

International Symposium on Food Safety and Quality: Applications of Nuclear and Related Techniques

10–13 November 2014, Vienna, Austria

PROGRAMME

Organized by the



Joint FAO/IAEA Programme
Nuclear Techniques in Food and Agriculture

CN 222

Organized by the



Joint FAO/IAEA Programme
Nuclear Techniques in Food and Agriculture

Symposium Chair: Z. Ye China

Scientific Committee:

A. Cannavan	IAEA
Z. Jandric	IAEA
C. Blackburn	IAEA
R. Frew	IAEA
B. Maestroni	IAEA
Y. Henon	IAEA
J. Corley	IAEA
J. Sasanya	IAEA
C. Elliott	UK
V. Fattori	FAO
P. Brereton	UK
S. Pillai	USA
A. Ambrus	Hungary
A. Prakash	USA

IAEA Secretariat:

Scientific Secretaries: D. Byron
A. Cannavan

Assistant Scientific Secretary: Z. Jandric

Symposium Organizer: J. Zellinger

Administrative Support: L. Chen
K. Viitaniemi
E. Nacif

Location of the Symposium:

International Atomic Energy Agency
Vienna International Centre (VIC)
M Building, Board Room B/M1
Wagramer Strasse 5
1400 Vienna, Austria

Tel.: (+43 1) 2600 21321
Fax: (+43 1) 2600 7

Working Language: English

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

TIMETABLE

Monday, 10 November 2014

08:00	Registration	M Building Ground Floor
10:00–11:00	Opening Session	
11:00–12:20	Plenary Session	
12:20–14:00	Lunch Break	
14:00–15:20	Session 1	Food Analysis & Food Control Systems
15:20–15:50	Coffee/Tea Break	
15:50–18:30	Session 1	Food Analysis & Food Control Systems
18:30–20:30	Reception	

Tuesday, 11 November 2014

08:30–10:30	Session 2	Food Forensics
10:30–11:00	Coffee/Tea Break	
11:00–12:40	Session 2	Food Forensics
12:40–14:00	Lunch Break	
14:00–15:30	Session 3	Food Irradiation and Processing
15:30–16:00	Coffee/Tea Break	
16:00–18:00	Session 3	Food Irradiation and Processing

Wednesday, 12 November 2014

08:30–10:30	Session 4	Emerging Issues
10:30–11:00	Coffee/Tea Break	
11:00–12:00	Session 4	Emerging Issues
12:00–12:30	Discussion Session	
12:30–14:00	Lunch Break	
14:00–15:30	Session 5	Food and Feed Safety – Risk Based Monitoring
15:30–16:00	Coffee/Tea Break	
16:00–17:00	Session 5	Food and Feed Safety – Risk Based Monitoring
17:00–18:00	Poster Session	
18:00–20:00	Exhibitors' Reception	

Thursday, 13 November 2014

08:30–10:30	Session 6	Enhancing International Trade
10:30–11:00	Coffee/Tea Break	
11:00–11:40	Session 6	Enhancing International Trade
11:40–12:30	Discussion Session	
12:30–14:00	Lunch Break	
14:00–15:20	Session 7	Developing Country Challenges
15:20–15:50	Coffee/Tea Break	
15:50–16:30	Session 7	Developing Country Challenges
16:30–17:00	Discussion Session	
17:00	Closing	

Display of Posters:

Posters will be on display throughout the proceedings.

