany
211P	M. Núñez K. Kacperski B. Hutton	Uruguay
212P	J.A. Santos I. Paula M.A. Fonseca L. Pereira T. Coutinho et al.	Portugal
213P	D. Bor D. Demirag M. Tuncel T. Toklu M. Caglar	Turkey
214P	J.J. Zakhun H. Schucktanz S. Prechtl S. Wasmayer	IAEA Austria
215P	D. D'Ambrosio A. E. Spinelli C. Pettinato C. Bergamini M. Marengo et al.	Italy
216P	J. Isidoro D. Freitas M. Cunha A. Ferrer-Antunes	Portugal
217P	H.M.A.K. Al-Azzawi A.M. Al-Hilli N.H. Agha I.F. Al-Jumaili	Iraq

Title of Poster

Training of nuclear medicine technical staff by the Brazilian Society of Nuclear Medicine and Biology

Patient-specific dosimetry in radioiodine therapy for thyroid disease: Optimization of computational procedure

Quantitative lung SPECT without transmission acquisition: Potential applications in 3D patient-specific dosimetry and in evaluation of treatment response

Patient characteristics criteria for adjusting ^{18}F -FDG administered activity for PET: weight, body mass index and DuBois skin surface area

The effects of acquisition and processing techniques on myocardial SPECT

Simple and fast camera-based QC of $^{99\text{m}}\text{Tc}$ -HMPAO radiopharmaceutical purity

Acceptance and routine tests for a small animal PET scanner

Comparison of ^{123}I FP-CIT SPECT acquisition protocols

Comparative radioanalytical and biokinetic studies of $^{99\text{m}}\text{Tc}$ -Tin and $^{99\text{m}}\text{Tc}$ -sulphur colloid kits

Tuesday, 18:00–19:00, PARALLEL POSTER SESSIONS

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
218P	J.A. Santos A. Iwahara I.G. Nicoli A.M. Xavier	Brazil
219P	M. Diemling J.J. Zaknun	EANM IAEA
220P	M. Diemling J.J. Zaknun	EANM IAEA
221P	I. Bahnarel L. Coretchi I. Chiruta	Republic of Moldova
222P	S.M.D. Al-Nuzal H.M.A.K. Al-Azzawi N.H. Agha	Iraq

18:00–19:00

PARALLEL POSTER SESSIONS

Hall D

Hall GH

Hall IK

Stream a (Radiation Treatment) Posters

Stream b (Diagnostic Radiology) Posters

Stream c (Nuclear Medicine) Posters

Title of Poster

Analysis of Brazilian comparison programme for radionuclides activity measurements used in nuclear medicine -
Implementation of a national metrology network

QA of long distance training courses

QC of nuclear medicine data collected in a worldwide network

Some aspects of QA in radiation medicine in the Republic of Moldova

QC studies and biological evaluations of three locally produced renal pharmaceutical preparations: ^{99m}Tc -DTPA, ^{99m}Tc -GH, and ^{99m}Tc -DMSA

WEDNESDAY, 15 NOVEMBER 2006

08:30–10:20 **SESSION 9: PLENARY IV**

Hall D **Education and QA-related Activities**

Chair: **P. Andreo, IAEA**
Vice-Chair: **A. Meghzifene, IAEA**
Rapporteur: **R. Fulton, IAEA**

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
079	G. Hanson C. Borrás P. Jiménez	PAHO
080	P. Grenier	ESR
081	H. Amols	AAPM
082	K. Inamura <i>Presented by:</i> J. Drew	AFOMP IAEA
262	R. Pötter C. Verfaillie	ESTRO
263	T. Eudaldo K. Olsen	EFOMP
264	M.-E. Brandan	IOMP
266	H. Zoetelief A. Wambersie	ICRU

Related POSTERS, 9 – Plenary IV

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
223P	A.M. Campos de Araujo R.S. Souza E.E.M. Arreguy C.C.B. Viegas P.P. Pereira Jr. et al.	Brazil
224P	V.A. Kostylev N.V. Sinyagovskaya M.V. Kisliakova	Russian Federation

10:20–10:40 *Coffee Break*

Title of Paper

The Pan American Health Organization's programmes on QA and QC in radiation medicine: Historical perspective

