

PROGRAMME

Sunday, 24 August 2008

Eötvös Loránd University, Pázmány Péter sétány 1/A, Budapest

15:00 – Registration
Mounting of posters

19:00 – 21:00 Welcome Party

Monday, 25 August 2008

Eötvös Loránd University, Pázmány Péter sétány 1/A, Budapest

08:00 Registration (continued)
Mounting of posters

08:30 – 08:50 Welcome Adresses
Conference Chairmen, Prof. F. Hudecz the Rector of Lorand Eotvos University and H. W. Gäggeler Chair, Division of Nuclear and Radiochemistry, EuCheMS

08:50 – 09:25 Opening Lecture: The heritage of Hevesy György:
OP – abs227 radioindicators in life sciences today
H.H. Coenen

09:25 – 09:45 Hevesy Medal Award Ceremony
Chair: A. Chatt

09:45 – 10:30 “Radiochemical determination of nuclear data for theory
H – abs93 and applications”
S.M. Qaim

10:30 – 11:00 Coffee break

Session 1 Actinides
Chair: H. Nitsche, Co-Chair: N. Vajda

O1 – abs215 Actinide extraction by ionic liquids
11:00 – 11:15 E. Jobin

O2 – abs39 Microgravimetric corrosion studies on UO₂ thin film
11:15 – 11:30 models
A. Seibert

O3 – abs129 Redox behavior of plutonium and neptunium in aqueous
11:30 – 11:45 solution containing humic substances or hydroquinone
C. Marquardt

O4 – abs218 Study of thermodynamic properties of Np-Al alloys in
11:45 – 12:00 molten LiCl-KCl eutectic

E. Mendes

O5 – abs52
12:15 – 12:30
Combined TRLFS, EXAFS and theoretical investigations on Actinide/Lanthanide complexed with partitioning-relevant N-donor ligands
P. J. Panak

O6 – abs247
12:30 – 12:45
Uranium dioxide oxidation and behavior under hydrothermal conditions
S. Kalmykov

12:45
Lunch

Session 2
Transactinides
Chair: M. Schädel, Co-Chair: S. Nagy

Invited Speaker
IT1– abs264
14:00 – 14:30
Synthesis, chemical identification and study of properties of superheavy elements
S.N. Dmitriev

Invited Speaker
IT2 – abs32
14:30 – 15:00
Chemistry of the Transactinides
J.V. Kratz

O7 – abs104
15:00 – 15:15
Chemical investigation of element 114 – status report
R. Eichler

O8 – abs157
15:15 – 15:30
Synthesis of Hassium isotopes in reactions leading to the compound nucleus Hs-274*
A. Türler

O9 – abs112
15:30 – 15:45
Fluoro complex formation of Rf and Db
Y. Nagame

15:45 – 16:15
Coffee break

Session 3
Nuclear methods in material science and industrial applications
Chair: G. Klingelhöfer
Co-Chair: E. Kuzmann

Invited Speaker
IT3– abs267
16:15 – 16:45
Mineralogical and chemical analysis of the surface of Mars by Mössbauer spectroscopy and XRF
G. Klingelhöfer

O10– abs239
16:45 – 17:00
Characterization of the new PGAA and PGAI facility at the research reactor FRM II
L. Canella

O11– abs138
17:00 – 17:15
After-effects in Co-57 emission Mössbauer spectroscopy: turning a foe into a friend

A. A. Kamnev

**O12– abs126
17:15 – 17:30**

**Spectromicroscopic investigation of metal precipitate
formation in nuclear waste repository materials**

R. Dähn

**O13 – abs64
17:30 – 17:45**

**Mössbauer spectroscopy with high velocity resolution:
new possibilities of chemical analysis in material science
and biomedical research**

M. I. Oshtrakh

19:00 –

Concert in Basilika

Tuesday, 26 August 2008

Eötvös Loránd University, Pázmány Péter sétány 1/A, Budapest

Session 4

Radionuclide production I.

