

5th Biennial Conference on Particles in Europe - 2016

Budapest University of Technology and Economics, Budapest Hungary

02 October: 6 p.m. – 7:30 p.m..... Ice-Breaker and Registration at Gellert Hotel, Budapest [included with Registration]. Dinner on your own.

October 3-5. 2016

Venue: H-1111 Budapest, Műegyetem rakpart 3, Central Building (Building K), Budapest Univ. of Tech. and Econ. (BME), 1st floor, Assembly Hall (Díszterem)

03 October: 8:30 a.m. • A Performance of *F. Liszt: Petrarch Sonnet No. 123* by Pianist *András Emszt*

- Opening Remarks: Host Prof. Sandor Baranya
- Welcome by Prof. János Józsa, Rector, Budapest Univ. of Tech. and Econ.

8:45 A.M – 10:30 A.M.

SESSION 1: Optics of Particles and Remote Sensing

PRESIDING: Yogi Agrawal, President, Sequoia Scientific, Inc., USA

1. **KEYNOTE: David Doxaran:** Remote sensing the concentration and size of suspended particles in river plumes and adjacent coastal waters: novel approaches and perspectives.
2. **Aurélien Gangloff, Romaric Verney, David Doxaran, Anouck Ody and Claude Estournel;** Rhône River plume (Gulf of Lions, France) metrics analysis using the MERIS-300m Ocean Color archive (2002-2012).
3. **Jacopo Agagliate, David McKee, Rüdiger Röttgers, Michael Twardowski;** Optical closure between PSDs and IOPs in natural waters: a Mie-based flow cytometric method
4. **Karolina Borzycka, Monika Zabłocka;** Seasonal changes of suspended particles parameters as a factor for inherent optical properties in the southern Baltic waters.
5. **Kelsey A. Fall, Carl T. Friedrichs, Grace M. Massey, David G. Bowers, and S. Jarrell Smith Guererro;** Relationships among

estuarine floc size, optical properties, organic content, and settling velocity: insights gained from combining LISST and a particle imaging camera system.

Chuck Pottsmith Presiding: Presentations by Vendors (3 min. ea.)

COFFEE BREAK: 10:30 a.m. – 11:00 A.M. [Complimentary]

SESSION 2: Methods and Instruments

Mon. 11:00 – 12:40 P.M.

PRESIDING: Sandor Baranya

1. **KEYNOTE: Guererro, Massimo;** Surrogate techniques to estimate river transport in the field.
2. **R. Le Boursicaud, G. Pierrefeu, D. Bonhomme ;** Comparaison of different methods to measure SSC at real time.

3. **S. Chaikalis, A.P. Karageorgis, S. Sofianos, P. Drakopoulos Conveski;** Estimating *zscat* in ultra-oligotrophic seas: implications for LISST-Deep scattering measurements.

and soil management applications: a methodological framework using dual signature tracers

4. **Santos, A.I., A. Oliveira, J.P. Pinto, S. More and N. Nakarias:** Using ADCP backscatter data as a proxy of suspended sediments in the water column.

AFTERNOON COFFEE BREAK: 3:20 PM to 3:50 p.m. [Complimentary]

LUNCH BREAK: 12:40 – 1:40 . [Lunch is included with Registration]

Mon. 3:50- 5:30 P.M.

Mon. 1:40 – 3:20 P.M.

SESSION 3: Methods and Instruments

SESSION 4: Methods and Instruments

PRESIDING: Ole Mikkelsen

PRESIDING: Katarina Holubova

1. **Chuck Pottsmith, Y.C. Agrawal, David Dana, and Ramon Cabrera;** LISST-ABS: A Point Acoustic Backscatter Sensor for Sediment Monitoring.
2. **Agrawal, Y.C;** Combining Optical and Acoustic Backscatter for a New Sediment Sensor.
3. **Slaven Conevsky, Baranya, Sandor, Nils Ruther, Guerro, Massimo;** Testing the LISST-ABS capabilities.
4. **Grace M. Massey, Kelsey A. Fall, Carl T. Friedrichs and S. Jarrell Smith;** In Situ Differentiation Among Suspended Primary Particles, Resilient Pellets and Flocs of Similar Size Using a Particle Image Camera System (PICS) in a Muddy Estuary.
5. **Poleykett, J; Black, K; Wright, M. Quinton, J. Armstrong, A , and Maher, B Santos;** The use of active sediment tracing in sediment

1. **François Bourrin, Mirjam Randla, Christophe Menniti, Dominique Aubert;** In-situ experiment of bottom sediment resuspension in a highly contaminated area, Portman Bay, Southern Spain
2. **Marion Chapalain, Romaric Verney, Flavie Druine, Michael Fettweis and Pierre Le Hir Druine;** Dynamics of suspended particulate matter and related measurement uncertainties in coastal waters (Bay of Seine, France).
3. **Flavie Druine, Romaric Verney, Julien Delofere Robert Lafite and Jean Philippe Lemoine;** Suspended particulate matter dynamics from optical backscatter sensor calibrations (Seine Estuary, France)
4. **Michael Fettweis and Matthias Baeye Jackson;** SPM concentration measurements in low and high turbulent conditions
5. **Alex Nimmo Smith:** In-situ measurements of microscale turbulence and particles in the sea

Discussion on Day's Presentations – 30 minutes.