Transposition of the European Directive (Euratom 97/43) in European countries: A survey and an example from France

Educational activities of the American Association of Physics in Medicine

The problems to be solved and a proposed action plan in education and training of medical physics in Asia Oceania Region

ESTRO educational activities in radiation oncology

The present status of medical physics education and training in Europe. EFOMP recommendations

Education of medical physicists

Recent activities of the International Commission on Radiation Units and Measurements (ICRU) on medical applications of ionizing radiation

Title of Poster

The use of electron beams in radiotherapy: 1st e-learning course in Latin America

System of continuing education and professional development of medical radiation physicists in Russia

10:40–12:30

SESSION 10: PARALLEL SESSIONS

Hall D

**10a: Radiation Treatment
Dosimetry Audits in Radiotherapy**

Chair:

D.I. Thwaites, UK

Vice-Chair:

J. Izweska, IAEA

Rapporteur:

D. Georg, Austria

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
084	G. Ibbott D. Followill A. Molineu P. Alvarez N. Hernandez	USA
085	D.I. Thwaites A. Nisbet C. Blyth	UK
086	M.A. Ebert K. Harrison J. Denham D. Cornes S. Howlett C.S. Hamilton	Australia
087	S. Onori C. De Angelis	Italy
088	J. Izweska D. Georg P. Bera D.I. Thwaites M. Arib	IAEA Austria IAEA UK Algeria
089	W. Bulski J. Rostkowska M. Kania S. Gwiazdowska	Poland
090	D. Georg	Austria

Title of Paper

Experience gained from the RPC's credentialing programmes for advanced technology clinical trials

Inter-centre radiotherapy dosimetry audits in Scotland: Feasibility of in vivo audits using diodes

QA of conformal radiotherapy for multi-centre radiotherapy trials in Australasia

Intra operative electron radiation therapy (IOERT) dosimetry intercomparison in Italy

Development of a methodology for TLD postal dosimetry audit of high-energy radiotherapy photon beams in non-reference conditions: An IAEA coordinated research project

TLD audits in radiotherapy centres in Poland (non-reference conditions)

Poster review: Summary of posters on dosimetry audits in radiotherapy

Wednesday, 10:40–12:30, SESSION 10, cont'd.

Related POSTERS, 10a

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
225P	M. Arib T. Medjadj B. Hattali F. Dari	Algeria
226P	M. Arib T. Medjadj B. Hattali F. Dari M. Tilmati A. Toutaoui	Algeria
227P	K.M. Sergieva Z. Buchakliev G. Ivanov V. Dimitrova V. Staykova N. Gesheva	Bulgaria
228P	J. Valenta D. Ekendahl	Czech Republic
229P	A. Viamonte C.C.B. Viegas L.A.R. Rosa A.M. Campos de Araujo R.S. Souza	Brazil
230P	D. Boffelli L. Molina A. Stefanic M. Saravi	Argentina
231P	C.C.S. Guzmán L.N. De Oliveir F. Chen A. de Almeida O. Baffa C.E. de Almeida	Peru Brazil
232P	N.H. Quyet T.N. Toan D.D. Nhan D.T. Luong N.X. Ku	Vietnam

Title of Poster

Audit of radiotherapy beams in non-reference conditions: Results of the pilot studies

Beam calibration check with TLD: Experimental determination of the holder effect

The results from external TLD audit in reference and non-reference conditions in Bulgarian radiotherapy centres

TLD audit in radiotherapy in the Czech Republic

Postal audit in reference and non-reference conditions in Brazil

A programme for dose quality audits for high-energy radiotherapy beams in non-reference conditions in Argentina

Implementation of an absorbed dose postal QA programme for radiosurgery

QA status of radiotherapy in Vietnam

Wednesday, 10:40–12:30, SESSION 10, cont'd.

