

Sed
Net

www.sednet.org



RB Institut Ruđer Bošković



Co-organised by Ruđer Bošković Institute and University of Dubrovnik, with the participation of IAEA

11th International SedNet conference

Sediment as a dynamic natural resource - from catchment to open sea

3-5 April 2019 – Dubrovnik, Croatia



Universität für Bodenkultur Wien



Hochschule für Angewandte Wissenschaften Hamburg
Hamburg University of Applied Sciences



**Sed
Net**

www.sednet.org



Institut Ruđer Bošković



**Co-organised by Ruđer Bošković Institute and
University of Dubrovnik, with the participation of IAEA**

**11th International SedNet conference
Sediment as a dynamic natural resource - from catchment to open sea
3-5 April 2019 – Dubrovnik, Croatia**

THANK YOU TO THE LOCAL ORGANISING TEAM:

Jasmina Obhodaš, Ruđer Bošković Institute
Ana Bratoš Cetinić, University of Dubrovnik
Marijana Pečarević, University of Dubrovnik
Marija Marguš, Université Lille & Ruđer Bošković Institute

Plenary Opening Session



Welcome by: Ana Bratoš - Cetinić, University of Dubrovnik

Keynote presentations:

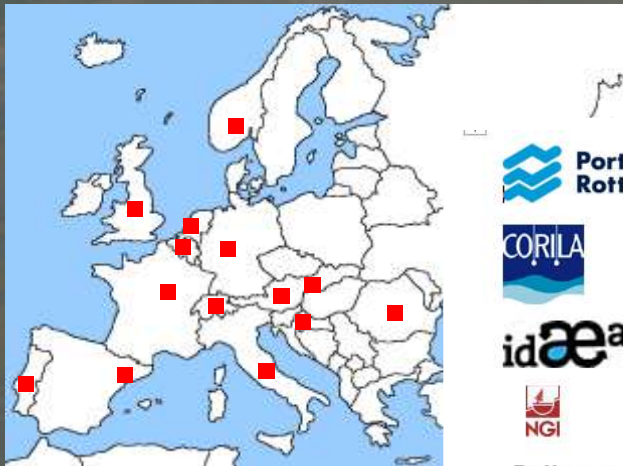
Indicators of methane hydrates occurrence in the deep Adriatic Sea
Jasmina Obhodaš, Ruđer Bošković Institute, Croatia

Acceleration of sedimentation rate in the Black Sea revealed in radiometrically dated by ^{210}Pb sediment cores
Gennady Laptev, Ukrainian Institute of Hydrometeorology, Ukraine



Marc Eisma,
Port of Rotterdam Authority
Chairman SedNet

SedNet Steer Group (SG)



Port of Rotterdam Authority
Marc Eisma (*Chairman SedNet Steering Group*)



CORILA
Andrea Barbanti



IDAEA-CSIC
Damià Barceló



Norwegian Geotechnical Institute (NGI)
Gijs Breedveld



Deltares
Jos Brils and Katherine Cronin



Hamburg Port Authority
Henrich Röper



Federal Institute of Hydrology (BfG)
Vera Breitung



Hamburg University of Applied Sciences
Susanne Heise



Port Authority Antwerp
Agnes Heylen and Eric de Deckere



International Commission for the Protection of the Danube River (ICPDR)
Igor Liska



BRGM
Bruno Lemière and Philippe Negrel



ISPRA, Italian National Institute for Environmental Protection and Research
Antonella Ausili and Elena Romano



CSIC – Institute of Construction Sciences
Eduardo Toranzo Urdeta (CSIC)
Marta Castellote Armero



Dutch Ministry of Infrastructure and Water Management
Pieter de Boer and Edwin van der Wel



Ecotox Centre
Carmen Casado and Benoît Ferrari



University of Lisbon
Cristina Lira



Flemish Government, Dept. Mobility and Public Works
Edward Van Keer and Jürgen Suffis



OVAM, Public Waste Agency of Flanders
Goedele Vanacker



University of Natural Resources and Applied Life Sciences, Vienna (BOKU)
Helmut Habersack and Marlene Haimann