Chair: F.F.R. Knapp, Co-Chair: L. Baranyai

Invited Speaker

IT4 – abs268

09:00 – 09:30

Availability of therapeutic radioisotopes for nuclear medicine and oncology – the important role of research

F.F.R. Knapp

O14 – abs58

09:30 – 09:45

Synthesis and testing of gel metal-oxide composites as filling materials for W-188/Re-188 generator column

E. Iller

O15 – abs24

09:45 – 10:00

Preparation and quality control of Lu-177 labeled radiopharmaceuticals

M.M. Ishfaq

O16 – abs134

10:00 – 10:15

The production of Be-7 in a nuclear reactor

M.C. Fornciari Iljadica

O17 – abs176

10:15 – 10:30

Neutron activation of nanoparticles using a cyclotron

K. Abbas

10:30 – 11:00

Coffee break

Session 5

Radionuclide production II.

Chair: M. Bonardi, Co-Chair: F. Tárkányi

O18 – abs178

11:00 – 11:15

Excitation functions and yields for Re-18x production by cyclotron irradiation

F. Groppi

O19 – abs186

11:15 – 11:30

Fully automated preparation of Ra-226 targets for the cyclotron based production of Ac-225

J. Moreno

O20 – abs144

11:30 – 11:45

New cross section measurements for the production of medically interesting radionuclides Br-75, 76, 77, 80m

I. Spahn

O21 – abs61

11:45 – 12:00

Experimental study of cross section for α -induced reactions on Cd-114,116

A. Rebeles

12:00

Lunch

13:00 – 15:00

POSTER SESSION A

Session 6

Radiotracers in life sciences I

Chair: F. Roesch, Co-Chair: J. Környei

Invited Speaker

IT5 – abs269

15:00 – 15:30

Therapeutic radiolanthanides and pre-therapeutic dosimetry by using PET

F. Roesch

O22 – abs200

15:30 – 15:45

A simulation approach to describe Bi-213 radiolabeling on CHX-DTPA-IgG conjugate

G. Montavon

O23 – abs181

15:45 – 16:00

Measurement of hyperfine field in metal complexes by perturbed angular correlation of γ -rays

A. Yokoyama

16:00 – 16:30

Coffee break

Session 7

Radiotracers in life sciences II

Chair: H.H. Coenen, Co-Chair: P. Mikecz

O24 – abs47

16:30 – 16:45

Tc-99m direct labeling of a new anti-MUC1 monoclonal antibody, PR81, as a potential agent for imaging of human breast cancer in nuclear medicine

M. Salouti

O25 – abs87

16:45 – 17:00

Scandium-DOTA complex for a new PET/3g camera for medical applications and radio labeling studies

S. Huclier Markai

O26 – abs120

17:00 – 17:15

New approach to the nucleophilic synthesis of 18F-labelled aromatic amino acids

J. Ermert

O27 – abs148

17:15 – 17:30

The synthesis of an F-18 labeled luteinising hormone-releasing hormone receptor targeting peptide ligand

I. Kertész

18:00 –

IAB meeting

Wednesday, 27 August 2008

Eötvös Loránd University, Pázmány Péter sétány 1/A, Budapest

Session 8

Radioecology and environmental sciences I

Chair: P. Benes, Co-Chair: T. Kovács

Invited

Speaker

IT6 – abs266

08:30 – 9:00

Environmental contamination by the NORM industry: challenges for radioecology

H. Vandenhove

O28 – abs223

09:00 – 9:15

Radiocarbon determination on carbonaceous particles

H. W. Gäggeler

O29 – abs15

09:15 – 9:30

Uranium isotopes in the Balkan's environment and foods

F.P. Carvalho

O30 – abs182

09:30 – 9:45

Field experience of thoron interference on radon measurements

S. Tokonami

O31 – abs41

09:45 – 10:00

Radon and Uranium Concentration Distribution of the Groundwater in Korea

Y. Y. Yoon

10:00 – 10:30

Coffee break

Session 9

Radioecology and environmental sciences II

Chair: J. Aupiais, Co-Chair: Zs. Molnár

Invited

Speaker

IT7 – abs265

10:30 – 11:00

Key parameters for radioecological modelling and assessments

G. Voight

O32 – abs196

11:00 – 11:15

Complexation studies of uranium(VI) by sulfur and nitrogen containing model ligands in aqueous solution

