

**NOVEL PROCESSING ROUTES  
FOR EFFECTIVE SEWAGE SLUDGE MANAGEMENT  
1<sup>ST</sup> END USERS CONFERENCE  
CNR HEADQUARTERS, MARCONI ROOM - ROME, 25 OCTOBER 2012**



**ROUTES**

***Project co-funded by the European Commission (ENV.2010.3.1.1-2; Contract n. 265156)  
Coordinator: Giuseppe Mininni (CNR – Istituto di Ricerca Sulle Acque)***

The ROUTES project ([www.eu-routes.org](http://www.eu-routes.org)) is aimed to set up a panel of innovative techniques for the effective management of sewage sludge produced in wastewater treatment plants to be assessed regarding their technical, economical and environmental sustainability. The project started in May 2011.

A Board of End-Users was constituted to assure a fast dissemination of the results and their prompt applicability. So far, the Board includes 27 stakeholders, including national and international organizations, SMEs, public and private research centres, professionals, regional and national environmental Agencies, Municipalities and Ministries.

This Conference has the objective to disseminate the scientific results achieved at the medium term to obtain comments, reaction and suggestions and to encourage and facilitate the exchange of ideas and perspective views in sludge management.

In this Conference some results of the parallel FP7 project END-O-SLUDG ([www.end-o-sludg.eu](http://www.end-o-sludg.eu)) will be presented as well.

**PROGRAM**

Chairmen  
Prof. Enrico Rolle  
Department of Civil - Construction and Environmental Engineering - University La Sapienza  
Prof. Mario Beccari  
Department of Chemistry - University La Sapienza



**1<sup>st</sup> session: Introductory aspects**

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|------------|--|
| 8.30-9.00  | Registration   |
| 9.00-9.10  | Official conference opening<br><i>Enrico Brugnoli, Coordinator of the Department Sciences of Earth System and Technologies for the Environment, CNR, Rome - Italy</i>  |
| 9.10-9.30  | Perspective approaches of the Italian Ministry of the Environment on sludge and bio-waste management<br><i>Maurizio Pernice, General Director of the Direction for the Protection of Land and Hydrological Resources, Ministry of the Environment, Rome, Italy</i> |
| 9.30-09.50 | From FP7 to Horizon 2020: European perspectives on the new research programs on environmental technologies<br><i>Luisa Prista, Wojciech Klimek, European Commission, DG Research &amp; Innovation, Unit I2, Environmental Technologies, to be confirmed</i>        |
| 9.50-10.00 | Highlights of current legislation on sludge and bio-waste in member states<br><i>Giuseppe Mininni, ROUTES Coordinator, Cnr – Water Research Institute (IRSA), Italy</i>  |

**2<sup>nd</sup> session: ROUTES results**

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|-------------|--|
| 10.00-10.20 | Enhanced stabilization processes to improve sludge recycling in agriculture<br><i>Camilla Maria Braguglia, Cnr-Water Research Institute, Italy</i> |
| 10.20-10.40 | Pathogens in sludge processing<br><i>Anicet Blanch, Barcelona University, Spain</i>  |
| 10.40-11.00 | Fate of micropollutants in sludge amended soil<br><i>Thomas Ternes, Institute of Hydrology (BFG), Germany</i>                                      |

11.00-11.20 Benchmarking of innovative processing routes  
*Giorgio Bertanza, University of Brescia, Italy*

**3<sup>rd</sup> session: Sludge management in Europe and America**

12.00-12.20 Sludge processing and management perspectives in the U.S.A.  
*John Novak, Virginia State University, USA*

12.20-12.40 Sludge processing and management perspectives in Europe  
*Helmut Kroiss, Vienna University of Technology, Austria*

12.40-13.00 Biosolids management in UK  
*Stephen Riches, Anglian Water Authority, United Kingdom, to be confirmed*

13.00-15.00 Lunch

**4<sup>th</sup> session: The End User point of view**

15.00-15.15 Experiences of sludge utilization in agriculture in Italy and Europe  
*Hubert Brunet, European Federation for Agricultural Recycling*

15.15-15.30 Experiences of recovery of sewage and agro-industrial sludges for fertilizers production  
*Massimo Centemero, CIC, Italy*

15.30-15.45 Water utilities perspectives on sewage sludge recovery  
*Renato Drusiani, Elena Mauro, Federutility, Italy*

15.45-16.00 A case study of recovery of sewage and agro-industrial sludge in Rome  
*Alessandro Filippi, Aquaser Acea*

**5<sup>th</sup> session: ROUTES and END-O-SLUDG results**

16.00-16.15 Life cycle assessment of sludge processing  
*Sara Heimersson, Magdalena Svanström, Greg Peters; Chalmers University - Sweden*

16.15-16.30 Perspectives for using microbial electrolytic cells as sludge reduction system  
*Mauro Majone, University La Sapienza, Italy*

16.30-16.45 Overview of the END-O-SLUDG project  
*Richard Clarke, United Utilities, UK*

16.45-17.00 Experiences of sludge disposal by wet oxidation  
*Edoardo Slavik, 3VGreenEagle, Italy*

17.00-17.15 Ecotoxicity of sewage sludge  
*Anja Coors, Elisabeth Richter, Jörg Römbke; ECT - Germany*

17.15-18.00 Discussion and conclusions

**VENUE**

CNR Headquarters, Sala Marconi,  
Piazzale Aldo Moro 7,  
Rome, Italy, 25 October 2012



**SCIENTIFIC COMMITTEE**

Mario Beccari, *University La Sapienza, Italy*  
Helmut Kroiss, *Vienna University of Technology, Austria*  
Giuseppe Mininni, *CNR – IRSA, Italy*  
David Newman, *ISWA President*  
John Novak, *Virginia State University, USA*  
Stephen Riches, *Anglian Water Authority, UK*  
Enrico Rolle, *University La Sapienza, Italy*

**CONTACTS**

*Andrea Sbrilli*  
[sbrilli@irsa.cnr.it](mailto:sbrilli@irsa.cnr.it) - +39 06 906 72 776  
Roma Research Area 1, Via Salaria km 29,3  
C.P. 10, 00015 Monterotondo  
*Sara Berselli*  
[berselli@cnr.it](mailto:berselli@cnr.it) +39 06 4993 2405  
CNR Headquarters, Piazzale Aldo Moro 7,  
00185 Rome



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**INDIVIDUAL REGISTRATION FORM**

**Please print in block letters.**

Surname: \_\_\_\_\_ Given (First) Name: \_\_\_\_\_

Institution / Organization: \_\_\_\_\_

Mailing Address:

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\_\_\_\_\_  
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\_\_\_\_\_

Phone (including country code): \_\_\_\_\_

Fax (including country code): \_\_\_\_\_

E-mail: \_\_\_\_\_

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**Please remit form to:**

Andrea Sbrilli  
National Research Council - Water Research Institute(CNR-IRSA)  
Area della Ricerca di Roma 1  
Via Salaria Km 29,300 - C.P. 10  
00015 Monterotondo (Rome)  
Phone: +39-06 906 72 776  
Fax: +39-06 906 72 787  
E.mail: sbrilli@irsa.cnr.it