Monday Evening Dinner on your own.

TUESDAY 04 OCTOBER : Field Visit. Boat trip between Gabčíkovo (SK) and Komárom (HU). Lunch on boat [included; courtesy of Dr. Katarína Holubová; Water Research Institute, Bratislava, Slovakia]; Bus leaves Univ. at 8 a.m. and returns to University at ~3 p.m.

TUESDAY: EXHIBITORS TIME – ~ 3 p.m. to 6 p.m.

Conference Dinner: 7:00 to 9:00 pm at Castle Museum, Gothic Hall. [included with Registration] Transport – on your own.

WEDNESDAY 05 October 2016

8:30 A.M. – 10:10 A.M.

SESSION 5: Sediment Transport and Field Studies

PRESIDING: Massimo Guerero

1. **KEYNOTE: Ulrik Lumborg**, Cohesive sediment dynamics in tidal estuaries – measurements and modelling.
2. **S. Baranya, B. Csiti, and G.T. Torok**, Quantitative mapping of dredged material mixing in the Danube River.
3. **Oliveira, A., Santos, A.I., Duarte, J., Taborda, R., Cascalho, J., & Ribeiro, M.**; Coastal and shelf particle studies in Portugal.
4. **P. D. Thorne, A.G. Davies**; Analysis of suspended sediment size sorting under waves above rippled bed

5. **Katarína Holubová, Miroslav Lukáč**; Comparison of SSC in the Danube obtained by different methods at Slovak and Austrian sites

COFFEE BREAK: 10: 10- 10:40 a.m. [Complimentary]

SESSION 6: Sediment Transport and Field Studies

Wed. 10:40 A.M. – 12:40 P.M.

PRESIDING: Stefan Haun

1. **Romarc Verney, Florent Grasso, Flavie Druine, Julien Deloffre, and Jean Philippe Lemoine Verney**; Using real time monitoring networks for investigating sediment dynamics in estuaries: a step beyond turbidity time series analysis.
2. **Colin Jago, Eleanor Howlett, Frances Hassard, Suzanna Jackson, Shelagh Malham, Paulina Rajko-Nenow, Peter Robins**; Trapping and bypassing of SPM, particulate nutrients and FIOs (pathogens) in the river estuary transition zone (RETZ) of a shallow macrotidal estuary
3. **Romarc Verney, Aurelien Gangloff, Marion Chapalain, David Le Berre, and Matthais Jacquet**, Floc features in estuaries and coastal seas
4. **Cansu Ozyaman and Cahit Yerdelen**; The Effect of Spur Kikes on Clear Water Scour in Open Channels.
5. **Piers Larcombe, Michael Garvey**; Complex near-bed sedimentary dynamics in seasonally stratified waters control visibility for subsea engineering

LUNCH BREAK: 12:40 – 1:40 P.M. [Included with Registration]

SESSION 7: Reservoir Sedimentation, Sediments in Hydropower

Wed. 1:40 – 3:10 P.M.

PRESIDING: David Doxaran

1. **KEYNOTE: G. Morris**; Sediment Sampling for Sustainable Management of Reservoirs
2. **B. Joshi, I.D. Dayal, R. Baboota**; Integrated Sediment Management and Reservoir Operation in Teesta Basin Projects, India.
3. **Emlyn Davies, Raymond Nepstad, Frode Leirvik**; Distribution and Transport of Suspended Particles from a Submarine Mine Tailing Discharge: Part 1, Observations.
4. **Marina Babić Mladenović, Dijana Oskoruš**; Development of the common sediment monitoring in the Sava River Basin.

COFFEE BREAK: 3:10:3:40 P.M.

SESSION 8: Reservoir Sedimentation, Sediments in Hydropower

Wed. 3:40: 5:10 P.M.

PRESIDING: Alex Nimmo Smith

1. **Georgiana – Mihaela PĂTRU, Florentina – Iuliana STAN**; Study on the Hydrological Processes in the Zetea Reservoir (Romania)
2. **Stefan Haun, Christoph Hauer, Andreas Hammer and Martin Schletterer**; Monitoring strategies to investigate suspended

sediments and turbine abrasion during the controlled drawdown of a hydropower reservoir

3. **Raymond Nepstad, Emlyn Davies, Morten Alver Ozyaman**; Distribution and Transport of Suspended Particles from a Submarine Mine Tailing Discharge: Part 2, Modelling
4. **Ugyen Rinzin**; Challenges of Sediment in Hydropower Plants in Bhutan. **(withdrawn)**

5:10 – 6:00 CLOSING DISCUSSION AND REMARKS:

Moderator – Yogi Agrawal

Group Photo on the Balcony