

INCC 2017 Sweden

INCC 2017

Gothenburg Sweden 2017, 27th August to 1st September

Topics: Radiochemistry, Radiation Chemistry, Radioanalytical Chemistry, Radioanalytical Chemistry, Education in Nuclear Chemistry, Radiopharmaceutical Chemistry, Radioecology and Geochemistry, Radiation Protection, Nuclear and Related Techniques, Nuclear Reactors and Nuclear Forensics



More Information at: http://www.chalmers.se/en/conference/INCC_2017/
and follow us at **LinkedIn**



Sunday, August 27

16:00

Registration opens

17:15

Conference Welcome

17:30

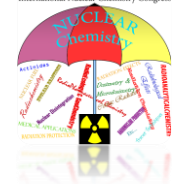
Opening lecture, Lars Öhrström
“Periodic footprints in history, from D to Pu”

**18:15-
20:30**

Welcome reception

* Located at the main entrance

** Located around the corner from the main hall



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Monday, August 28

09:00	Main Conference Hall* Nuclear and Related Techniques, <u>Ingmar Persson</u> <i>"Synchrotron Radiation - Possibilities and Challenges for Nuclear Chemistry"</i>
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09:50 Coffee Break

Main Conference Hall*				Pascal**			
Nuclear and Related Techniques Chairperson: TBA				Radiochemistry Chairperson: Dean R. Peterman			
Title and Presenter	Country	No.		Title and Presenter	Country	No.	
10:20	Challenges of the production and certification of U and Pu large-sized dried (LSD) spikes Renáta Buják	Belgium	101	Understanding of uranium extraction mechanisms from phosphoric and sulphuric media using DEHCNPB B. Fries	France	201	
10:40	The Role of Water and Acid Concentration in Supercritical Fluid Extraction of Rare Earth Elements Using Nitric Acid – TBP Adducts Robert V. Fox	USA	102	Extraction of Am(III) from simulated Highly Active Raffinate solutions by soft-donor ligands dissolved in ionic liquid/molecular diluent mixtures Peter Zsabka	Belgium	202	
11:00				Investigations Of A Novel Ion Exchanger For Cs Removal From Burned Nuclear Fuel Solution Mu Li	Switzerland	203	

11:20 Short Break

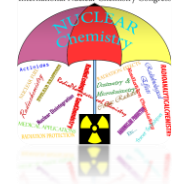
Main Conference Hall*				Pascal**			
Nuclear and Related Techniques Chairperson: TBA				Radiochemistry Chairperson: Dean R. Peterman			
Title and Presenter	Country	No.		Title and Presenter	Country	No.	
11:30	Reduction and Resource Recycling of High-level Radioactive Waste Masaki Ozawa	Japan	104	Structure and radiolytic stability of monoamide-actinide complexes Philippe Guilbaud	France	204	
11:50	The new laboratory for development and test of advanced nuclear fuels at Chalmers University of Technology, Sweden Marcus Hedberg	Sweden	105	UV-Vis and TRIFS study of the outstanding An/Ln selectivity of PyTri ligands under GANEX process conditions Eros Mossini	Italy	205	

12:10 Lunch

13:30	Main Conference Hall* Education in Nuclear Chemistry, <u>Jon-Petter Omtveldt</u> <i>"Remote Radiochemistry Training and E-learning Tools – is it useful? Experience with the CINCH-II tools RoboLab and NucWik"</i>
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14:20

Short Break

Main Conference Hall*				Pascal**			
Education in Nuclear Chemistry				Nuclear and Related Techniques			
Chairperson: Jon-Petter Omtveldt				Chairperson: Masaki Ozawa			
Title and Presenter	Country	No.		Title and Presenter	Country	No.	
Educating and Training the 21st Century				Advances in microfluidic technique – preparation for microfluidic liquid-liquid extraction of SHE homologues			
14:30	Nuclear Workforce at South Florida's Public Research University			Pavel Bartl	Czech	106	
	Konstantinos Kavallieratos	USA	001				
Education for environmental and radon indoor measurements at Milano University				Investigations on a zirconium molybdate series containing plutonium			
14:50	Flavia Groppi	Italy	002	Sandrine Costenoble	France	107	