B. Raditzky

O33 – abs248

11:15 – 11:30

Chemical decontamination of Goiania materials containing Cs-137

J.A. Medeiros

O34 – abs165

11:30 – 11:45

Ni-63 in Chernobyl „ruthenium hot particles” and in forest soil samples

J.W. Mietelski

O35 – abs74

11:45 – 12:00

Radiation events of the past identified by Pb-210 in lakes bottom sediment layers

E. Kvasnikova

O36 – abs238 12:00 – 12:15	Behaviour of Np(V), U(VI) and Cs in geochemical barriers on the basis of natural and modify clay minerals M. Sabodina
12:15	Lunch
13:00 – 15:00	POSTER SESSION B
<u>Session 10</u>	Radioecology and environmental sciences III Chair: S. Tokonami, Co-Chair: Á. Nényei
O37 – abs189 15:00 – 15:30	A comparative study of neodymium uptake by yeast cells A. Vlachou
O38 – abs166 15:30 – 15:45	Interaction of uranium(VI) with peptidoglycan A. Barkleit
O39 – abs88 15:45 – 16:00	U(VI) species sorbed on the green algae <i>Chlorella vulgaris</i> - a TRLFS and EXAFS study A. Günther
O40 – abs20 16:00 – 16:15	New contribution of CE-ICPMS for speciation studies J. Aupiais
O41 – abs211 16:15 – 16:30	Validation of ecological I-131 transfer models using experimental data of the “Plavsk scenario” I. Zvonova
O42 – abs11 16:30 – 16:45	Radioecological studies of higher aquatic plants within the Chernobyl accident exclusion zone N. Shevtsova
16:45 – 17:15	Coffee break
<u>Session 11</u>	Radionuclides in geo- and cosmochemistry Chair: D. Schuman Co-Chair: N. M. Nagy
Invited Speaker IT8 – abs253 17:15 – 17:45	Role of radiochemistry towards solving astronomical puzzles S. Lahiri
O43 – abs169 17:45 – 18:00	Influence of silicate ions on Eu(III) aqueous speciation T. Vercouter
O44 – abs155 18:00 – 18:15	Reconstructing historical trends of metal inputs in a heavily-disturbed coastal area of the North Adriatic Sea (Ravenna, Italy) R. Guerra

- O45 – abs135**
18:15 – 18:30
Chemistry of technetium in the near field of a cementitious waste repository
N.D.M. Evans
- O46 – abs121**
18:30 – 18:45
Mobility of Zn^{2+} -65 in granite filled columns in the absence and presence of C-14 -labeled humic substances
A. Mansel
- O47 – abs119**
18:45 – 19:00
Radionuclides of astrophysical interest from accelerator waste
D. Schumann
- 19:00 –**
EuChem DNRC meeting

Thursday, 28 August 2008

Eötvös Loránd University, Pázmány Péter sétány 1/A, Budapest

Session 12

Radioanalytical chemistry I.

Chair: E. Mackey, Co-Chair: Zs. Révay

Invited

Speaker

IT9 – abs277

08:30 – 9:00

Recent trends in radioanalytical chemistry

A. Chatt

O48 – abs28

09:00 – 9:15

Radiochemical analysis in decommissioning of nuclear facilities

Hou Xiaolin

O49 – abs179

09:15 – 09:30

Prompt Gamma-Ray Activation Analysis at NIST

E.A. Mackey

O50 – abs132

09:30 – 09:45

Zinc investigation in osteoporosis diseases by X-ray micro fluorescence

I. Lima

O51 – abs124

09:45 – 10:00

Determination of plutonium in environmental samples using AMS

T. Bisinger

10:00 – 10:30

Coffee break

Session 13

Radioanalytical chemistry II

Chair: P. Povinec, Co-Chair: Zs. Révay

O52 – abs50

10:30 – 10:45

Radiometrics and mass spectrometry synergy in ultrasensitive radionuclide analysis