Related POSTERS, 10a

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
233P	D. Followill G. Ibbott A. Molineu P. Alvarez N. Hernandez	USA
234P	S. Vatnitsky J. Izewska P. Bera K.R. Shortt	IAEA

Hall GH

**10b: Radiation Imaging
QA for Diagnostic Radiology**

Chair:

K. Faulkner, EFOMP

Vice-Chair:

I.D. McLean, IAEA

Rapporteur:

C.-L. Chapple, EFOMP

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
091 (invited)	A.D.A. Maidment	USA
092	P.A. Hiles	UK
093	A. Aroua P.R. Trueb S. Baechler F.R. Verdun	Switzerland
094	A Hammou L. Ben Omrane M. Mogaadi W. Douira I. Ballagha	Tunisia, Republic of
095	F. Saghatchi M. Salouti M.T. Bahreini	Iran, Islamic Republic of
096	P.R. Costa T.A.C. Furquim	Brazil

Title of Poster

Credentialing for advanced technology clinical trials using anthropomorphic phantoms

The IAEA/WHO TLD postal dose audits as a tool for evaluating the status of dosimetry practices in radiotherapy hospitals in developing countries

Title of Paper

Clinical teleradiology and PACS QA

A summary of the latest UK guidance on routine performance testing of diagnostic X ray imaging systems, including simple but effective regular operator performance tests

Investigation of the fluoroscopy units used in radiology and cardiology

Reject film analysis in a pediatric radiological department of Tunis

QC of X ray machines in the hospitals of the Medical Sciences University of Zanjan

QC in imaging departments in São Paulo/Brazil: A 10 year experience at a public university

Wednesday, 10:40–12:30, SESSION 10, cont'd.

Related POSTERS, 10b

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
235P	S.A. Rahimi	Iran, Islamic Republic of
236P	K. Grymek M. Wasilewska- Radwańska E. Araszkiwicz A. Ploszaj	Poland
237P	L. Gray A. Dowling D. Gorman U. O'Connor A. Larkin et al.	EFOMP
238P	M.C. Lopes M.C. de Sousa S. Bras	Portugal
239P	J.M. Jiménez M. Paraiso C. Ruiz de Vergara	Spain
240P	M. Majali	Jordan
241P	P.R. Costa T.A.C. Furquim P.R.C. Oliveira	Brazil
126P	A. Gallagher A. Dowling D. Gorman M. Devine U. O'Connor et al.	EFOMP
123P	K. Faulkner J.F. Malone E. Vano Carruana R. Padovani H.P. Busch et al.	EFOMP

Title of Poster

Study on the performance of recommended standards in the diagnostic radiology units of the hospitals affiliated to the Mazandaran University of Medical Sciences

REX phantom and CONNY II dosimeter as examples of applied tools for QA in diagnostic radiology

QA of film/screen general radiographic X ray systems: Mobile units and fixed installations

QA in radiology: Local diagnostic reference levels and information to the patient

Patient dose reduction in single radiographs

New technique for performing daily QC tests by using flatbed scanner

Development of low cost integrated phantoms for optimization of QC programmes in accordance with Brazilian regulations

Acceptance testing and QA in dental radiology

The Sentinel Project

Wednesday, 10:40–12:30, SESSION 10, cont'd.

Related POSTERS, 10b

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
268P	J. Vassileva A. Dimos M. Stoeva S. Avramova	Bulgaria
274P	R. Wolf P. Brosi P. Vock	Switzerland

Hall IK

**10c: Radiation Imaging
EANM Perspectives on Quality
Management in Nuclear Medicine
Practice**

Chair: A. Bischof-Delaloye, Switzerland
Vice-Chair: M. Dondi, IAEA
Rapporteur: J. Zaknun, IAEA

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
097 (invited)	M. Lyra R. Klett W.B.Tindale	EANM
098 (invited)	M. Bardies C. Chiesa G. Flux M. Monsieurs S. Savolainen S.-E. Strand M. Lassmann	EANM
099 (invited)	C. Decristoforo	EANM

12:30–14:00 *Lunch Break*

LUNCH FORUM II: Refresher Course on Radiobiology

267 **J.H. Hendry** IAEA
E.H. Zubizarreta

Title of Poster

Quality control in diagnostic radiology in Bulgaria – Regulation, implementation, procedures, first results

DoseWatchers – A computer based X ray dose monitoring project in paediatric radiology

Title of Paper

Guidelines on QC for nuclear medicine instrumentation

Dosimetry in nuclear medicine (Quo vadis?)