Dedicated Poster Session: Wednesday 12 November 2014, 17:00–18:00

**Commercial exhibits will be shown in the common area in M01 and M0E.
From Monday to Thursday, 10–13 November 2014.**

MONDAY, 10 NOVEMBER 2014

08:00 **Registration and distribution of
Symposium material**

10:00–11:00 **OPENING SESSION**

K. Aning, IAEA
Deputy Director General,
Head of Department of
Technical Cooperation

Senior Representative of FAO

Q. Liang, IAEA
Director
Head of Joint FAO/IAEA Division of
Nuclear Techniques in Food and Agriculture

C. Krejci, Austria
Department Head
Food Law, Food Safety and Food Quality
Austrian Federal Ministry of Health

11:00–12:20 **OPENING PLENARY SESSION**

Chairperson: **Q. Liang, FAO/IAEA**

<i>Time</i>	<i>No. of Paper IAEA-CN-222/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
11:00–11:20	80	Z. Ye	China	Application of nuclear technology in research on agrifood safety and authenticity in China
11:20–11:40	N/A	D. Prater	USA	Importance of food safety and quality standards in international trade of food and feed commodities
11:40–12:00	196	R. Van Gorcom	The Netherlands	Food integrity, how to guarantee the safety and authenticity of our food in a society where the consumer requires a zero-risk (including the role of reference laboratories)
12:00–12:20	215	K. Miyagishima	WHO	International efforts to improve food safety
12:20–14:00	Lunch Break			

14:00–18:30 **SESSION 1:
Food Analysis & Food Control Systems**

Chairperson: P. Brereton, UK

<i>Time</i>	<i>No. of Paper IAEA–CN–222</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
14:00–14:30	195	C. Elliott	UK	The Elliott Review into the integrity and assurance of food supply networks
14:30–15:00	187	J. Keogh	Canada	Transparency in the global food supply chain
15:00–15:20	173	G. Dervilly-Pinel	France	Implementation of predictive models based on metabolomics-derived biomarkers
15:20–15:50	Coffee/Tea Break			
15:50–16:10	54	A. Ben Mansour	Tunisia	Disposition of 14C-flumequine in Sea Bream (<i>Sparus Auratus</i>) after a single intraperitoneal administration
16:10–16:30	40	T. Trtić-Petrović	Serbia	Sample preparation techniques based on extraction for analysis of pesticides in food samples
16:30–16:50	57	V. Demin	Russian Federation	Nuclear-physical methods for detecting pollutants and microelements in food
16:50–17:10	37	M. Zayats	Belarus	Novel method of determination of pesticides in rapeseed oil based on dissociation extraction in water-free medium followed by gas chromatography/mass spectrometry
17:10–17:30	58	R. Fernando	Sri Lanka	Determination of nitrofurans metabolites in shrimp muscle tissue by liquid chromatography - photo diode array detection
17:30–17:50	119	M. Ginovska	Macedonia	Establishing laboratory for detection of irradiated food in Republic of Macedonia
17:50–18:10	125	L. Tölgyesi	Germany	Minimizing matrix effects in multi-residue pesticide analysis using a new sensitivity-enhanced triple quadrupole instrument in combination with extensive sample dilution
18:10–18:30	213	A. de Melo Ferreira	Brazil	Database of radionuclide levels in typical Latin American foods
18:30–20:30	Welcome Reception (MO2 foyer – M building, 2nd floor)			

TUESDAY, 11 NOVEMBER 2014**08:30–12:40 SESSION 2:
Food Forensics****Chairperson: C. Elliott, UK**

<i>Time</i>	<i>No. of Paper IAEA–CN–222</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
08:30–09:00	206	P. Brereton	UK	The concept of food integrity: what does it mean and what are the scientific challenges that it poses?
09:00–09:30	191	T. Prohaska	Austria	Challenges in food provenance by multi - level elemental and isotopic fingerprint methods
09:30–09:50	147	D. Valchev	Bulgaria	Terahertz based automated food analysis
09:50–10:10	188	D. Singh	India	Traceability of rice and wheat to ensure their quality using molecular and isotopic techniques
10:10–10:30	149	B. Schuetz	Germany	Food analysis to check quality, safety and authenticity by full-automated ¹ H-NMR
10:30–11:00	Coffee/Tea Break			
11:00–11:20	31	M. Rosner	Germany	The use of strontium isotope compositions (⁸⁷ Sr/ ⁸⁶ Sr) for food provenancing
11:20–11:40	177	S. Walker	Australia	Food authentication and traceability: an Asian and Australian perspective
11:40–12:00	89	R. Frew	IAEA	Stable isotope deltas – nature's own traceability system for verifying food authenticity
12:00–12:20	105	N. Dordevic	Italy	Climatic and geographical dependence of H, C and O stable isotope ratios of Italian wine
12:20–12:40	141	J. Riener	Germany	Modern mass spec tools for food profiling to ensure authenticity and quality
12:40–14:00	Lunch Break			

