



**BABEŞ-BOLYAI UNIVERSITY
FACULTY OF GEOGRAPHY
DEPARTMENT OF PHYSICAL AND
TECHNICAL GEOGRAPHY
and
AIR AND WATER ASSOCIATION**



in cooperation with

“SOMEŞ - TISA” Basin Water Administration

organize

**THE INTERNATIONAL CONFERENCE
AIR AND WATER - COMPONENTS OF THE ENVIRONMENT**

7th Edition

Partners

**”SOMEŞ” WATER COMPANY CLUJ
MDS ELECTRIC
HIDROELECTRICA CLUJ BRANCH
CLUJ-NAPOCA CITY HALL
CLUJ ENVIRONMENTAL PROTECTION AGENCY**

**20 – 22 March 2015
CLUJ-NAPOCA, ROMANIA**

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| PhD. Lect. T. TUDOSE | Babeș-Bolyai University, Cluj-Napoca, Romania |

PROGRAM

Friday, March 20, 2015

- 8.00 – 9.00: *Registration (Hall 43)*
- 9.00 – 10.20: *Opening ceremony (Hall 43)*
- 10.20 – 11.00: *Plenary session (Hall 43)*
- 11.15 – 12.45: *Visit to the Cluj-Napoca Astronomic Observatory*
- 13.00 – 14.30: *Lunch (Haşdeu University Restaurant, Petru Friciu Hall)*
- 09.00 – 18.30: *Poster session (Hall 43)*
- 14.45 – 16.30: *Communication sessions*
- 16.30 – 16.50: *Coffee break (Hall 27)*
- 16.50 – 18.30: *Communication sessions*
- 18.30 – 19.00: *Conclusions (Hall 43)*
- 19.30 – 22.30: *Official dinner (Haşdeu University Restaurant, Petru Friciu Hall)*

Saturday, March 21, 2015

8.00 – 20.00 *Field trip itinerary*

Cluj-Napoca – Lechința – Colibița Lake – Dracula Castle – Liviu Rebreanu Memorial House - Cluj-Napoca

Sunday, March 22, 2015

9.30 – 12.30 *Cluj-Napoca city tour*

Friday, March 20, 2015

Opening Ceremony

Hall 43, Amphitheatre „George Vâlsan”, 1st floor

- 09.00 - 09.05: Organizers welcome
09.05 - 09.10: Prof. Dănuț Petrea - Dean of the Faculty of Geography
09.10 - 09.15: Assoc. Prof. Florin Moldovan - World Meteorological Day - 2015
09.15 - 09.20: Prof. Gavril Pandi – World Water Day - 2015
09.20 - 09.30: General Manager – Ștefania Ferencz, Cluj-Napoca City Hall
09.30 - 09.40: Dipl. Eng. Ioan Roșu – Presentation of Someș - Tisa Water Branch Administration
09.40 - 09.50: Eng. Vlad Oprea - Presentation of S.C. Hidroelectrica S.A.
09.50 - 10.05: Soc. Victor Croitoru – Presentation of ”Someș” Water Company
10.05 - 10.20: Dipl. Eng. Sorin Bogdan – Presentation of MDS Electric
10.20 - 10.25: Laudatio for PhD. Prof. Victor Sorocovschi

Plenary Session

Hall 43, Amphitheatre „George Vâlsan”, 1st floor

Chairmen: PhD. Assoc. Prof. Gheorghe Șerban, PhD. Assoc. Prof. Adina Croitoru

10.30 - 10.45

PhD. Prof. Janos Mika - *Contribution of satellite-born information to climate science*

10.45 – 11.00

PhD. Prof. Elisha Tel-Or, Regina Borokhov-Sharapov, Yael Grunwald and Eran Benyamini -
Aquatic plants for the removal of toxic chemicals. Principles and applications

11.15 – 12.45: *Visit to the Cluj-Napoca Astronomic Observatory*

13.00 – 14.30: *Lunch* (Hașdeu University Restaurant, Petru Friciu Hall)

Session 1. Air and water environment monitoring

14.45-16.30

Hall 30, Groundfloor

Chairmen: PhD. Prof. Gavril Pandi, PhD. Robert Toth

14.45 - 15.00

Laszlo Nyitrai, Robert Tóth: *Investigation of atmospheric humidity transport on the basis of aerological measurements*

15.00 - 15.15

Costin Hîrlav, Adriana Porcuțan: *Seasonal flow regime on the rivers from Călimani Mountains*

15.15 - 15.30

Gavril Pandi, Florin Stoica: *Influenced flow in lower Iza River Basin*

15.30 - 15.45

Viorel Chendeș, Dan Bălțeanu, Dana Micu, Mihaela Sima, Ion B., Ines Grigorescu, Mihaela Persu, Carmen Dragotă: *A database design of major past flood events in Romania from national and international inventories*