Rothamsted Research – North Wyke
Adrian Collins



GeoEcoMar
Adrian Stanica



Ruder Bošković Institute
Jasmina Obhodaš



ELSA – Remediation of contaminated Elbe sediments
Ilka Carls

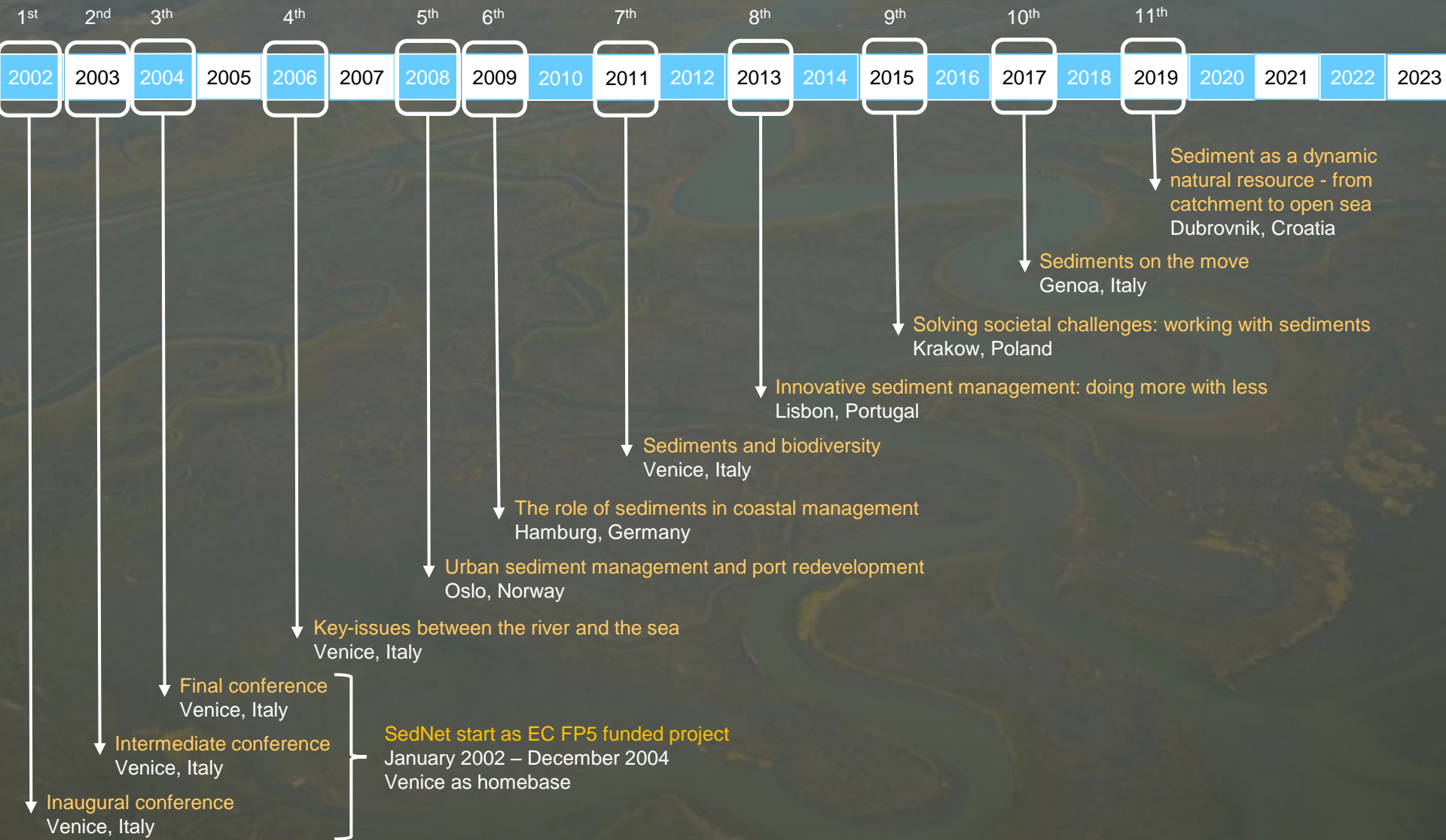
2002-2004: Conferences 1-2-3 (Venice)



2002-2004: funded by EC
DG-Research under the 5th
RTD Framework Programme

5 SedNet Books

SedNet conferences



Four SedNet messages (2014)



