

Commission on Mineral and Thermal Waters

Commission Eaux Minérales et Thermales



MINUTES OF THE 46th ANNUAL SESSION

Together with

**MinWat2017 – International Multidisciplinary Conference on
Mineral Waters Genesis, Exploitation, Protection and
Valorization.**

Villa de Luso, 26 – 31 March, 2017

prepared by: Adam Porowski, Jia LaMoreaux, Werner Balderer

September 2017

According to the decision of the CMTW-IAH Meeting 2016 in Montpellier, France, **the meeting of the IAH Commission on Mineral and Thermal Water in 2017 was held in Villa de Luso Spa, Portugal.**

The meeting took place together with 2nd MinWat2017 – International Multidisciplinary Conference on Mineral Waters Genesis, Exploitation, Protection and Valorization, which was held in Luso Spa, Central Portugal from 26th to 31st March 2017.

The open meeting and the business meetings of the CMTW took place on Tuesday, 28th March, from 18:00 – 19:00.

The main organizer and the Chairman of the 2nd MinWat2017 Conference was prof. José Manuel Marques, Centre for Natural Resources and Environment (CERENA) Instituto Superior Técnico, University of Lisbon.

Dr Jim LaMoreaux, Chairman of the Commission on Mineral and Thermal Water of the International Association of Hydrogeologists (CMTW IAH) was the Member of the MinWat2017 Scientific Advisory Committee. The CMTW was one of the co-organizers of the Conference.

MinWat2017 summary and CMTW activity

MinWat2017 is a multidisciplinary conference concerning various aspects of mineral and thermal waters from the exploration and state-of-the-art scientific research to sustainable management, utilization and protection of their resources, groundwater bottling industry and medical hydrology.

The 2nd MinWat2017 had four main topics:

- A. Hydrogeology, hydrogeochemistry and hydrogeophysics – origin, protection and management of mineral and thermal waters.
- B. Bottled water: key characteristics and market trends.
- C. Mineral and thermal waters – health issues, balneology balneotherapy, and balneotechnics.

Additionally, two special Sessions have been organized at the end of the conference:

1. From fable to facts: a contribution to the study of Portuguese mineral and thermal waters.
2. Research in thermalism in Portugal and the international scientific knowledge.

Co-organizers and conveners of the MinWat2017:

- Centre for Natural Resources and the Environment (CERENA), Portugal
- Instituto Superior Tecnico (IST), University of Lisbon, Portugal
- International Association of Hydrogeologists (IAH)
- IAH Commission on Mineral and Thermal Waters (IAH-CMTW)
- IAH National Chapter of Portugal (IAH-GP)
- European Federation of Bottled Waters (EFBW)
- CPL Meetings & Event

Scientific Lectures and posters by CMTW Members during the MinWat2017

27-Mar-2017	Porowski Adam <i>(key-note speech)</i>	PL	REE in mineral and thermal waters: review of their origin, significance and application.
27-Mar-2017	Rman Nina , Laura Gabor, Mihael Brenčič <i>(oral speech)</i>	SL	Characterization of mofettes in Slovenia.
27-Mar-2017	Piscopo Vincenzo , Baiocchi A., Formica F., Lotti F., Pianese L. <i>(oral speech)</i>	IT	The thermal waters of the isle of Ischia (Southern Italy)
27-Mar-2017	Vinograd Natalia , Porowski Adam <i>(oral speech)</i>	RU, PL	Geochemistry and origin of mineral water resources in Staraya Russa spa inferred from new isotopic data.
27-Mar-2017	Marques Jose Manuel , Matos C., Carreira P.M., Neves M.O. <i>(oral speech)</i>	PT	Geochemical and isotopic tools to asses Caldas da Rainha thermomineral water system ascribed to a karst/fissured-porous environment, Portugal: a review.
27-Mar-2017	Carreira Paula M. , Marques J.M., Guerra A., Nunes D. <i>(oral speech)</i>	PT	Environmntal isotopes and geochemistry in the characterization of Caldelas and Gerés thermomineral waters, N Portugal.
27-Mar-2017	Marques Jorge Espina , Marques J.M., Carreira P.M. <i>(poster)</i>	PT	Hydrogeologic conceptual model of a mountain thermomineral system (Serra da Estrela, Central Portugal): a multidisciplinary approach.
30-Mar-2017	Rman Nina , Lapanje Andrej, Szócs Teodora, Palcsu Laszlo, Junež Peter <i>(oral speech)</i>	SL	Origin of high mineralized mineral water and gas in Rogška Slatina, Slovenia.
30-Mar-2017	Marques Jose Manuel , Carreira P.M. <i>(oral speech)</i>	PT	Conceptual model of Chaves low-temperature geothermal system – revisited, N Portugal.