14:00–18:30

**SESSION 3:
Food Irradiation and Processing****Chairperson: S. Pillai, USA**

<i>Time</i>	<i>No. of Paper IAEA–CN–222</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
14:00–14:30	45	M. Lacroix	Canada	Overview of applications of radiation processing in combination with conventional treatments to assure food safety
14:30–14:50	71	G. Hallman	IAEA	Research needs for phytosanitary irradiation
14:50–15:10	73	C. Horak	Argentina	Highly nutritive and safe bread for people suffering alimentary emergencies
15:10–15:30	44	F. Kuntz	France	Improvement of EPR spectrometer sensitivity and its implication on detection of irradiated food products and dosimetry
15:30–16:00	Coffee/Tea Break			
16:00–16:20	138	C. Mohacsi-Farkas	Hungary	Use of irradiation to provide wider selection of foods for immuno-compromised patients
16:20–16:40	2	K. Sliter	USA	USDA experience with irradiation as a quarantine treatment
16:40–17:00	4	I. Ihsanullah	Pakistan	Current activities of food irradiation as sanitary and phytosanitary treatment in Asia and the Pacific region and its comparison with advanced countries
17:00–17:20	155	Z. De Guzman	Philippines	Radiation inactivation of microbes in fresh vegetables
17:20–17:40	110	S. Shayanfar	USA	Quantitative microbial risk assessment to accelerate adoption of electron beam technologies for fresh produce safety and quality in the United States
17:40–18:00	207	S. Coulon	European Commission (DG SANCO)	Food irradiation within the EU

WEDNESDAY, 12 NOVEMBER 2014

08:30–11:40 **SESSION 4:
Emerging Issues**

Chairperson: **A. Ambrus, Hungary**

<i>Time</i>	<i>No. of Paper IAEA–CN–222</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
08:30–09:00	209	R. Patel	UK	Chemical contaminants in food: current and future challenges
09:00–09:30	208	T. Kuhn	Austria	Contaminants from natural and food processing sources
09:30–09:50	65	J-W. Kwon	Korea, R.O.	Fate study of veterinary drugs for fish in the aquatic system
09:50–10:10	128	M. Cesio	Uruguay	Pesticide residues analysis in bee products: a useful tool to assess food safety and agro-ecosystems sustainability
10:10–10:30	55	K. Satpathy	India	Concentration of heavy metals in the food chain components of the nearshore coastal waters of Kalpakkam, south east coast of India
10:30–11:00	Coffee/Tea Break			
11:00–11:20	169	R. Gupta	India	Effect of heavy metals on the various bio-molecules contents in Indian major crops
11:20–11:40	75	J. Al-Tuweity	Yemen	Natural radioactivity of some fertilizers in Yemeni's farms
11:40–12:00	84	M. Mathole	South Africa	Prevalence, serotypes and antimicrobial resistance profiles of Salmonella among pigs, chickens and goats in South Africa
12:00–12:30	DISCUSSION SESSION			
Moderators:	T. Prohaska, Austria N. Gras, Chile			
12:30–14:00	Lunch Break			

14:00–18:30 **SESSION 5:
Food and Feed Safety - Risk Based
Monitoring**

Chairperson: A. Bruno, FAO

<i>Time</i>	<i>No. of Paper IAEA-CN-222</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
14:00–14:30	186	J. de Jong	Netherlands	Improving safety in the food production chain through risk-based monitoring of feed
14:30–15:00	216	F. Verstraete	European Commission (DG SANCO)	Ensuring safety of food as regards chemical contaminants through regulation and control
15:00–15:30	N/A	D. Battaglia	FAO	Feed safety, an overview and the FAO programme for capacity development
15:30–16:00	Coffee/Tea Break			
16:00–16:20	30	A. Canella Avelar	Brazil	Detecting fraud in indigenous cattle feed and supplements by nuclear techniques: phosphate hazardous profile assessed by neutron activation analysis as unique fingerprint
16:20–16:40	34	M. Nakibuuka	Uganda	Assessment of mycotoxins levels in food and animal feeds using ELISA and HPLC: case study of Uganda National Bureau of Standards (UNBS)
16:40–17:00	126	J. Lee	UK	Accurate quantification of regulated mycotoxins by UHPLC-MS/MS and screening for 200+ mycotoxins in food and feed
17:00–18:00	Poster Session			
18:00–20:00	Exhibitors' Reception (MO2 foyer – M building, 2nd floor)			