The sense or non-sense of centralized radiopharmacy services

iology

Developments in applied and clinical radiobiology

Part 1: Growing points in radiobiology research applied to radiotherapy

Part 2: Fractionation, treatment duration and dose-rate effects

14:00–15:50

SESSION 11: PARALLEL SESSIONS

Hall D

**11a: Radiation Treatment
Applications of Dosimetry and QA in Radiotherapy**

Chair:

J. Van Dyk, Canada

Vice-Chair:

J. Drew, IAEA

Rapporteur:

M.A. Ebert, Australia

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
103 (invited)	D.I. Thwaites	UK
104	L.A. DeWerd J. VanDamme S. Davis W. Culberson	AAPM
105	H.-M. Kramer R.-P. Kapsch	Germany
106	E. Moretti M.R. Malisan A. Trianni R. Padovani	Italy
107	P. DeJean R. Senden K. McAuley C. Peters L.J. Schreiner	Canada
108	M.A. Ebert	Australia

Title of Paper

Clinical dosimetry and QA for radiotherapy: Developments in methods, applications and accuracy

Advances in calibration of high dose rate brachytherapy sources

The use of plane-parallel chambers in electron dosimetry without cross calibration

Use of radiochromic films to calibrate a high dose-per-pulse electron accelerator for intraoperative radiation therapy (IORT)

Assessment of optical computed tomography for polymer gel dosimetry

Poster review: Summary of posters on applications of dosimetry and QA in radiotherapy

Wednesday, 14:00–15:50, SESSION 11, cont'd.

Related POSTERS, 11a

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
243P	A.K. Mahant	India
244P	K.E. Malkoske B.M.C. McCurdy D.W. Rickey	AAPM
245P	J.E. Lah H.S Kim J.S. Jang Y.N. Kang D.O. Shin T.S. Suh	Korea, Republic of
246P	D.I. Thwaites C. McKerracher A.M. Morgan A. McCabe C. Evans et al.	UK
247P	F.C.S. Teixeira M.H. Maréchal R.F. Gutterres	Brazil
248P	J. Byrne K. Roxborough J. Stacey	EFOMP
249P	I. Kristensen T. Knöös <i>Presented by:</i> P. de Munck	Sweden
250P	J. Lee S. Hong Y. Kim K. Choi J. Chung et al.	Korea, Republic of
251P	V.S. Khrunov S.S. Martynov A.M. Chervjakov A.G. Molokanov S.A. Popov	Russian Federation

Title of Poster

Development of a reference standard for brachytherapy sources

Evaluation of three calibration techniques for amorphous silicon EPID dosimetry

Evaluation of radiophotoluminescent glass rod detector for small field dosimetry; measurement of output factor in water for CyberKnife

Practical approaches to small field dosimetry for radiotherapy

Evaluating the performance of commercial systems of QA for radiotherapy facilities: A case study

A modern radiotherapy department equipment QC system

Periodic QC of linear accelerators with an electronic diode matrix

Dosimetric characterization of an ion chamber matrix for radiotherapy QA

QA programme based on clinical dosimeter with diamond detector

Wednesday, 14:00–15:50, SESSION 11, cont'd.

Hall GH

**11b: Radiation Imaging
Interventional Radiology**

Chair:

E. Vano Carruana, Spain

Vice-Chair:

M. Rehani, IAEA

Rapporteur:

P. Vock, ESR

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
109 (invited)	B. Wall	UK
110	A. Dowling A. Gallagher C. Walsh A. Larkin U. O'Connor et al.	EFOMP
111	C. Maccia O. Bar J. Donadieu P. Pagès S. Sinno-Tellier P. Pirard	France
112	C.-L. Chapple I. Birch J. Willis C.J. Kotre	EFOMP
113	N. Manatrakul T. Lirdvilai K. Ariyadet S. Karaket S. Klomkaew	Thailand
114	A.N. Al-Haj A.M. Lobriguito W. Rafeh A. Al-Humaidan	Saudi Arabia

Title of Paper

The role of diagnostic reference levels in patient dose reduction

Acceptance testing and QA in interventional cardiology

Technical factors influencing patient received dose in interventional cardiology

Patient dose surveys: Improving and utilizing the data

Patient and staff exposure during cardiac catheterization

Optimization of radiation protection in pediatric cardiac catheterization procedures

