

**GLOBAL ENVIRONMENTAL CHANGE:
CHALLENGES TO SCIENCE AND SOCIETY IN SOUTHEASTERN EUROPE**
international conference, Sofia 19 - 21 May 2008, park-hotel Moskwa
(Preliminary programme)

Monday, 19 May 2008

till 16:00 Arrival of participants
15:00-18:00 Registration
16:00-16:30 **Opening** - Local welcome(s) and Sponsor welcome(s)
16:30-17:15 **Keynote speaker 1** The Weather and Climate - Difficult Science Problems, Stoycho Panchev (Bulgaria)
17:15-18:00 **Keynote speaker 2** Climate Change and the Balkans: Real Concern or "Useless Arithmetic", Gregory Knight (USA)
18:00–20:00 Welcome Reception at the park-hotel Moskwa

Tuesday, 20 May 2008

08:30-12:00 Registration
09:00-09:50 Keynote speaker 3 Global change and related impacts, Lucka Bogataj (Slovenia)

| | Session 1: Topic 1 GLOBAL CHANGE, Chairperson: Ekaterina Bachvarova | Author(s) | Country | Session 2: Topic 3 ENVIRONMENTAL IMPACTS, Chairperson: Galja Bardarska | Author(s) | Country |
|--------------------|---|---|----------------|---|---|----------------|
| 10:00-10:15 | Global Ocean Observing Infrastructure EURO-ARGO:Extension of the program in the Black Sea | Magda Bozhkova et al. | Bulgaria | CECILIA – EC FP6 Project on the Assessment of Climate Change Impacts in Central and Eastern Europe | Tomas Halenka | Czech Republic |
| 10:15-10:30 | Variability of Polar Atmosphere and its Effects on European Winter time Climatic Conditions | Natalia Kilifarska | Bulgaria | Joanneum Research: Climate Change - Research and Network Activities in Austria and SE Europe. The Climate Change Platform and related Research Activities | Eric Kirschner and Clemens Habsurg-Lothringen | Austria |
| 10:30-10:45 | UNDP/GEF Rio Conventions Project | Natalia Dimitrova | Bulgaria | Impact of expected changes of climate to the water resources and power sector in Albania | Eglantina Bruci | Albania |
| 10:45-11:00 | The Black Sea level as an indicator of climate and global change | Lyubka Pashova | Bulgaria | Modeling local dimensions of the climate change in Etropole, Stara Planina | Mariyana Nikolova et al. | Bulgaria |
| 11:00-11:30 | coffee break/posters | | | coffee break/posters | | |
| | Session 3: Topic 2 CLIMATE CHANGE, Chairperson: Vesselin Alexandrov | | | Session 2: Topic 3 ENVIRONMENTAL IMPACTS (cont.), Chairperson: Mariyana Nikolova | | |
| 11:30-11:45 | Use of diatoms as indicators of human impact and climate changes in Bulgarian high mountain lakes | Nadya Ognyanova-Rumenova and Ivan Botev | Bulgaria | Possible climate change impacts on freshwaters in Slovenia; biodiversity aspect in lowland ecoregions | Maja Pavlin | Slovenia |