30-Mar-2017	Wachowicz-Pyzik Anna , Sowiżdżał Anna, Maćkowski Tomasz <i>(oral speech)</i>	PL	Recognition of geothermal potential in Central Poland with the application of physical methods.
30-Mar-2017	Belle P. , Lachassagne P, Mathieu F., Barbet C., Bonneval F. <i>(oral speech)</i>	FR	Methodological and conceptual hydrogeological results from electrical tomography profiles in granitic and metamorphic context.
30-Mar-2017	Hałaj Elżbieta , Kępińska Beata <i>(oral speech)</i>	PL	Possibilities of sustainable use of thermal water resources from Lower Cretaceous formations in Mogilno – Łódź Trough, Poland.
30-Mar-2017	Lachassagne P , Alazar M., Bailly-Comte V., Couëffe R., Dewandel B., Grataloup S., Ladouche B., Lanini S., Maréchal J-C., Wyns R. <i>(oral speech)</i>	FR	The role of weathering profiles in the hydrogeological functioning of Crystalline thermo-mineral and carbo-gaseous systems.
30-Mar-2017	Carreira Paula M. , Costa A., Soares A.M., Nunes D., João M., Valadas A. <i>(oral speech)</i>	PT	Carbon-14 content as a support for Moura mineral waters aquifer hydrodynamic model.
30-Mar-2017	Marques Jorge Espina , Miller A.Z., Suzuki S., Rocha C. <i>(poster)</i>	PT	Microbial signatures in the Cabeço de Vide mineral waters (Central Portugal): a natural analogue for life on early Earth and... Mars.

CMTW Meeting: 28 March 2017

IAH CMTW Meeting

LIST OF PARTICIPANTS

No	Name	Country	e-mail
1	LAMOREAUX, JAMES (Chairman)	USA	jlamoreaux@pela.com
2	POROWSKI, ADAM (secretary)	PL	adamp@twarda.pan.pl
3	PISCOPO, VINCENSO	IT	piscopo@unitus.it
4	VINOGRAD, NATALIA	RU	natalia_vinograd@yahoo.com nv.70@hotmail.com
5	RMAN, NINA	SL	Nina.Rman@GEO-ZS.SI
6	HAŁAJ, ELŻBIETA	PL	elzbieta.halaj@gmail.com
7	WACHOWICZ-PYZIK, ANNA	PL	amwachowicz@poczta.fm

8	VYLITA, TOMÁŠ	CZ	tomasvyлита@seznam.cz
9	MARQUES JOSE MANUEL	PT	Jose.marques@tecnico.ulisboa.pt
10	CARREIRA PAULA	PT	carreira@ctn.tecnico.ulisboa.pt
11	FABBRI PAOLO	IT	Paolo.fabbri@unipd.it
<i>Non-members</i>			
12	Pizarro Cristina	PT	Cristina.pizarro@insa.min-sande.pt
13	Dada Giuseppe	IT	Giuseppe.dada@ferrarelle.it
14	Calado Noemia	PT	Noemia.calado@aguapuso.pt
15	Oliveira Vasco	PT	Vasco.oliveira@aguapuso.pt
16	Da Silva Antunes Manuel	PT	Antunes.silva@unices.pt
17	Paolucci Vittorio	IT	Vittorio.paolucci@ferrarelle.it
18	Tedesco Dario	IT	Dario.tedesco@unicampania.it
19	Sacchi Elisa	IT	Elisa.sacchi@unipv.it
20	Fosselard Patricia		Patricia.fosselard@efbw.org
21	Belle Pierre	FR	Pierre.belle@danone.com
22	Thomson Paul		pthomson@zenithglobal.com
23	Szócs Teodora	HU	szocs.teodora@mfgi.hu
24	LACHASSAGNE, PATRIK	FR	patrick.lachassagne@danone.com
25	POLA, MARCO	IT	Marco.pola@unipd.it
26	FABBRI, PAOLO	IT	Paolo.fabbri@unipd.it

ACCOMPANING PERSONS

No	Name	Country	
1	LaMoreaux, Nicole, Mrs	USA	cultural program

ABSENT MEMBERS

Name	Country	Member / Cand. Memb.	Absent with apologies
DOWGIAŁO, JAN (hon. Chairman)	PL	M	dowgian@yahoo.pl *
BALDERER, WERNER (Vice Chairman)	CH	M	bawerner@retired.ethz.ch