15:10

Coffee Break

Main Conference Hall*			
Radiochemistry , Chairperson: Jon-Petter Omtveldt			
Title and Presenter	Country	No.	
Crystal structure and solubility of radium sulfate			
15:30	Artem V. Matyskin	Sweden	206
Radiochemical separation of ⁷ Be and ¹⁰ Be produced at the PSI accelerator facility			
15:50	Stephan Heinitz	Switzerland	207
Organic iodine on Charcoal			
16:10	Mark Foreman	Sweden	209

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Tuesday, August 29

8:45		Main Conference Hall*				
		Radioecology and Geochemistry, <u>Lindis Skipperud</u>				
		<i>“Exposure, effect and risk of NORM and metals - case Road and Tunnel Construction in alum shale areas”</i>				
09:35		Coffee Break				
		Main Conference Hall*		Pascal**		
		Radioecology and Geochemistry		Radiochemistry		
		Chairperson: Lindis Skipperud		Chairperson: Michael Fassbender		
	Title and Presenter	Country	No.	Title and Presenter	Country	No.
10:00	Particle size dependency for the sorption of Cs, Sr, Co and Eu on biotite and labradorite			Nano-AnO ₂ (An= Th, U, Np, Pu) and associate solid solutions produced through hydrothermal decomposition of oxalates		
	Stellan Holgersson	Sweden	301	Karin Popa	Germany	210
10:20	Solubility Model for Siderite and Chukanovite in the Solutions of Sodium Chloride and Sodium Carbonate			Proposal of a combined singles/coincidence NAA acquisition and analysis system for geological and biological samples		
	Je-Hun Jang	USA	302	Iberê Souza Ribeiro	Brazil	211
10:40	Studies of Extractable Organohalogens in Atlantic Salmon by Neutron Activation, Chromatography, Mass Spectrometry and NMR			Radiochemical analysis for an application in decommissioning and waste management at NRG		
	Amares Chatt	Canada	303	Gaël Ménard	Netherlands	212
11:00		Short Break				
		Main Conference Hall*		Pascal**		
		Radioecology and Geochemistry		Radiochemistry		
		Chairperson: Lindis Skipperud		Chairperson: Michael Fassbender		
	Title and Presenter	Country	No.	Title and Presenter	Country	No.
11:10	Uptake of natural radionuclides from contaminated soil to plants, assessed by various nuclear analytical methods			Production and purification of no-carrier-added ⁸⁹ Zr at the Leipzig cyclotron for extraction studies with a calix[4]arene		
	Borut Smodiš	Slovenia	304	Alexander Mansel	Germany	213
11:30	Radioactivity in marine sediments taken up from Cuba's North and South littoral (137Cs/40K and total α emitters).			Pyridine-2,6-bis(1H-1,2,3-triazol-4-yl): a selective chelating unit for Minor Actinides		
	J. M. Navarrete Tejero	Mexico	305	Annalisa Ossola	Italy	214
11:50	Modification of clay-salt slimes of JSC "Belaruskali" for preparation of aluminosilicates sorbents of radionuclides			The size of actinoid(III) ions – structural analysis vs. common misinterpretations		
	Vladislav Gatsko	Belarus	208	Daniel Lundberg	Sweden	215
12:10		Lunch				
13:30		Main Conference Hall*				
		Radiation Chemistry, <u>Bruce Mincher</u>				

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"The effects of radiation chemistry on radiochemistry: When unpaired electrons defy great expectations"

14:20

Short Break

Main Conference Hall*				Pascal**		
Radiation Chemistry Chairperson: Bruce Mincher				Radioecology and Geochemistry Chairperson: Flavia Groppi		
Title and Presenter	Country	No.		Title and Presenter	Country	No.
14:30	Radiation induced dissolution of UO ₂ -based nuclear fuel. –Impact of H ₂ and dopants.			System for measurement of artificial radioactivity in surface water bodies		
	Mats Jonsson	Sweden	401	Michal Fejgl	Czech	306
14:50	Evaluation of the impacts of gamma radiolysis on an ALSEP process solvent			Distribution of ²³² Th, ²³⁰ Th, and ²²⁸ Th in the Coastal Waters of Northwest Peninsular Malaysia		
	Dean R. Peterman	USA	402	Che Abd Rahim Mohamed	Malaysia	307
15:10	Radiation-induced organic radical cation chemistry and separation ligand degradation			Incompatible elements in bottom sediments of the Itaipu Dam Reservoir- Eastern Paraguay by EDXRF		
	Stephen P. Mezyk	USA	403	Juan F Facetti-Masulli	Paraguay	308