Sediment quantity & hydromorphology



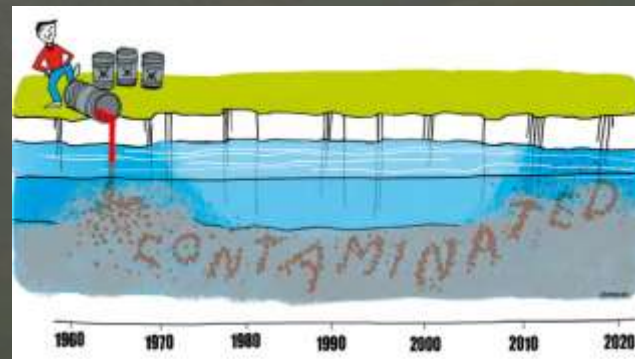
Sediment & river ecology



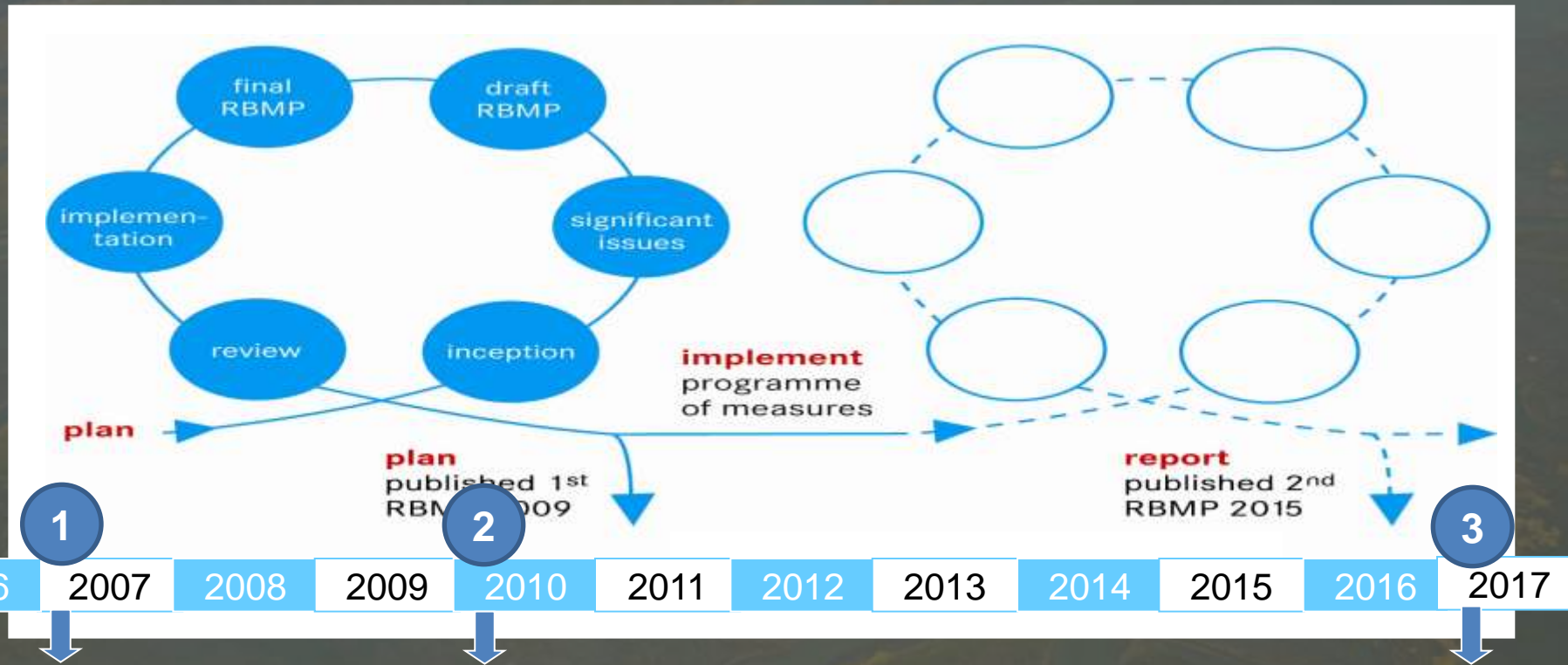
Dredged material management



Sediment quality & remobilization



SedNet Round Table Discussions (RTD)



Sediment management essential element of RBMP



Integration of sediment in river basin management

Elbe meets Danube
Effective river basin management needs to include sediment



Policy brief SedNet 2017



1st copy handed over to **Raimund Mair** (EC DG Env, WFD team) at SedNet Genoa Conference 2017



Effective river basin management needs to include sediment

European water policy objectives will only be achieved by also integrating sediment in River Basin Management Planning. Underpinned by the work of SedNet, the Elbe provides now for the first time an example on how to integrate sediment. SedNet is delighted with this milestone and is happy to share its experience with other European river basins.