THURSDAY, 13 NOVEMBER 2014**08:30–11:40 SESSION 6:
Enhancing International Trade****Chairperson: D. Prater, USA**

<i>Time</i>	<i>No. of Paper IAEA–CN–222</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
08:30–09:00	97	N. Gras	Chile	Food safety standards and consumer confidence: are we on the right direction?
09:00–09:30	113	E. Mitema	Kenya	Risk assessment of veterinary drug residues in edible animal food: role of international agencies
09:30–10:00	202	J. M^cEvoy	European Commission (FVO)	Residue monitoring in food: EU expectations from trading partners
10:00–10:30	N/A	A. Bruno	FAO	International Standards: the work of the Codex Alimentarius Commission
10:30–11:00	Coffee/Tea Break			
11:00–11:20	100	K. Sobiech-Matura	European Commission	Radioactivity monitoring in food and feed - current status in the European Union countries
11:20–11:40	129	H. Heinzen	Uruguay	Method development of pesticide residues analysis in Herbs, to support regulatory aspects of food safety and public health in the MERCOSUR countries
11:40–12:30	DISCUSSION SESSION			
Moderators:	J. Sasanya, IAEA A. Ambrus, Hungary			
12:30–14:00	Lunch Break			

14:00–16:10 **SESSION 7:
Developing Country Challenges**

Chairperson: **R. Clarke, FAO**

<i>Time</i>	<i>No. of Paper IAEA–CN–222</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
14:00–14:30	183	P. Young	UK	Food safety capacity building - the role of public private partnerships in this shared responsibility
14:30–15:00	214	A. Montes-Niño	Brazil	Export requirement challenges for third countries to attend Russia and European Union requirements with respect of certain veterinary drug residues in animal products
15:00–15:20	178	G. Onen	Uganda	Challenges and benefits of international food safety guidelines, standards and regulations: the Uganda case
15:20–15:50	Coffee/Tea Break			
15:50–16:10	11	A. Kileo	Tanzania	The role of nuclear science and technology in achieving sustainable agricultural development for developing countries
16:10–16:30	164	A. Sako	Burkina Faso	Prevalence of mycotoxins and pesticide residues in food and environment in Burkina Faso from 2012 to 2013: case rice, wheat, flour, fruits, vegetables, soils and water
16:30–17:00	DISCUSSION SESSION			
Moderators:	R. Clarke, FAO P. Young, UK			
17:00–17:15	Closing of symposium Chair's closing statement Z. Ye, China			

POSTERS

Posters will be on display throughout the Symposium

Poster contributors are requested to be at their posters during the
Poster Session – **Wednesday, 12 November, (17:00–18:00)**