P. Povinec

O53 – abs237

10:45 – 11:00

CE-DAD-ICP-MS – A tool for the speciation of actinides and long lived fission products in environmental chemistry

B. Kuczewski

O54 – abs161

11:00 – 11:15

New sensors based on extraction systems for stable fission products analysis

V. Babain

O55 – abs175

11:15 – 11:30

Speciation of Trivalent Actinides (U, Np, Pu) in aqueous solution

N.I. Banik

O56 – abs111

11:30 – 11:45

Selective separation and ultra-trace analysis of technetium-99

T.J. Tranter

O57 – abs30 11:45 – 12:00	Production and separation of ‘Tracer Packet’ of most similar elements in the periodic table: A novel method D. Nayak
O58 – abs287 12:00 – 12:15	Applications of extraction chromatographic resins in radioanalytics and nuclear medicine S. Happel
12:15	Lunch
13:00	Conference dinner to Visegrád

Friday, 29 August 2008

Eötvös Loránd University, Pázmány Péter sétány 1/A, Budapest

Session 14

Radiochemistry in nuclear energy production I

Chair: J. Jahn, Co-Chair: J. Schunk

Invited Speaker

IT10 – abs281

08:30 – 9:00

Activity transport mechanisms in water cooled reactors

V. Kritskiy

O59 – abs171

09:00 – 9:15

A digital autoradiographic system for irradiated fuel

M. H. Kaye

O60 – abs188

09:15 – 9:30

Elaboration of a chemical decontamination procedure: comprehensive analysis of the main technological steps

K. Radó

O61 – abs110

09:30 – 9:45

Aqueous dissolution of uranium oxides in oxidizing alkaline media

S. M. Peper

O62 – abs142

09:45 – 10:00

Comprehensive study of uranium and transuranium (Pu, Am, Cm) accumulation on stainless steel surfaces

L.P. Kádár

10:00 – 10:30

Coffee break

Session 15

Radiochemistry in nuclear energy production II

Chair: R. S. Herbst Co-Chair: R. Schiller

O63 – abs108

10:30 – 10:45

Cs & Sr Extraction from HNO₃ by HCCD & PEG-400 In FS-13

R. S. Herbst

O64 – abs250

10:45 – 11:00

On the way to a Chromatographic process for minor actinides partitioning from high level liquid wastes

J. John

O65 – abs149

11:00 – 11:15

Complexation of Eu(III) with N,N,N',N'-tetraoctyl diglycolamide

V. K. Manchada

O66 – abs204

11:15 – 11:30

Stability of hollow fibre supported liquid membranes

P. Mohapatra

O67 – abs212

11:30 – 11:45

Effect of acetohydroxamic acid on speciation of plutonium

A. Paulenova

O68 – abs130 11:45 – 12:00	Recent results on polonium behavior in liquid eutectic lead-bismuth alloy J. Neuhausen
O69 – abs127 12:00 – 12:15	Mechanisms of lanthanide binding by cementitious materials E. Wieland
<u>Session 16</u>	Fundamental nuclear chemistry Chair: H. W. Gäggeler, Co-Chair: Z. Homonnay
Invited Speaker IT11 – abs221 12:15 – 12:45	Update on IUPAC Project: Terminology, quantities and units concerning production and applications of radionuclides in radiopharmaceutical and radioanalytical chemistry M.L. Bonardi
O70 – abs83 12:45 – 13:00	Still productive: the “gold mine” of basic nuclear parameters M. Bichler
O71 – abs60 13:00 – 13:15	Spent fuel/old uranium oxide natural surrogates: concerning helium behavior, how far is the analogy possible? B. Folch
O72 – abs123 13:15 – 13:30	Speciation of polynuclear An(IV) complexes and colloids in aqueous solution C. Walther
13:30	Closing and NRC8 invitation
13:45	Farewell snacks