			*
PAPIĆ, PETAR	RS	M	papic@rgf.rs *
SHUGG, ANDREW	AU	M	Aquaregia1@inet.net.au *
FÓRIZS, ISTVAN	HU	M	Forizs.istvan@csfk.mta.hu *
RYBACH, LADISLAUS	CH	M	Rybach@ig.erdw.ethz.ch *
STRBACKI, JANA	RS	CD	jana.stojkovic@rgf.bg.ac.rs
LOTTI, FRANCESCA	IT	CM (?)	*
KRALJ, PETER (hon. Chairman)	SLO	M	
DEÁK, JÓZSEF	HU	M	Deak47jozsef@gmail.com
FERU, ADRIAN	RO	M	*
MARCIN, DANIEL	SK	M	*
POPESCU, MARIA	GR	M	
CARELLA, ROBERTO	IT	M	
CALADO, Carlos	PT	M	
CRUZ, José Virgilio	PT	CM	
DOTSIKA, LIANA	GR	CM	
FRANCESCHI, Michel	FR	M	
FRICKE, Michael	FR	M	
HABERMEHL, Rien	AUS	M	
HERCH, Andrea	GER	M	
IBRAGIMOVA, Irada	AZN	M	
ISSAADI, Abderrahmane	ALG	M	
LAHERMO, Pertti. W.	FIN	M	
LAING, Colin	AUS	M	
LESMO, Renato	IT	M	
MOORE, JOHN	USA	M	
PANG, Zhonghe	CHINA	M	
POUCHAN, Pierre	FR	M	
ROSENTHAL, Eliahu	IS	M	
RISLER, JEAN J.	FR	M	
SCHNEIDER, Jean	AUS	M	
SHAWKI, Abdine	ET	M	
SHTEREV, KOSTADIN	BUL	M	
TAHLAWI, Mohamed Ragaie El	EGY	M	
VERDEIL, Pierre	FR	M	
VON STORCH, KURT	GER	M	*
ZUURDEG, Boudewijn	NL	M	
CUCHI, Antonio	ES	M	

Agenda Part I: open meeting

1. Welcome of the participants and members:

Chairman: Jim Lamoreaux

Secretary: Adam Porowski

2. Acceptance of the CMTW Minutes from Montpellier, France, 2016:

Chairman: Jim LaMoreaux – short info, and voting.

3. New activities in relation to establishment of the official CMTW web-site on the IAH web-pages.

Discussion about the form and way of application: to whom it must be directed – as new IAH management works since October, 2016.

Jim Lamoreaux, Adam Porowski, Elżbieta Hałaj (Anna Wachowicz).

4. Information / discussion about upcoming publications:

a) New Zealand Mineral Waters: Andy Shugg and Jim Lamoreaux

b) New publication of Special Issue of Sustainable Water Resources Management with papers from CMTW meeting in Rome, 2015, and Portugal, 2017: guest editors Vincenzo Piscopo, Jose Marques and Paula Carreira

c) New publication: ***Encyclopedia of Sustainability Science and Technology, Second Edition***, edited by **Robert A. Meyers**.

Jim LaMoreaux, as Editor of the Environmental Geology Section, requested CMTW members to participate in authorship of one or more chapters. The following chapters may be still available for participation (- upon the acceptance of the editors).

1. Caves of Cuba
2. Impacts and Methodology of Fracking
3. Coral Morphology and Deposition
4. Mine Waters Inrush
5. Water in Loess
6. Surface Water Geochemistry
7. Surface and Groundwater Interaction
8. Climatic Effects on Ice and Snow
9. Brine Disposal
10. Metals Mining in Sub-Tropical Climates
11. Managed Aquifer Recharge
12. Remediation in Karst
13. Groundwater Vulnerability
14. Arid and Semi-arid Soil and Water Interaction
15. Mineral and Thermal Waters (Adam Porowski – editor + others)

BUSINESS Meeting

5. New Regular Members (RM) & Candidate Members (CM) and new members acquisition – discussion.
 - a) **Kriang Pirarai** – Senior Hydrogeologist with the Thailand Department of Ground Water Resources – voting about his Candidate Membership - confirmed
Info required
 - b) **Louis Mangani Nyirongo** – Sub Consultant Geologist at Snowy Mountain Engineering Corporation – eventual voting about his Candidate Membership ??
Info required
 - c) Sebnem Arslan, PhD – Ankara University, Faculty of Engineering, Department of Geological Engineering, Turkey
 - Voting about CM – there is official request and CV (attached).
 - d) Prof. Dr. Salih Muhammad Awadh - Geochemistry & Economic Geology, Department of Geology, College of Science, University of Baghdad, Iraq.
 - He is interested to participate in the CMTW activities and meetings; IAH member; he is going to participate in CMTW meeting in Slovenia, 2018.

Information from Secretary Adam Porowski

6. Elections of new CMTW management: preparation for internet voting, discussion, new candidate's proposition and discussion.
7. Propositions of the next meetings: discussion, voting, decisions
 - a) Proposition 2018: Slovenia – information from Nina Rman
 - b) Proposition 2019: ? Elena Kayukowa (Adam Porowski)
 - c) Propositions for the next years - discussion
8. Miscellaneous