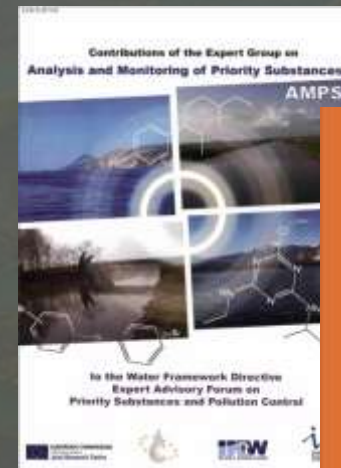


Contribution to EU policy development



Water Framework Directive (WFD) Common Implementation Strategy (CIS):

- Working Group Analysis and Monitoring of Priority hazardous Substances (AMPS): AMPS guidance document (2005)
- Working Group C (Chemicals): guidance on chemical monitoring of sediments and biota under the WFD (2010)
- Applied as NGO member of Strategic Coordination Group (SCG) (pending)



Biodiversity strategy:

- Soil pilot Working Group targeted to action 5: 'Mapping and Assessment of Ecosystems and their Services' (MAES) (2014 - 2017)



SedNet WG Q (quantity)



- Kicked-off at 10th SedNet conference (Genoa, 2017)
- Strategic objectives:
 - Increase awareness:
 - Need for **sediment quantity management at river-sea scale**
 - Understanding of related challenges
 - Demonstrating potential or opportunities of such management
 - Promote the sharing of experiences and best practices in this field
 - Develop & facilitate preparation of guidance
 - Developing of Strategic Research & Innovation Agenda (SRIA)
 - Promotion of that SRIA (e.g. **lobby 'SOS - Save Our Sediments' topic**)
- Co-leads: **Helmut Habersack** (BOKU, AT) & **Ad van der Spek** (Deltares)
- 2 Working meetings held in 2018 (March, Delft & November, Hamburg)
- Working meeting 2 April 2019, Dubrovnik (preceding SedNet conference)

SedNet WG CE (circular economy)