15.45 - 16.00

Oana Bălan: *Morphometric aspects in the Bârlad Basin*

16.00 - 16.15

George Murătoareanu: *The influence of climatic factor on landslides in Ialomita Subcarpathians*

16.15 - 16.30

Vjacheslav Yavkin , Yevgen Gopchenko: *Method of calculating the maximum water flow in the mountains*

16.30 – 16.50 Coffee break

Session 2. Climatic Hazards (1)

14.45-16.30

Hall 43 (George Vîlsan), 1st Floor

Chairmen: PhD. Assoc. Prof. Agnieszka Wypuch, PhD. Assoc. Prof. Iulian Holobacă

14.45 - 15.00

Agnieszka Wypuch, Angelika Palarz, Danuta Kubacka: *Spatial differentiation and drought intensity in the Upper Silesia Region, Poland*

15.00 - 15.15

Daniel Celiński-Mysław: *Derecho - characteristics of the phenomenon, the danger zone in Poland*

15.15 - 15.30

Dominika Ciaranek: *Weather conditions favourable to the increased incidence of influenza virus in selected regions of Poland*

15.30 - 15.45

Vlad Minea, Raluca Burțiță, Lucian Sfică, Nicolae Ilie, Claudia Samoilă, Ioana Dicu: *Evaluation of environmental induced susceptibility to windfalls in the hydrographic basin of Moldova River*

15.45 - 16.00

Nicolae Ilie: *The wave of snow which covered the north of Moldavia in the interval 9-20th of December 2012*

16.00 - 16.15

Małgorzata Śliwińska, Dominika Ciaranek: *Very strong foehn winds in the Tatra Mountains (Polish Carpathian Mountains) – causes, course and consequences*

16.15 - 16.30

Andreea Floriana Marinică, Ion Marinică: *The drought of the summer of 2012 in Oltenia - Climatic risk phenomenon. Social and economic impact*

16.30 – 16.50 Coffee break

Session 2. Climatic Hazards (2)

16.50 - 18.30

Hall 43 (George Vîlsan), 1st Floor

Chairmen: PhD. Sen Res. Carmen Dragotă, PhD. Assoc. Prof. Florin Moldovan

16.50 - 17.05

Ion Marinică, Andreea Floriana Marinică: *Climatic considerations in the south-west of Romania on the autumn of 2014*

17.05 - 17.20

Doruța Ciurlău, Monica Sasu: *The comparison between two early blizzard events occurred in Romania during the time*

17.20 - 17.35

Cosmin-Liviu Șchiopu, Doruța Ciurlău: *The blizzard from 25-26 October 2014 and its impact on air flights*

17.35 - 17.50

Carmen-Sofia Dragotă, Loredana-Elena Havriș: *Changes in frequency, persistence and intensity of extreme high-temperature events in the Romanian Plain*

17.50 - 18.05

Irina Onțel, Nicoleta Ionac: *Land surface temperatures estimated on ground-observed data and satellite images, during the vegetation period in the Oltenia Plain*

18.05 - 18.20

Vasilică Istrate, Liviu Apostol, Lucian Sfică, Iulian Iordache, Florentina Bărcăcianu: *The status of atmospheric instability indices associated with hail events throughout Moldova*

18.30 - Conclusions

Session 3. Hydrological Hazards

16.50 - 18.30

Hall 46 (Emmanuel de Martonne), 1st Floor

Chairmen: PhD. Prof. Liliana Zaharia, PhD. Assoc. Prof. Martina Zelenakova

16.50 - 17.01

Martina Zelenakova, P. Blistan, P. Purcz: *Flood vulnerability in Bodva river basin in Slovakia*

17.01 - 17.12

Andrei Sima: *The significant flash floods in Vişeu River basin. Causes and effects on the floodplain*

17.12 - 17.23

Romulus Costache: *The assessment of economical loss caused by floods and flash-floods with the help of computer techniques. Case study: Lopătari village, Slănic River*

17.23 - 17.34

Gabriela Adina Moroşanu, Mohamed Ben-Daoud: *The assessment of floods within Coşuştea river basin, Romania (2000 - 2012). A statistical and conditional approach*

17.34 - 17.45

Liliana Zaharia, Gabriela Ioana-Toroimac, Romulus Costache, Eugen Crăciun: *The flood potential and measures for flood risk mitigation in Tecuci City*

17.45 - 17.56

Adriana Porcuţan, Costin Hîrlav: *Some particularities of rivers' high flow periods from Suceava hydrographic Basin*

17.56 - 18.07

Gabriela Ioana-Toroimac: *Historical flood risk management: spatial expansion of Gherghiţa village (Lower Prahova River)*

