



**НАУЧНА КОНФЕРЕНЦИЯ**  
**“Климат, атмосфера и водни ресурси в условията на климатични промени”**  
**14 – 15 октомври 2021 г.**  
София, НК1, бл.26 б, ЕЦИ-БАН

**ПРОГРАМА**

**14 октомври 2021 г., четвъртък**

9.50 – 10.00: Включване на участниците в онлайн платформата

10.00 – 10.15: Откриване на конференцията, приветствия

**Чл.-кор. проф. дфн Екатерина Бъчварова**, Директор на ИИКАВ–БАН, Председател на конференцията

10.15 – 12.00: **Сесия 1** Председател: **Чл.-кор. проф. дфн Екатерина Бъчварова**

10:15-10:30, Zoya Mateeva and Georgi Zhelezov

**The Climatic Risk: Methodological aspects**

10:30-10:45, Katya Georgieva, Yavor Chapanov, Boian Kirov

**Long-term variations of Danube discharge and their relation to long-term variations of large-scale atmospheric systems and solar activity**

10:45-11:00, Damyan Barantiev, Yavor Chapanov, Ekaterina Batchvarova

**Wavelet Analyzes of Wind and Temperature Coherence**

11:00-11:15, Kilifarska N.A., Velichkova Ts.P.

**Volcanic Activity and its Imprint on Climate of 20-th and 21-st centuries**

11:15-11:30, Jelena Svetozarevic, Nina Nikolova

**Seasonal distribution of extreme precipitation months in Northwest Bulgaria**

11:30-11:45, Damyan Barantiev, Ekaterina Batchvarova and Rosen Penchev

**Monitoring and prediction of fog formation on a Black Sea coastal site based on PARAFOG decision support system - a case study at Burgas Airport (BOJ)**

11:45-12:00, Polyana Angelova, Nikolay K. Vitanov, Zlatinka I. Dimitrova

**Discussion on extreme values of the water levels of the Mississippi river**

12.00 – 13.00: Обяд на участниците в конференцията

13.00 – 14.30: **Сесия 2** Председател: **Проф. д-н Явор Чапанов**,

13:00-13:15, Yavor Chapanov, Emil Bournaski

**Climate Variations over Catchment Area of Struma River**

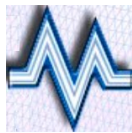
13:15-13:30, Nadezhda Shopova, Vesselin Alexandrov

**Hydrothermal conditions in the region of Vidin during the period 2012-2021**

13:30-13:45, Nadezhda Shopova, Vesselin Alexandrov

**Hydrothermal conditions in risky agricultural areas of central and southeastern Bulgaria**

13:45-14:00, Nikolay K. Vitanov



**New developments in the Simple Equations Method (SEsM) for obtaining exact solutions of nonlinear differential equations: methodology and applications**

14:00-14:15, Antoaneta Frantzova

**Climate change and health emergencies. The hidden factors**

14:15-14:30, Antoaneta Frantzova, Donka Shopova, Georgi Belev, Tatiana Orehova

**Risk assessment of hydro meteorological disaster for Primorsko municipality**

14.30 – 15.00: Кафе пауза, ПОСТЕРНА СЕСИЯ (Постери 1-5)

15.00 – 16.30: **Сесия 3** Председател: Гл. ас. д-р Дамян Барантиев

15:00-15:15, Yavor Charanov

**A New Method of Time Series Noise Reduction**

15:15-15:30, Antonia Mokreva

**Evaluation of the degree of soil contamination in the region of Maritza-East thermal power plants using magnetic and non-magnetic methods**

15:30-15:45, Elena V. Nikolova, Mila Chilikova - Lubomirova

**Solitary wave solutions of the extended KDV equation and their applications to propagating surface waves**

15:45-16:00, Mila Chilikova-Lubomirova

**Droughts Vulnerability of Teteven Town**

16:00-16:15, Mila Chilikova-Lubomirova, Daniel C. Diaconu, Elena Nikolova, Nina Philipova, Elitca Petrova

**Flood Impact on the Rivers Water Quality. Case study – Blato River**

16:15-16:30, Silvia Kirilova

**Geomorphological peculiarities of Yantra catchment area in GIS environment**

**15 октомври 2021 г., петък**

9.30 – 11:00: **Сесия 4** Председател: Проф. д-р Емил Бурназки

9:30 – 10:15, Valentin Simeonov (invited lecturer, Ecole Polytechnique Federale de Lausanne)

**Global Climate Change**

10:15-10:30, Georgi Belev

**Morphology of a segment of the Treklyanska river valley (Gebreshevska) - in connection with the design and construction of a dam facility**

10:30-10:45, Nelly Hristova, Beloslava Simeonova, Nikolay Lenkov

**Seasonal variability of streamflow in two rivers in lower Danube in Bulgaria**

10:45-11:00, Nelly Hristova, Olga Nicheva, Tatiana Orehova

**Coefficient of seasonal variability in Yantra catchment area**

11.00 – 11.30: Кафе пауза, ПОСТЕРНА СЕСИЯ (Постери 6-11)

11.30 - 12.45: **Сесия 5** Председател: Доц. д-р Татяна Орехова



11:30 - 11:45, Nikolay Lenkov, Nelly Hristova  
**Water literacy and hydro-citizenship**

11:45- 12:00, Nina Philipova

**Interactive Computer Program for Design of Surface Drip Irrigation System for Row Crops: I. Crop Water Requirements' Calculations**

12:00-12:15, Nina Philipova

**Interactive Computer Program for Design of Drip Irrigation System for Row Crops: II. Hydraulic Calculations**

12:15-12:30, Kalin Seymenov

**Water quality assessment of the Danube's tributaries west of the Ogosta River**

12:30-12:45, Maria Karasani, Dionissis Latinopoulos, Susanne Schmeier, Ifigenia Kagalou

**Water Governance Overview in a Transboundary Large River, The Mesta / Nestos Case Study over the last 60 years**

12.45 – 13.30: Обяд на участниците в конференцията

13.30: **Закриване на конференцията**

ПОСТЕРНИ ДОКЛАДИ

1. Vesselin Alexandrov, Nadezhda Shopova

**Global climate change and meteorological events in 2020**

2. Peter Tonev (Space Research and Technology Institute, Bulgarian Academy of Sciences)

**Consistency of electric fields in atmospheric regions at high latitudes measured during SEP**

3. Georgi Belev, Yavor Chapanov

**Breeze Direction near Black Sea Coast of Bulgaria**

4. Georgi Belev, Yavor Chapanov

**Wind Properties over East Balkan Peninsula**

5. Emil Bournaski, Rosen Iliev, Leoneed Kirilov

**Incorporation of computational models to support water resources management**

6. Olga Nitcheva, Albena Vatrlova, Donka Shopova, Veselin Kutev, Polya Dobreva

**Analysis of Calculated Water Potential of Snow Cover and Yields of Rye and Triticale for the Last 4 years in the South Central Region of Bulgaria**

7. Donka Shopova

**Influence of climate change and human activity on water resources of the Tundja river basin**

8. Tatiana Orehova, Petar Gerginov

**Model study of the regime of karst spring Iskrets, NW Bulgaria**

9. Georgi Belev, Petja Radovanova

**Decrease of the volume of the Dead Sea due to Global Climate Change**

10. Petja Ivanova-Radovanova



## **Nature based solution in urban areas – possibility for noise protection by vegetation in the city of Sofia**

11. Petja Ivanova-Radovanova

**Urban green system for the development of effective climate adaptation strategies**