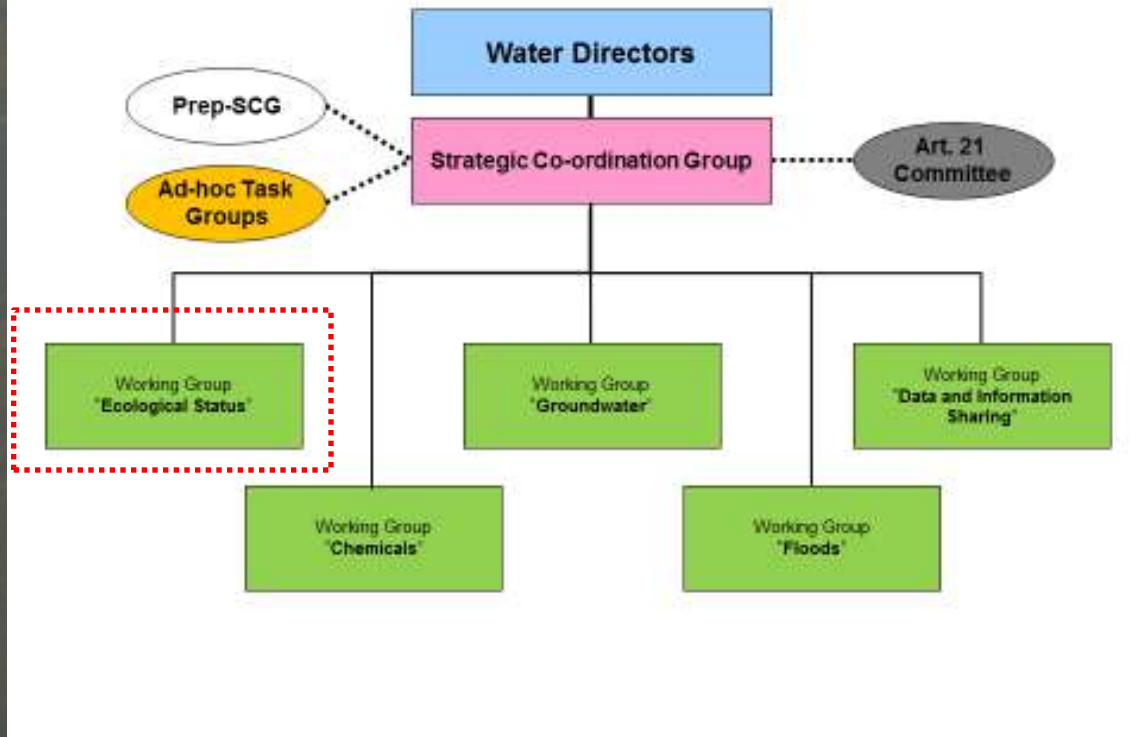


- Spin-off from CE session at 10th SedNet conference (Genoa, 2017)
- Objective / rationale:
 - Activities centered on **fostering initiatives on beneficial use of sediment**, and on offering an exchange forum to sediment practitioners, policymakers and scientists involved in beneficial use promotion
- Lead: Bruno Lemière (BRGM, F)
- First (kick-off) WG meeting held 6 November in Hamburg. Discussed:
 - Regulations vs circular economy, barrier or incentive?
 - **Beneficial use pathways for dredged sediments**, which, where and how far explored?
 - Sediment agglomeration vs aggregate extraction - compared sustainability?
 - **Demonstration, good practice**, and securing confidence for decision makers
 - Markets, SMEs and jobs from sediment beneficial use
 - Land use impacts of on-land sediment disposal, and beneficial use
 - Causal loops in sediment management - how beneficial use may affect dredging needs and more generally, river management?
 - Working meeting 2 April 2019, Dubrovnik (preceding SedNet conference)

WFD CIS* WG ECOSTAT & SedNet



CIS Organisation 2019-2021



- Participants:
 - MS delegated experts
 - Network delegates
 - Lead JRC & DG Env.
- Development guidance to implement WFD
- Lots of attention for **eutrophication****
- Now also more attention to **hydro-morphology****
- Thus direct link to, and attention for **sediment**
- ECOSTAT & SedNet **sediment management workshop**

* CIS = Common Implementation Strategy

** Europe-wide the 2 key-causes hindering WFD objective achievement

ECOSTAT Sediment workshop



- Dubrovnik, 1-2 April 2019
- 45 participants
- 16 EU countries and Turkey
- SedNet co-organizer & host



Outcome:

- Endorsement of SedNet's key principles to sustainable sediment management
- Proposal to develop a WFD related **sediment management guidance document** (\leq 2021):
 - Development led by ECOSTAT WG
 - With support of SedNet and national experts
- Process: 1) proposal to be elaborated, then 2) proposed to ECOSTAT WG, thereafter 3) to be endorsed by the WFD CIS Strategic Coordination Group, and then 4) start work

11th International Conference:



“Sediment as a dynamic natural resource - from catchment to open sea”

- 3 - 5 April 2019, Dubrovnik, Croatia
- 130 abstracts received and reviewed by SedNet SG
- 164 people (27 European and 4 other countries)!
- Platform sessions:
 1. Sediment management concept and sediment policy
 2. Sediment quality guidance, sediment quality assessment
 3. How can sediment management influence ecosystem services provision?
 4. Climate change and sediments: direct and indirect consequences
 5. Circular economy – sediment as a resource (SedNet WG CE)
 6. Impacts of disturbed sediment continua & mitigation measures (SedNet WG Q)
 7. The impact and transport of micro-plastics
 8. Ballast water and sediments – BWM Convention
 9. Nuclear and isotopic analytical techniques in sediment analysis
- Poster sessions (3 minute flash presentations)



new!

Poster Sessions

vote!



- Today 17:00 - 18:00: **Flash presentations!**

	Room Mare 1	Room Mare 3-4
17:00 - 17:15	Climate Change / Ecosystem Services	Sediment Quality
17:20 - 17:40	Sediment Management	Sediment Quality
17:45 - 18:00	Microplastics	Sediment Quality

- Today 18:00 - 20:00 Reception and Poster Session: **meet poster presenters at their poster!**
- Thursday 16:00 - 16:40: **Flash presentations!**

	Room Mare 1	Room Mare 3-4
16:00 - 16:20	Circular Economy	Nuclear/Isotopic Analytical Techniques
16:25 - 16:40	Sediment Quality	Sediment Quality/Quantity

- Thursday 16:40 - 18:00: **meet poster presenters at their poster!**
- Thursday 19:30 - 21:30 Conference dinner + **poster award ceremony!**

Journal of Soils and Sediments (JSS)



- SedNet 2019 Special Issue (SI) -

- SedNet 2019 attendees are invited to submit their contributions to JSS
- Once you enter the JSS Editorial Management System to submit a manuscript **select the SI title: "Sediments as a dynamic natural resource – from catchment to open sea"**
- Instructions to authors for preparing manuscripts can be found on JSS web site
- The page number limit: up to 6-8 pages of text (Times New Roman, font size 10, 1.5 line spacing, up to 5 figures/tables)
- **Submission Deadline: May 12, 2019**



Co-organised by Ruđer Bošković Institute and
University of Dubrovnik, with the participation of IAEA

**Thank you Ruđer Bošković Institute
and University of Dubrovnik, with participation of IAEA
for co-organising!**

Special thanks:

Jasmina Obhođaš, Ruđer Bošković Institute, SedNet SG
Ana Bratoš Cetinić, University of Dubrovnik





Have a nice conference!