18.07 - 18.18

Marina Iosub, Ionuţ Minea, Oana Hapciuc, Gheorghe Romanescu: *The use of HEC-RAS modelling in flood risk analysis*

18.18-18.29

Miftode Ioana Delia: *Hazards, vulnerability and associated hydrological risks in the hydrographical basin of the river Uz, tributary of the river Trotuș*

Session 4. Water resource management

14.45 – 16.30

Hall 46 (Emmanuele de Martone), 1st Floor

Chairmen: PhD. Prof . Włodzimierz Marszelewski, PhD. Lect. Petre Brețcan

14.45 – 14.58

Senada Nezirović, Nusret Drešković, Alma Pobrić, Ranco Mirić: *Geographical aspects of river flows in the region of northeast Bosnia*

14.58 – 15.12

Lenka Zvijakova, Martina Zelenakova: *Impact assessment of structural flood mitigation measures*

15.12– 15.25

Michał Marszelewski, Włodzimierz Marszelewski: *Selected problems of lakes management on Polish Water law related to the differences between Polish and European Union legislation*

15.25 – 15.38

Ileana Tănase, Liliana Zaharia: *Impact of the reservoirs on the river low flow and measures to mitigate the negative effects*

15.38 – 15.51

Csaba Horváth, Kinga-Olga Réti, Ștefan Bilașco, Gheorghe Roșian: *Spatial distribution of the average runoff in the Iza and Vișeu watersheds*

15.51 – 16.04

Daniel Constantin Diaconu: *The use of SWAT hydrological model in Braila's Small Pond*

16.04 – 16.17

Victor Sorocovschi, Gavril Pandi, Corina Ungur, Csaba Horvath, Răzvan Băținaș: *South-Western Apuseni Mountains small rivers seasonal hydrological flow regime*

16.17 – 16.30

Petre Giștescu, Petre Brețcan, Dacian Teodorescu: *Lakes on the Romanian coast of the Black Sea – anthropic modifications and state-of-the-art*

Session 5. *Climatic changes and their impact*

14.45 – 16.30

Hall 22, Groundfloor

Chairmen: PhD. Prof. Janos Mika, PhD. Prof. Liviu Apostol

14.45 – 14.58

Mohammad Jafar Nazemosadat, Marjan Koohezadeh, Habib Ghaedamini: *Individual and coupled effects of the ENSO and PDO on the incidence of autumnal dry and wet periods in Iran*

14.58 – 15.11

Narcis Maier: *Variations of air temperature at 850 hPa in North-West Romania*

15.11 – 15.24

Ali-Akbar Sabziparvar, S. Movahedi, H. Asakereh, A. Masoodiyan, Z. Maryanaji: *Geographical factors affecting the precipitation regime in Iran*

15.24 – 15.37

Liviu Apostol, Liliana Sîrghea: *Thermal continentalism in Europe*

15.37 – 15.50

Zineddine Nouaceur, Ovidiu Murărescu: *Characterization of precipitation extremes and trends in two regions of North Africa*

15.50 – 16.03

Iulian Mitof: *Temporal variability of water resources in the Lower Buzău catchment*

16.03 – 16.16

Anna Kis, Rita Pongrácz, Judit Bartholy: *Analysis of projected frequency and intensity changes of precipitation in the Carpathian region*

16.16 – 16.30

Remus Prăvălie: *Positive feedback in climate change. A global approach.*

16.30 – 16.50 Coffee break

Session 6. *Pollution and protection of air and water environment*

Session 7. *Tourism potential of hydro - climatic resources*

16.50 – 18.30

Hall 22, Groundfloor

Chairmen: Ph.D Lect. Simion Beldean-Galea, Prof. Nicolae Ciangă

16.50 – 17.02

Nicholas Kathijotes: *Blue Technology - The Water-Energy Interrelationship in Producing Renewable Energies and Nutrient Recovery*

17.02 – 17.14

Mihail Simion Beldean-Galea, Andreea Cozma, Raluca Diodiu: *Simultaneous degradation of some phthalate esters under Fenton and Photo-Fenton oxidation processes*

17.14 – 17.26

Jahangiri-Rad Mahsa: *Modeling and analysis of algal blooms in Aras dam by artificial neural network*

17.26 – 17.38

Mohammad Rafiee, Jahangiri-Rad Mahsa: *Investigation of Legionella species in Tehran's hospital water supplies*

17.38 – 17.50

Maria-Adina Jurj: *Conversion of the hydro-climatic resources in tourism attractors in Roşia Montană-Abrud mining area*

17.50 – 18.02

Nicolae Ciangă, Daniel Costea: *The sodium chloride mineral waters from Harghita county, lasting tourism protection and capitalization*

18.02 – 18.14

Gheorghe Hognogi, Roxana Văidean: *Hydrological elements representative for a regional geography study*