<i>No. of Paper IAEA–CN–222</i>	<i>Presenter</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
1	A. Li	Singapore	Detection of sugar adulteration in palm sugar by isotope ratio mass spectrometry (IRMS)
5	A. Aylangan	Turkey	Gamma irradiation of pulses for quality maintenance and introducing food irradiation technology to producers and inspectors
6	M. Al-Bachir	Syria	Radiation technology for the enhancement of food quality and ensuring food safety in Syria
7	A. Mtenga	Tanzania	Efficiency of fractionated gamma irradiation doses to eliminate vegetative cells and spores of <i>Bacillus cereus</i> from raw rice
8	I. Fernandez Gomez	Cuba	Radiological quality control of imported and exported foods in Cuba
10	J. España	Colombia	Methodology for the analysis of pesticide residues in export tropical fruits
14	J. Pinela	Portugal	Effects of gamma irradiation and extraction method in the antioxidant potential of wild and commercial <i>Tuberaria lignosa</i> samples
21	J. Pinela	Portugal	Dose-response effects of gamma irradiation on colour and antioxidant activity of wild <i>Malva neglecta</i>
22	E. Pereira	Portugal	Evaluation of antioxidant activity of <i>Tropaeolum majus</i> L. flowers processed by ionizing radiation
23	K. Suklim	Thailand	Brown rice qualities as affected by low-dose gamma irradiation
24	C. Paschal	Tanzania	Assessment of the essential and toxic elements in complementary foods for children (0-5 years) in Tanzania using EDXRF
32	A. Busamongkol	Thailand	Application of stable isotope and elemental composition for discrimination of jasmine rice in Thailand
33	S. Todoriki	Japan	Thermoluminescence analysis using X-ray irradiator for detection of irradiated foods
35	T. Silva	Portugal	Gamma radiation effects on microbial inactivation and antioxidant activity of cherry tomatoes
36	R. Seth	India	Ascertaining the radio-sensitivity of the papaya mealybug, <i>Paracoccus marginatus</i> towards setting up phytosanitary irradiation regimen against this tropical quarantine pest

<i>No. of Paper IAEA-CN-222</i>	<i>Presenter</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
38	S. Pillai	USA	Empowering decision-making on commercial adoption of food irradiation technology
41	H. Louvandini	Brazil	Use radioimmunoassay to evaluated the cortisol and testosterone level in hair sheep feeding cottonseed co-products with gossypol
42	I. Al Bulushi	Oman	Effect of temperature fluctuation in fresh fish supply chain on safety and quality of fish in the Sultanate of Oman - review
43	D. Werner	France	Food authenticity - overview of available methods to detect and to authenticate irradiated food
52	U. Gryczka	Poland	E-beam technology in decision support system for monitoring and eliminating of microbiological food threat
53	M. Rosner	Germany	Boron isotope composition: A new tracer for food provenancing
56	Y. Lee	Republic of Korea	Simultaneous analysis of flonicamid and its metabolites in agricultural products by liquid chromatography-tandem mass spectrometry
59	P. Henríquez Pizarro	Chile	Risk assessment of potential water contamination using a simple approach model as a crop indicator
60	X. Videla	Chile	Natural radionuclides content in soil and the fruit-crop relationship
64	D. Munasinghe	Sri Lanka	Development and validation of thin layer chromatographic method for screening of sulfonamides in chicken meat
68	J-W. Kwon	Republic of Korea	Semicarbazide (SEM); the unclear evidences of formation from natural occurrence, food processing and nitrofurazone use
70	E. Kim	Republic of Korea	The survey on pesticide residues of imported agricultural products in Korea
76	Y. Suzuki	Japan	Stable isotope analysis of water in whiskies using cavity ring-down spectrometry
77	A. Abdalla	Brazil	The potential of Moringa oleifera leaves, root bark and propolis extracts for manipulating rumen fermentation and methanogenesis in vitro
79	J. Antoine	Jamaica	Geographic determination of the growing origins of Jamaican and international coffee using multi-element analysis
81	I. Bosneaga	Moldova	Integrated solution for energy and food problems - a way to sustainable development
82	I. Bosneaga	Moldova	Non-equilibrium plasma for sterilization in food industry
83	R. Kalupahana	Sri Lanka	Occurrence of motile Salmonella in retail table eggs in Kandy district of Sri Lanka and characterization of isolates
85	A. Hammad	Egypt	Application of DNA Comet Assay and absence of gram-negative bacteria for detection of irradiated food in Egypt