15:30

Coffee Break

16:00

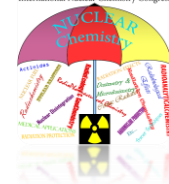
Official Dinner

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23:00

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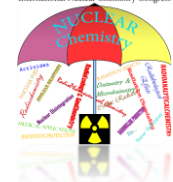
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Wednesday, August 30

09:00	Main Conference Hall*		
	Radiopharmaceutical Chemistry, <u>Frank Brucherseifer</u>		
	<i>"The development of the targeted alpha therapy approach and the supporting radiochemistry"</i>		
09:50	Coffee Break		
	Main Conference Hall*		
	Radiopharmaceutical Chemistry. Chairperson: Frank Brucherseifer		
	Title and Presenter	Country	No.
10:00	Production of radioactive terbium isotopes for medical use Károly Brezovcsik	Hungary	501
10:20	A radionuclide generator for the production of lutetium-177 based on the decay of its nuclear isomer lutetium-177m Pablo Serra Crespo	Netherlands	502
10:40	Experimental excitation functions of ⁸⁹ Zr production by deuteron irradiations for theraagnostic applications Mazhar Hussain	Pakistan	503
11:00	Short Break		
	Main Conference Hall*		Pascal**
	Radiopharmaceutical Chemistry Chairperson: Frank Brucherseifer		Radioanalytical Chemistry Chairperson: Sue B. Clark
	Title and Presenter	Country	Title and Presenter
	Country	No.	Country
	No.		No.
11:10	A dual generator concept to yield ²²⁶ Th: an isotope of interest for targeted alpha therapy Michael E. Fassbender	USA	504
11:30	Atomic Layer Deposition to aid the Production of Radionuclides having High Specific Activity Josette L.T.M. Moret	Netherlands	505
			Measurement of ¹²⁹ I using triple quadrupole inductively coupled plasma mass spectrometry Zilvinas Zacharuskas
			UK
			601
			Challenge of ⁹⁰ Sr separation in environmental samples collected from the Fukushima exclusion zone Norbert Kavasi
			Japan
			602
11:50	Lunch		
13:30	Main Conference Hall*		
	Nuclear Reactors, <u>Janne Wallenius</u>		
	<i>"Small Lead-cooled Reactors for Commercial Power Production"</i>		

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14:20

Short Break

Main Conference Hall*				Pascal**		
Nuclear Reactors				Radiopharmaceutical Chemistry		
Chairperson: Janne Wallenius				Chairperson: Sture Lindegren		
Title and Presenter	Country	No.		Title and Presenter	Country	No.
14:30	Determination of adsorption properties of fission products released from HLM-coolant - toward realisation of the MYRRHA-reactor			In vitro and in vivo evaluation of polymeric nano-carriers especially designed for alpha radionuclide therapy		
	Erik Karlsson	Switzerland	701	Antonia G. Denkova	Netherlands	506
14:50	Alpha-radionuclides speciation in model decontamination solutions			Mo-99/Tc-99m production using an electron linear accelerator		
	Aleksander Zarubo	Belarus	702	Shun Sekimoto	Japan	507

15:10

Coffee Break

Main Conference Hall*		
Company presentation, Chairperson: Christian Ekberg		
Title and Presenter		No.
15:50	New aspects of the mechanism of hydrogen effect on spent fuel dissolution SKB	Co.1
16:10	Improved and dose-reducing sampling and analysis methodology for nuclear fuel deposits Westing House	Co.2
16:30	TrisKem TrisKem	Co.3

