

**Program of the Final Symposium of COST NETWORK “NORM4Building”
Use of by-products in construction: dealing with natural
radioactivity**

Rome, Istituto Superiore di Sanità (National Institute of Health), 6-8 June 2017

6th June

14:00-14:30	introduction	F. Bochicchio, M. Magnoni, C. Nuccetelli, W. Schroeyers	
14:30-17:00	Session 1: NORM or NOT?		
CHAIR	Rosabianca Trevisi		
14:30-15:00	Key-Note	G. Jonkers	NORMalisation
15:00-15:30	Key-Note	M. Sanjuán	Coal bottom ash natural radioactivity
15:30-16:00	Coffee break		
16:00-16:20	Presentation	K. Kovler	The book of NORM4BUILDING: Aims, terminology and introduction
16:20-16:40	Presentation	S. Bucci	Characterization of Australian garnet abrasive and waste deriving from waterjet cutting in the framework of radiological legislation
16:40-17:00	Presentation	F. Puertas	Impact of SCM incorporated in the alkali-activated matrix. Radiological and leaching studies

7th June

9:00-12:30	Session 2: New options for the reuse of NORM in construction		
CHAIR	Francisca Puertas		
9:00- 9:30	Key-note	A. Janssens	Challenges in the national implementation of the requirements of the EU-BSS with regard to NORM industries and building materials
9:30-10:00	Key-note	F.J. Maringer	The European joint research project MetroNORM - Main findings and impact on regulators and industry
10:00-10:20	Presentation	D. Vaičiukynienė	Zeolitized bottom ashes from biomass combustion as cement replacing components
10:20-10:40	Presentation	E. Fidanchevska	Optimization of the main process parameters of ceramics production from red mud and clay
10:40-11:00	Coffee break		
11:00-11:20	Presentation	T. Kovacs & Z. Sas	The NORM4BUILDING & the By-BM databases
11:20-15:30	Session 3: Measurement protocols for NORM and NORM containing construction materials		
CHAIR	Harry Friedmann		
11:20-11:50	Key-note	P. De Felice	ENEA-INMRI contribution to MetroNORM project in the field of development of Reference Materials
11:50-12:20	Key-note	G. de With	A harmonised european norm for the determination of natural radioactivity in

construction products

12:20-13:20	Lunch		
13:20-13:40	Presentation	B. Michalik	Measurement of radioactivity in building materials – problems encountered and commonly made mistakes
13:40-14:00	Presentation	M. Magnoni	Thoron exhalation rate in stony materials: a simplified approach
14:00-14:20	Presentation	F. Leonardi	Radon exhalation rate in building materials containing NORM residues via dynamic method: methods and protocol
14:20-14:40	Presentation	K. Kovler	Indoor radon control based on tabulated values of temporal radon variation
14:40-15:00	Presentation	F. Puertas & H. Friedmann	The book of NORM4BUILDING: Measurements & practices
15:00-15:30	Coffee break	Poster	
15:30-16:30	MC meeting		

8th June

9:00-12:40	Session 4: Assessing the impact of the use of NORM in construction		
CHAIR	Christian Kunze and Emilija Fidanchevski		
9:00-9:30	Key-note	P. Vuorinen	Assessing ionizing radiation from construction products under Construction Product Regulation CPR — Dose assessment of emitted gamma radiation
9:30-9:50	Presentation	R. Wiegers	The book of NORM4BUILDING: Industrial perspectives
9:50-10:10	Presentation	S. Pepin	Using RESRAD-BUILD to assess the external dose from building material
10:10-10:30	Presentation	T. Croymans	Gamma exposure from building materials – a dose model with expanded gamma lines from NORs applicable in non-standard rooms
10:30-11:30	Special Poster session – Coffee break		
11:30-11:50	Presentation	N. Todorović	Radiological impacts assessment for workers in ceramic industry
11:50-12:10	Presentation	E. Toth-Bodrogi	Immobilization of red mud into clay matrix
12:10-12:30	Presentation	S. Friedreich	From NORM residues to building materials – Legislation & practice
11:00-12:30	Parallel: European NORM Associations (closed session)		
12:30-13:30	Lunch		
13:30-16:00	Session 5: Round table in 3 working groups		
Chair: G. Jonkers	WG 5.1	Communication, perception and terminology	
Chair: G. De With	WG 5.2	Pretreatment of NORM residues	
Chair: K. Kovler	WG 5.3	Standardized assessments of construction products	
15:40-16:00	Coffee break		
16:00-17:00	Session 6: Future perspectives of the COST Action NORM4BUILDING		
CHAIR	Wouter Schroevers		
	General discussion with participation of audience		

POSTERS

External Dose Assessment from NORM in Building Materials

Yoon Hae Cho, Seung Woo Ji, Jung Hwan Jang, Jae Kook Lee, Kwang Pyo Kim

Biomass ashes characterization and radiological behaviour

M. Martín-Morales, M.M. Alonso, S. Gismera, C. Gascó, J.A. Suárez, M. Zamorano, F. Puertas

Foam ceramic from romanian coal-firing power stations ash processed in microwaves field

Enikö Volceanov, Adrian Volceanov, Simona Badea

Radiological aspects for use of woodchips ashes in building industry

Massimo Garavaglia, Silvia Bucci, Elena Caldognetto, Marco Cappio Borlino, Massimo Faure Ragani, Concettina Giovani, Mauro Magnoni, Cristina Nuccetelli, Ilaria Peroni, Rosella Rusconi, Flavio Trotti, Luca Verdi

Energy Spectrum Distribution of Photon Radiations for U Series and Th Series in Secular Equilibriu

Jaekook Lee, Kunwoo Cho, Kwang Pyo Kim

Control of radon emanation at determining the activity concentration index of NORM

A. Tsapalov, K. Kovler

ASSESSMENT OF NATURAL RADIOACTIVITY FROM BUILDING MATERIALS IN SPAIN

M. Pérez, R. Ruiz-Cruces, C. Dueñas, E. Liger, E. Gordo, M.Cabello S. Cañete

Reuse of NORM for Esoteric Energy Manipulation

I. Prlic, M. Suric Mihic, Z. Veinović, A. Mostecak, M. Justic

PHYSICAL and CHEMICAL CHARACTERIZATION OF BUILDING MATERIALS

M. Pérez, L. León Reina, R. González, R. Ruiz-Cruces, C. Dueñas, E. Liger, E. Gordo, S. Cañete

ENEA-INMRI contribution to MetroNORM project in the field of development of new Nuclear Data for the U series

L. Sperandio, M. Capogni, P. Carconi, P. De Felice, A. Fazio, A. Petrucci

NORM from building materials...and not just – Disposal and control issues

G. Zambelli, M. Taroni, F. Carnaccini, F. Cesarini, G.Gaggioli, A. Iannarone, A. Ciarmatori