<i>No. of Paper IAEA-CN-222</i>	<i>Presenter</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
86	K. Jayasekara Mudiyanselage	Sri Lanka	Establishment of a method to detect sulfonamide residues in chicken and eggs by high performance liquid chromatography
87	M. Heidarieh	Iran	Gamma irradiation process effect on phenolic compounds and antioxidant activity of saffron (<i>Crocus sativus</i> L.) petal
88	J. Ahn	Republic of Korea	Discrimination of variety, milling quality and crop year of rice by stable isotope dilution and tandem mass spectrometry
90	J. Rachubik	Poland	Analysis of 2-alkylcyclobutanones for detecting irradiated food products notified in RASFF
91	Z. Azzouz	Tunisia	Free radicals kinetics in irradiated <i>Trigonella foenum graecum</i> - EPR investigation
92	E. Gasu	Ghana	Consumer perception and acceptability of cut-mango and irradiated fruits in Ghana
93	C. Vasco	Ecuador	Study of the effect of the combination of two unconventional treatments, irradiation with gamma rays and edible coating on postharvest quality of tree tomato (<i>Solanum betaceum</i> Cav.)
95	J. Klinsoda	Thailand	Effect of sodium chloride (NaCl) and chlorine treatments on survival of <i>Vibrio parahaemolyticus</i> in mussel at low temperature
96	E. Niang	Senegal	Risk of exposure to marketed milk with chloramphenicol drug residues in Senegal
99	M. Bao	China	To see the status of food irradiation from an irradiation processing enterprise
101	A. Nehal	Egypt	Epidemiological studies on <i>Clostridium perfringens</i> food poisoning in retail foods
102	F. Salgado	Ecuador	Study of the influence of gamma radiation from a cobalt 60 source over the microbial load (<i>Escherichia coli</i> and total coliforms) in Ecuadorian ground beef
103	K. Ruiz Hidalgo	Costa Rica	Ecotoxicological, physiochemical and biological evaluation of Quebrada Sanatorio: a surface water body used for irrigation of agricultural production in Cartago, Costa Rica
104	T. Prapamontol	Thailand	Multiple pesticide residues in vegetables and fruits from rural and urban markets in upper northern Thailand: the national food safety agenda
106	A. Pavlov	Russian Federation	Death of spice microorganisms at different doses of gamma-radiation
109	L. Monza	Argentina	Spatial distribution of ecotoxicological risk derived from the use of organophosphate pesticides in the lower valley of the Neuquen river, Argentina
115	A. Adu-Gyamfi	Ghana	Effect of gamma irradiation on total flavanols, total phenolics and antioxidant activity of <i>Moringa oleifera</i> Lam. leaves

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116	C. Thihe	South Africa	Stability study of tetracyclines in poultry liver extracts by HPLC analysis
117	S. Caballero	Paraguay	Pre validation of a method of analysis of samples aflatoxins peanut ultra high performance liquid chromatographic (UPLC)
118	T. Imafidon	Nigeria	Incidence of aflatoxin contents in food in Nigeria – a 4 year study
120	J. Estevez Álvarez	Cuba	Determination of chlorinated pesticides and polychlorinated biphenyls in edible oils and fats using MSPD extraction and freeze lipids-filtration cleanup with GC-ECD measurement
124	M. Lacroix	Canada	The growth and toxigenic potential of <i>Bacillus cereus</i> during storage temperature abuse in cooked irradiated rice
130	O. Odueke	Nigeria	Irradiation applications in dairy products
131	P. Pabroa	Philippines	Comparison of elemental and isotopic composition of Philippine and Japanese polished rice samples for provenance validation
132	M. Seyhoon	Iran	Investigation of the irradiation history of the Iranian dates carbohydrates using high performance liquid chromatography technique
134	I. Maler	Israel	Microbiological decontamination by irradiation of honey bee pollen in commercially-produced bumble bee colonies intended for export can significantly reduce risks for native and managed pollinators
136	R. Huque	Bangladesh	Comparative study of raw and boiled silver pomfret fish from coastal area and retail market in relation to trace metals and proximate composition
140	J. Estevez Álvarez	Cuba	Application of ICP-MS, ICP-AES and AAS-CV techniques to the analysis of metal contaminants in rice samples
142	E. Carazo R.	Costa Rica	Crop protection practices in minor crop production in the central Pacific of Costa Rica and their impact in food and environmental quality determined by conventional and nuclear techniques
143	C. Izcapa-Trevino	Mexico	Monitoring and real-time risk assessment in the eutrophic Valle de Bravo reservoir (water supply for Mexico City): a joint society-academy pilot management program
144	E. Carazo R.	Costa Rica	Application of nuclear, conventional and ecotoxicological techniques in the validation of biobeds for treatment of contaminated waste remaining in the pesticide application equipment after pest field control
145	J. Perez Sabino	Guatemala	Determination of metals by TXRF in tomato and broccoli grown in the basin of Lake Atitlan
146	P. Zhao	China	New progress on pesticide/veterinary residue analytical methodologies