18:00

Poster session

20:30

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Thursday, August 31

09:00		Main Conference Hall*	
		Radiation Protection, <u>Geraldine Thomas</u>	
		<i>“Health effects of nuclear accidents - separating facts from fiction”</i>	
09:50		Coffee Break	
		Main Conference Hall*	Pascal**
		Radiation Protection Chairperson: Geraldine Thomas	Nuclear Reactors Chairperson: Cheuk Lau
	Title and Presenter	Country	No.
10:20	Radiolabeling of nanoparticles as a versatile tool in safety research	Germany	801
	Karsten Franke		
10:40	Radiation Protection on Nuclear Battery for Micro Energy		
	Nia Febriyanti	Indonesia	802
		Pascal**	No.
		Belgium	703
		Sweden	704
11:00		Short Break	
		Main Conference Hall*	Pascal**
		Radiopharmaceutical Chemistry Chairperson: Geraldine Thomas	Radioanalytical Chemistry Chairperson: Steve Mezyk
	Title and Presenter	Country	No.
11:10	Production of technetium isotopes for Compton camera imaging	Japan	508
	Yuichi Hatsukawa		
11:30	Realizing Clinical Trials with Astatine-211: Radiopharmaceutical Chemistry		
	Sture Lindgren	Sweden	509
		Pascal**	No.
		Japan	603
		UK	604
11:50	Possible intake of ²²⁶ Ra, ²¹⁰ Pb, ²¹⁰ Po, ²²⁸ Ra and ²²⁸ Th at (TE)NORM working places: method development and case study	Germany	605
	Diana Walther		
12:10		Lunch	
13:30		Main Conference Hall*	
		Radioanalytical Chemistry, <u>Henrik Ramebäck</u>	
		<i>TBA</i>	
14:20		Short Break	
		Main Conference Hall*	Pascal**
		Radioanalytical Chemistry Chairperson: TBA	Radiochemistry Chairperson: Ivan Kajan

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	Title and Presenter	Country	No.	Title and Presenter	Country	No.
14:30	Measurement of ^{93}Zr by liquid scintillation counting and inductively coupled plasma mass spectrometry			Interaction of U(VI) and lanthanide ions with deferoxamine B by affinity capillary electrophoresis		
	Ben Russell	UK	606	Vladimir Sladkov	France	216
14:50	Analysis of Tycho Brahe's hair and bones by nuclear analytical methods			Graphene oxide-modified materials for selective sorption and remediation of uranium		
	Jan Kamenik	Czech	607	Hibaaq Mohamud	UK	217

15:10

Coffee Break

Main Conference Hall*

15:30

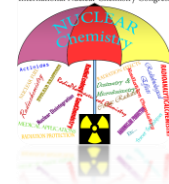
INCS Meeting

Addressed to all participant of INCC-2017

18:00

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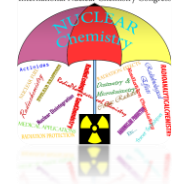
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Friday, September 1

08:45	Main Conference Hall*		
	Radiochemistry, <u>Jukka Lehto</u>		
	<i>“Selectivity is the key factor in removing radionuclides from nuclear waste effluents”</i>		
09:35	Coffee Break		
	Main Conference Hall*	Pascal**	
	Radiochemistry Chairperson: Jukka Lehto	Nuclear Forensics Chairperson: David Smith	
	Title and Presenter Country No.	Title and Presenter Country No.	
10:00	Isolation of Americium from PUREX Raffinate Utilizing Sodium Bismuthate Chromatography Jason M. Richards USA 218	Actinide forensic chemistry: Nuclide ratios for determining contamination sources. Punam Thakur USA 901	
10:20	Radiochemical Study of Endohedral Fullerenes Using Reactor/Accelerator and MD Simulation Tsutomu Ohtsuki Japan 219	Comparison of methods for measuring lanthanides in uranium matrices Anna Vesterlund Sweden 902	
10:40	Electrophoretic studies on the hydrolysis of Zr(IV) in aqueous solutions Peter Ivanov UK 220	The Utilization of Nuclear Forensics to Determine Thorium in Each Country for Proliferation Resistance Ari Sulistiyo Indonesia 903 Prabowo	
11:00	Short Break		
11:10	Main Conference Hall*		
	Nuclear Forensics, <u>David Smith</u>		
	<i>“The Case for Nuclear Forensics: Science Applied to Nuclear Security”</i>		
12:00	Closing of the Conference		
12:10	Lunch		