Related POSTERS, 11b

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
252P	E. Vano Carruana A. Segarra Medrano M.A. García Fidalgo T. Ballester Mol M.M. Soler Cantos et al.	Spain
253P	M. Ramanandraibe G. Randrianantoandro R. Andriambololona	Madagascar
254P	E. Cotelo G. Paolini A. Duran	Uruguay
255P	R. Padovani K. Faulkner E. Vano Carruana H. Bosmans A. Dowling et al.	EFOMP
256P	R. Borisova J. Vassileva A. Zagorska A. Dimov	Bulgaria
257P	D. Nikodemova K. Böhm D. Salat	Slovakia
258P	E. Papageorgiou J. Dadous V. Tsapaki I.A. Tsalafoutas S. Kottou V. Neofotistou	Greece
259P	S. Jovanovic	EFOMP
260P	D.S. Soejoko W. Koesharyono F. Sukma K. Dadi F. Ginting	Indonesia

Title of Poster

Basic QC to support a national survey on patient dosimetry in interventional dosimetry

Patient doses assessment in diagnostic radiology: Preliminary guidance levels in Madagascar (GLs)

QA in interventional cardiology: The lessons learned

Assessment of the level of optimization of the interventional cardiology practice – The Sentinel Project

Patient and staff doses in interventional cardiological procedures

Management of patient and staff doses in interventional radiology

Comparison of radiation doses in permanent cardiac pacemaker implantation in three Greek hospitals

Radiation medicine in Montenegro - Regulatory control first!

Radiation exposure to patient and staff in interventional radiology of hepatoma: A preliminary study

Wednesday, 14:00–15:50, SESSION 11, cont'd.

Related POSTERS, 11b

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
261P	S. Pellet K. Faulkner E. Vano Carruana R. Padovani F. Giczi et al.	Hungary UK Spain Italy Hungary
125P	U. O'Connor A. Dowling A. Gallagher D. Gorman C. Walsh et al.	EFOMP

Hall IK

**11c: Radiation Imaging
National QA Implementation in
Nuclear Medicine**

Chair: A. Ellmann, South Africa
Vice-Chair: K. Knešaurek, USA
Rapporteur: M.G. Stabin, USA

<i>No of Paper IAEA-CN-146/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>
115 (invited)	R. Nicoletti	Austria
116	M.A. Coca Pérez L.A. Torres Archo G.M. López C. Varelac M. Diaz et al.	Cuba
117	H. Korpela R. Parkkinen	Finland
118	D. Eiselen A. Ellmann	South Africa
119	V. Husák Z. Pasková K. Petrová J. Ptáček	Czech Republic
120	A. Celler	Canada

15:50–16:10 *Coffee Break*

Title of Poster

Hungarian contribution to the Sentinel Project

Acceptance testing of fluoroscopy systems used for interventional purposes

Title of Paper

SPECT: How much acceptance testing is reasonable?

Inter-comparative study to evaluate the current state of gamma cameras and SPECT systems in Cuba

Survey on QC measurements of nuclear medicine imaging equipment in Finnish hospitals

Implementation of a trace document as part of a QA programme in a nuclear medicine department

Five-year experience in the Czech Republic with the State Office for Nuclear Safety (SONS). Recommendations for QA system at the Departments of nuclear medicine, instruments, and intended amendments

Quality control programme established in the Nuclear Medicine Department of the Vancouver Coastal Health Authority Hospitals

16:10–17:50

SESSION 12: PLENARY V

Hall D

Closing Session

Chair:

A.D.A. Maidment, USA

Vice-Chair:

K.R. Shortt, IAEA

Rapporteur:

H. Amols, AAPM

- Session Summaries
- Discussions
- Findings and Recommendations

17:50–18:00

Closing of the Conference

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Governments of Member States and those organizations whose activities are relevant to the meeting subject matter are invited to designate participants to IAEA scientific conferences and symposia. In addition, the IAEA itself may invite a limited number of scientists as invited speakers. Only participants designated or invited in this way are entitled to present papers and take part in the discussions.

Representatives of the press, radio, television or other information media and members of the public, the latter as "observers", may also be authorized to attend, but without the right to take part in the proceedings.