<i>No. of Paper IAEA-CN-222</i>	<i>Presenter</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
148	G. Pérez-Rojas	Costa Rica	Impact of rice production on the environmental contamination by pesticides and other contaminants at the La Mula micro watershed, Guanacaste, Costa Rica
151	L. Makedonski	Bulgaria	Determination of some heavy metal of selected Black Sea fish species
153	M. Stancheva	Bulgaria	Polychlorinated biphenyls in fish from Black Sea, Bulgaria
154	A. Cannavan	IAEA	The application of chemical measurement techniques to support systems for food traceability and authenticity
156	D. Esquivel	Colombia	Easy guide for the implementation of quality control (QC)/quality assurance System (QA) in food analysis laboratories under ISO/IEC 17025
157	R. Wierzchnicki	Poland	Isotopic composition of strawberry for authenticity control of fruit products
158	Z. Jandric	IAEA	Authentication of Indian citrus fruit/fruit juices by untargeted and targeted metabolomics
159	Z. Jandric	IAEA	Metabolomics: an approach to control food authenticity
160	D. Pereira	Portugal	Estimation of bioaccessible fractions from yerba mate infusions by ICP-MS
161	V. Waduge	Sri Lanka	Stable isotope analysis of rice in Sri Lanka: possible method for geographic origin discrimination
162	J. España Amórtegui	Colombia	Comprehensive screening, quantitation and confirmation of pesticide residues by modern GC-MS and LC-MS techniques
163	S. Ferrari	Brazil	Determination of enrofloxacin and ciprofloxacin in chicken tissues by ESI LC-MS/MS
165	E. Vieira	Brazil	Sorption behavior of pure and formulated pesticides in rivers sediment from Latin America
166	L. Luchini	Brazil	Sorption and mineralization of ¹⁴ C- fluopicolide fungicide on two Brazilian soils
168	C. Elias	Brazil	Antimony compromising dog food safety
170	H. Sayed	Sudan	Decontamination of food additive guar gum using gamma irradiation
175	J. Angeles Hernandez	Mexico	Comparing the milk production and characteristics of lactation curves in organic and conventional dairy sheep farms in Mexico
179	R. Bou Khouzam	Lebanon	Geographical traceability of Lebanese olive oil through stable isotope ratios and trace element characterization pattern
184	E. Mubito	Tanzania	Assessment of antimicrobial usage and sulfonamide residues in chicken eggs in Dar es Salaam, Tanzania

<i>No. of Paper IAEA-CN-222</i>	<i>Presenter</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
185	M. Diaz Asencio	Cuba	Reconstruction of sedimentary and pollution process with natural and artificial radionuclides (210Pb, 226Ra, 137Cs) in Hanabanilla reservoir, Cuba
189	C. Pereira	Portugal	Impact of gamma irradiation on hydrophilic and lipophilic compounds of <i>Cochlospermum angolensis</i> Welw. (borututu)
190	E. Pereira	Portugal	Effects of gamma irradiation on antioxidant potential and chemical composition of <i>Ginkgo biloba</i> L.: a comparative study of 1 and 10 kGy doses
192	P. Kaviiri	Uganda	Heat induced dietary food toxicants, an emerging threat to food safety and quality : the case of Uganda
193	A. Fernandes	Portugal	Irradiation and storage time effects on chemical parameters of processed samples of wild <i>Macrolepiota procera</i> (Scop.) Singer
194	A. Adegboye	Nigeria	Application of HACCP-based system to unrefined sheabutter production in Nigeria
197	I. Ghanem	Syria	Determination of ochratoxin A levels in some food and feed crops consumed in Syria
199	J. Butterweck	USA	Using food irradiation by the meat industry as food safety intervention in the western hemisphere in the twenty- first century
200	T. Tswiio	Botswana	Antibiotics residues detected in processed and raw milk samples from various dairy holdings in Botswana
201	T. Prapamontol	Thailand	Gas chromatographic-flame photometric detection (GC-FPD) detection of organophosphate pesticide residues in vegetable and fruit samples from Chiang Mai, northern Thailand
203	B. Maestroni	IAEA	The use of analyte protectants and matrix matched calibration in gas chromatographic analysis for pesticide residues in potatoes
204	B. Maestroni	IAEA	Validation of a gas chromatographic method for several pesticides in potatoes
205	B. Maestroni	IAEA	Nuclear techniques applied to the generation of input data for first tier risk assessment
211	C. Gonzaga	Brazil	Developing certified reference materials for food safety analysis
212	B. Lubura	Austria	Multi-microencapsulation technology for improving the stability and storage of biologically active ingredients used in food and beverage
217	M. Islam	IAEA	A multiresidue method for the determination of antimicrobials in meat