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Poster Session

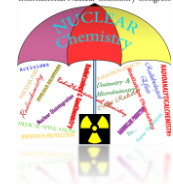
Wednesday, August 29: 16.30-20.30

Main Conference Hall*, Backside

Title and Presenter	Country	No.
The Spherical Sources of the ^{131}Cs Radionuclides in Modify Chitosan Sorbents Abdusamad Vasidov	Russia	1001
^{133}Xe Separation and Purification from Uranium Fission Products during ^{99}Mo Production Alexander E. Petrenko	Russia	1002
Potentially toxic elements downward mobility in an impounded vehicle scrapyard Camila Neves Lange	Brazil	1003
The European Network on Nuclear and Radiochemistry Education and Training Christian Ekberg	Sweden	1004
Characterization of $\text{UyNd}_{1-y}\text{O}_{2+x}$ and $\text{UyCe}_{1-y}\text{O}_{2+x}$ spheres produced by internal gelation Christian Schreinemachers	Belgium	1005
Archaeometry studies at the PGAA facility of the Heinz Maier-Lebnitz Zentrum (MLZ) Garching Christian Stieghorst	Germany	1006
Metal and Trace element assessment in bottom sediments from Medium Tietê River Basin, by INAA and ICP OES techniques Débora Ines Teixeira Favaro	Brazil	1007
Biomonitoring evaluation for trace and toxic elements for the sea urchin species <i>LYTECHINUS VARIEGATUS</i> (LAMARCK, 1816) in marine environment: São Paulo Northern coast (Brazil) Débora Ines Teixeira Favaro	Brazil	1008
Interfacial radiation chemistry. –Fundamentals and applications in nuclear technology. Elin Toijer	Sweden	1009
Astatine interactions in simple molecular and metallic systems - a modelling study Emma Aneheim	Sweden	1010
Hot particles in air filters collected in Finland immediately after the Chernobyl accident Flavia Groppi	Italy	1011
Evaluation of Tellurium as a Source Term in Severe Nuclear Accident Situations Fredrik Espegren	Sweden	1012
Separations of americium from europium by extraction chromatography Ivan Kajan	Switzerland	1013
Development of the Chalmers Grouped ActiNide EXtraction Process Jenny Halleröd	Sweden	1014
Production and Properties of Promethium Metallofullerenes Kazuhiko Akiyama	Japan	1015
Heat capacity, thermal expansion, and thermal diffusivity of NaUO_2BO_3 Karin Popa	Germany	1016
Oxidative dissolution of Gd-doped UO_2 -pellets. –Effect of H_2 . Mats Jonsson	Sweden	1017
Short term stability assessment of a bovine kidney candidate reference material Marina Beatriz Agostini Vasconcelos	Brazil	1018
Sedimentary profile from the Itaparanga reservoir: metal, trace and rare earth element assessment by INAA and ICP-OES techniques, São Paulo, Brazil Matheus Angelini	Brazil	1019

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Isotopic composition of commercially available uranium chemicals and elemental analysis standards

Maxim Peñkin	Austria	1020
Conditioning of ionic liquid waste streams in nuclear research applications		
Michiel Van de Voorde	Belgium	1021
Aluminium determination by instrumental neutron activation analysis in tree barks		
Mitiko Saik	Brazil	1022
Investigation of elemental composition in commercial dietary supplements by neutron activation analysis		
Mitiko Saik	Brazil	1023
Inclusion- Recognition Radiochemical Separation Of Some Fission Products		
Moayyed G.Jalhoon	Iraq	1024
Radium release at solid/fluid interface – experimental investigations		
Norman Dietrich	Germany	1025
Absorption behaviour of protactinium-231 on the novel TK400		
Peter Ivanov	UK	1026
On the correction of spectral interferences from uranium for the determination of $n(234\text{U})/n(238\text{U})$ and $n(236\text{U})/n(238\text{U})$ using ICP-SFMS		
Petra Lagerkvistlobo	Sweden	1027
Cyclotron production of ^{186}Re for therapeutic radiopharmaceuticals: Purity and specific activity		
Sandor Takacs	Hungary	1028
Experimental excitation functions of ^{103}Pd production by deuteron irradiations		
Simone Manteni	Italy	1029
Structure of Uranyl Complexes with Hydroxamate Siderophores		
Sue B. Clark	USA	1030
On the significance of total expanded uncertainties when measuring radioactive strontium		
Stina Holmgren Rondahl	Sweden	1031
Meet CINCH a new initiative for education and training in nuclear and radiochemistry in the EU		
Teodora Retegan	Sweden	1032
Recovery of ^{60}Co with sulfides of d-elements from aqueous solutions in presence of EDTA		
Vladimir Kulemin	Russia	1033

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