Scientists interested in participating in any of the IAEA meetings should request information from the Government authorities of their own countries, in most cases the Ministry of Foreign Affairs or national atomic energy authority.

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Proceedings

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AGENCY PUBLICATIONS RELATED TO THE SUBJECT OF THE CONFERENCE

STI/PUB/1198	Nuclear Medicine Resources Manual	2006
IAEA TRS-xxx	Dosimetry in Diagnostic Radiology: An International Code of Practice (approved for publication in 2007)	(in press)
IAEA-TECDOC-1517	Control de Calidad en Mamografía, in Spanish	2006
IAEA TRS-454	Quality Assurance for Radioactivity Measurement in Nuclear Medicine	2006
Safety Reports Series No. 47	Radiation Protection in the Design of Radiotherapy Facilities	2006
Safety Reports Series No. 38	Applying Radiation Safety Standards in Radiotherapy	2006
IAEA-TECDOC-1488	Radiological Protection Issues in Endovascular Use of Radiation Sources	2006
STI/PUB/1196	Radiation Oncology Physics: A Handbook for Teachers and Students	2005
IAEA-TECDOC-1455	Implementation of the International Code of Practice on Dosimetry in Radiotherapy (TRS-398): Review of Testing Results	2005
Safety Reports Series No. 40	Applying Radiation Safety Standards in Nuclear Medicine	2005
Training Course Series No. 25	A Syllabus for the Education and Training of RTTs (Radiation-Therapists/Therapy Radiographers)	2005
IAEA-TECDOC-1447	Optimization of the Radiological Protection of Patients: Image Quality and Dose in Mammography (Coordinated Research in Europe)	2005

AGENCY PUBLICATIONS RELATED TO THE SUBJECT OF THE CONFERENCE (continued)

IAEA TRS-430	Commissioning and Quality Assurance of Computerized Planning Systems for Radiation Treatment of Cancer	2004
IAEA-TECDOC-1423	Optimization of the Radiological Protection of Patients Undergoing Radiography, Fluoroscopy and Computed Tomography	2004
Proceedings Series	Standards and Codes of Practice in Medical Radiation Dosimetry. Proceedings of an International Conference in Vienna, Austria, 25-28 November 2002	2003
STI/PUB/1141	IAEA Quality Control Atlas for Scintillation Camera Systems	2003
IAEA-TECDOC-1331	Use of Electron Paramagnetic Resonance Dosimetry with Tooth Enamel for Retrospective Dose Assessment	2002
IAEA-TECDOC-1274	Calibration of Photon and Beta Ray Sources Used in Brachytherapy	2002
IAEA-TECDOC-1297	Predictive Assays and Their Role in Selection of Radiation as the Therapeutic Modality	2002
Safety Standards Series No. RS-G-1.5	Radiological Protection for Medical Exposure to Ionizing Radiation Safety Guide	2002
IAEA TRS-403	Compendium of Neutron Spectra and Detector Responses for Radiation Protection Purposes Supplement to TRS 318	2002

FORTHCOMING SCIENTIFIC MEETINGS SCHEDULED BY THE IAEA

2006

International Conference on Lessons Learned from Decommissioning of Nuclear Facilities and the Safe Termination of Nuclear Activities

11–15 December, Athens, Greece

2007

International Conference on Nuclear Power Process Heat Applications

16–19 April, Oarai, Japan

International Conference on the Challenges faced by Technical and Scientific Support Organizations in Enhancing Nuclear Safety

23–27 April, Aix-en-Provence, France

International Conference on Environmental Radioactivity: From Measurement and Assessment to Regulation

23–27 April, Vienna, Austria

International Symposium on Advances in Isotope Hydrology and its Role in Sustainable Water Resources Management

21–25 May, Vienna, Austria

International Conference on Knowledge Management in Nuclear Facilities

18–21 June, Vienna, Austria

Second International Symposium on Nuclear Power Plant Life Management

15–18 October, Shanghai, China

International Conference on Research Reactors: Management and Effective Utilization

5–9 November, Sydney, Australia

International Symposium on Clinical PET and Molecular Medicine

10–14 November, Bangkok, Thailand

International Conference on Illicit Trafficking

December

For information on forthcoming scientific meetings, please consult the IAEA website: <http://www.iaea.org/meetings>

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