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PUBLICATIONS

Proceedings

The proceedings of the conference, containing papers presented at the conference and subsequently submitted for peer review, will be published in a special edition of the journal "Food Control".

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STI/DOC/010/475	Guidelines for Remediation Strategies to Reduce the Radiological Consequences of Environmental Contamination. Technical Report Series No. 475. ISBN 978-92-0-134110-5, IAEA, Vienna	2012	IAEA-TECDOC-1462	Validation of Thin-Layer Chromatographic Methods for Pesticide Residue Analysis. Results of Coordinated Research Project 1996-2002	2005
FAO/IAEA Agriculture and Biotechnology Laboratories Activities Reports	http://www-naweb.iaea.org/nafa/ab-out-nafa/biotechnology-lab.html	2010 -2012	CAC/GL 56-2005	Guidelines on the use of Mass Spectrometry (MS) for Identification, Confirmation and Quantitative Determination of Residues	2005
IAEA-TECDOC-1612	Quality Control of Pesticide Products. Results of a Coordinated Research Project 2001-2006	2009	IAEA-TECDOC-1431	Determination of Human Pathogen Profiles in Food by Quality Assured Microbiological Assays. Results of a Coordinated Research Project 1998-2002	2005
CAC/GL 71-2009	Codex Guidelines for the Design and Implementation of National Regulatory Food Safety Assurance Programmes Associated with the Use of Veterinary Drugs in Food Producing Animals	2009	IAEA-TECDOC-1427	Irradiation as a Phytosanitary Treatment of Food and Agricultural Commodities. Results of a Coordinated Research Project 1998-2002	2004
IAEA-STI/PUB/1365	Irradiation to Ensure the Safety and Quality of Prepared Meals. ISBN 978-92-0-111108-01, IAEA, Vienna	2009	CAC/GL 54-2004	Codex Guidelines on Measurement Uncertainty	2004
CAC/GL 59-2006	Codex Guidelines on Estimation of Uncertainty of Results	2006	IAEA-TECDOC-1337	Radiation processing for safe, shelf-stable and ready-to-eat food. Results of a Coordinated Research Project 1996-2000	2003

SIT/DOC/010/409	Dosimetry for Food Irradiation. Technical Report Series No. 409, IAEA, Vienna	2002
STAN 231-2001	Codex General Methods for the Detection of Irradiated Foods	2001
IAEA- TECDOC-1158	Irradiation of Fish, Shellfish and Frog-legs - a compilation of technical data for its authorization and control	2000

2014

International Conference on Occupational Radiation Protection:
Enhancing the Protection of Workers - Gaps, Challenges and
Developments

1-5 December 2014, Vienna, Austria

2015

International Experts Meeting on Strengthening Research and
Development Effectiveness in the Light of the Accident at the
Fukushima Daiichi Nuclear Power Plant (IEM 8)

16-20 February 2015, Vienna, Austria

IEM 9

20-24 April 2015, Vienna, Austria

International Symposium on Isotope Hydrology: Revisiting
Foundations and Exploring Frontiers

11-15 May 2015, Vienna, Austria

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1-5 June 2015, Vienna, Austria

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9-12 June 2015, Vienna, Austria

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