18.14 – 18.26

Cătălina Maria Bătea (Bota): *Types of tourism associated with ground-water resources in the adjoining counties of Satu Mare and Szabolcs-Szatmár-Bereg*

Session 8. Students

14.45-15.15

Hall 37, Groundfloor

Chairman: PhD. Lect. Traian Tudose

14.45 – 15.00

Raluca Talpoș: *Tree-ring reconstruction of avalanche activity in Parâng Mountains (Southern Carpathians)*

15.00 – 15.15

Carla Nicoară: *Assesment of drinking water quality from Nadăș village – Cluj*

16.30 – 16.50 Coffee break

Session 9. Poster session

09.00 – 18.30

1st Floor

1. Andras Rázsi, Edina Csabai, Janos Mika, Zsófia Molnár, Attila Kovács: *Wind energy climate of the Eger region in Hungary*
2. Alexandra Hoaghia, Erika Levei, Oana Cadar, Dumitru Ristoiu: *Assessing of seasonal variations of water quality in Moşna River (Sibiu County)*
3. Ildiko Pieczka, Judit Bartholy, Rita Pongrácz, Karolina André, Anna Kis, Fanni D. Kelemen: *Regional climate modeling study for the Carpathian region using REGCM4 experiments*
4. Narcisa Milian: *Synoptic conditions for avalanche cases in Romania*
5. Adriana Băcescu, Mietta Colan, Magdalena Iordăchescu, Carmen Mănescu, Liliana Velea: *Hail episodes at meteorological station Craiova during the warm season*
6. Dariia Kholiavchuk: *The evolution of the wind patterns over regions with complex topography in the last 50 years (on the example of the Dniester Canyon, Ukraine)*
7. Robert Daniel Manta, Mihăiță Huştiu, Z. Sipos: *Agravating factors in the blizzard situations in the South-East of Romania*
8. Vaidean Roxana, Gheorghe Hognogi : *Damages assessment associated to the flood event which occurred on 11-14 July 1999 in the Râul Mare basin*
9. Loredana-Elena Havriş, Doina Stan: *Impacts of dryness and drought phenomena on agricultural landscape in the Titu Plain*
10. Fania Sfirlează, M. Băcescu, Cristina Burada, Mihaela Brâncuş, Ştefan Iordăchescu: *The influence of Mediterranean cyclones on the weather in Oltenia during the first month of summer*
11. Dorian Udo Reckerth: *Correlations between hail events and radar echoes in Transylvania*
12. Marin Şenilă, Mihaela Sima, Erika Levei, MariusRoman, Lăcrimioara Şenilă, Alexandra Hoaghia, Dana Micu, Oana Cadar, Dan Bălteanu: *Drinking water quality in wells from an area affected by flood events: case study of curvature Sub-Carpathians, Romania*

13. Flavius-Sebastian Ignea, Alexandru-Florin Birou: *Comparative study of the flash flood waves from the summer and autumn of 2014 on Bârzava River in the Gătaia-Partoș sector*
14. Oana Hapciuc, Ionuț Minea, Marina Iosub, Gheorghe Romanescu: *The role of the hydro-climatic conditions in causing high floods in the Sucevița river catchment*
15. Mihai Mereuță: *Using Landsat images in mapping and monitoring water bodies in Măgura Basin*
16. Emil Radu, Gabriela Stănescu, Cristiana Rotaru: *Geological and hydrogeological considerations on the Quaternary deposits from Crișul Alb basin between Vârșand and Sebiș (CLIMHYDEX PROJECT)*
17. Carmen Roba, Cristina Roșu, Bety-Denissa Burghele, M. Moldovan, H. Mitrofan: *The quality of natural mineral waters from Buzău County*
18. Ottilia Ruzs: *Temperature inversions in Transylvania*
19. Melinda Vigh: *Seasonal average flow in Râul Negru hydrographic basin*
20. Alina Ristea, Anișoara Irimescu, Andrei Diamandi, Oana Nicolae, Denis Mihăilescu: *Soil moisture analysis from in-situ and satellite observations over Romania*
21. Traian Tudose, Florin Moldovan: *The role of air advection and atmospheric stability indices for identifying heavy rainstorms in north-western Romania*
22. Sanda Roșca, Ștefan Bilașco, Narcis Maier, Dănuț Petrea, Iuliu Vescan, Ioan Fodorean: *Analysis of cumulative precipitation triggering landslides in Mures County*
23. Ioana Piștean, Cristina Roșu, Carmen Roba, Alexandru Ozunu: *Sediments pollution with heavy metals. Case study: Baia Mare mining area*
24. Adriana Greblă, Clara Roncea, Șerban Iordachescu: *Considerations on weather instability in Oltenia in the interval 27 – 31 July 2014*