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| 11:45-12:00 | Changes in different type of clouds in south-eastern part of Europe | Blanka Bartok | Romania | Long-term variations of the water balance components for Croatia | Krezo Pandzic | Croatia |
| 12:00-12:15 | Climate modeling beyond the complexity: Challenges in model-building | Dragutin Mihailovic | Serbia | Assessment of climate change impact on the water resources- case study on Struma and Osam river basins | Snejana Dakova | Bulgaria |
| 12:15-12:30 | Regional climate modeling in Romania; research and applications | Ion Victor Pescaru et al. | Romania | Droughts/floods impacts on drinking water quality and measures for health protection | Galja Bardarska | Bulgaria |
| 12:30-12:45 | Statistical downscaling is still alive: relative merits of statistical and dynamical downscaling approaches. | Radan Huth | Czech Republic | Forests in Serbia as the factor of soil and water protection against degradation in the condition of global climate changes | Stanimir Kostadinov | Serbia |
| 12:45-13:00 | Discussion | | | Discussion | | |
| 13:00-14:00 | lunch break | | | lunch break | | |
| | Session 4: Topic 2 CLIMATE CHANGE (cont.), Chairperson: Dragutin Mihailovic | | | Session 5: Topic 3 ENVIRONMENTAL IMPACTS (cont.), Chairperson: Valentin Kazandjiev | | |
| 14:00-14:15 | Climate variability and change in Bulgaria: an approach based on stochastic downscaling of atmospheric fields | Plamen Neytchev et al. | Bulgaria | Vulnerabilities and adaptation options of European agriculture - recent results from the ADAGIO project | Josef Eitzinger et al. | Austria |
| 14:15-14:30 | Some climate changes in Bulgaria during the XX century | Stefan Velev | Bulgaria | Climate change and development of agriculture in Bulgaria | Ivan Varlev | Bulgaria |
| 14:30-14:45 | Climate change research in Republic of Macedonia in the XXI century | Suzana Monevska and Pece Ristevski | Macedonia | Agriculture and climate change | Svetla Nikolova | Bulgaria |
| 14:45-15:00 | Climatological analysis of the synoptic situations causing torrential precipitation events in Bulgaria during the period 1961 - 2007 | Lilia Bocheva et al. | Bulgaria | Climate change impact on maize yield in Bulgaria | Zornitsa Popova | Bulgaria |
| 15:00-15:15 | Tweedie distribution model of NO2 data for Sofia 2001-2006" | Neyko Neykov et al. | Bulgaria | Agroclimatic resources and definition of the less favored areas at the beginning of XXI century in Bulgaria | Valentin Kazandjiev | Bulgaria |
| 15:15-15:30 | Climate altitude variations of the relative humidity up to the middle stratosphere over Sofia | Stayko Kolev | Bulgaria | Climate change impacts and possible adaptations on selected crops in Marchfeld, Eastern Austria | Sabina Thaler | Austria |
| 15:30-16:00 | coffee break/posters | | | coffee break/posters | | |
| | Session 4: Topic 2 CLIMATE CHANGE (cont.), Chairperson: Neyko Neykov | | | Session 5: Topic 3 ENVIRONMENTAL IMPACTS (cont.), Chairperson: Josef Eitzinger | | |
| 16:00-16:15 | Snow cover variability in Bulgaria | Nadezhda Petkova | Bulgaria | Climate parameters of soil vulnerability to compaction | Milena Kercheva | Bulgaria |
| 16:15-16:30 | Changes in air temperature regime at Musala peak for the period 1934-2008 | Peter Nojarov and Ivo Kalapov | Bulgaria | Methods for determining the soil moisture reserves—and their significance for the agriculture | Valentin Kazandjiev and Nadejda Shopova | Bulgaria |

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| 16:30-16:45 | Extreme events and weather variability in Bosnia and Herzegovina within last ten years with special overview on 2007 | Dzenan Zulum | Bosnia and Herzegovina | Climate change impact on irrigation in South Bulgaria | Zornitsa Popova | Bulgaria |
| 16:45-17:00 | Climate change in Sandanski, Southwest Bulgaria during the XX century | Milen Tsekov | Bulgaria | Assessing Suitability of Water for Irrigation | Spaska Kalcheva et al. | Bulgaria |
| 17:00-17:15 | Evaluations of climate elements, temperature and area relatives' humidity in Tirana zone, Albania | Hysen Mankolli | Albania | The soil moisture supply for winter wheat in Bulgaria in climate change conditions | Valentin Kazandjiev and Veska Georgieva | Bulgaria |
| 17:15-17:30 | Impact of climate changes in precipitation regime in Bosnia and Herzegovina | Dzenan Zulum and Zeljko Majstorovic | Bosnia and Herzegovina | Common biophysical criteria for defining areas which are less favored for agriculture in the context of expected climate changes | Catalin Simota | Romania |
| 17:30-17:45 | Variability and trend in sunshine duration over South Bulgaria | Julia Ivancheva et al. | Bulgaria | Discussion, conclusions of the day | | |
| 17:45-18:00 | Discussion, conclusions of the day | | | Discussion, conclusions of the day | | |

19:00– Reception at the Austrian Embassy

Wednesday, 21 May 2008

09:00-09:50 Keynote speaker 4 Society, Science and Action, Marieta Staneva (USA/Bulgaria)

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| | Session 6: Topic 4 IMPACTS ON SOCIETY AND ECONOMY, Chairperson: Plamen Mishev | | | Session 7: Topic 5 GLOBAL CHANGE AND LOCAL CHALLENGES, Chairperson: Igor Sirodoev | | |
| 10:00-10:15 | Who wins and who loose from global warming | Petkan Iliev | Bulgaria | Political, social and economical aspects of the Bulgarian reaction to climate change problems | Yordan Yankov | Bulgaria |
| 10:15-10:30 | Eco-innovative practices in the construction sector to respond the environmental changes | Antoaneta Yotova | Bulgaria | Change in surface water resources as a challenge to Moldova's society | Igor Sirodoev | Moldova |
| 10:30-10:45 | Climate change impacts on tourism | Plamen Mishev and Milkana Mochurova | Bulgaria | Ecotechnological development in Serbia | Nenad Ilic | Serbia |
| 10:45-11:00 | Heavy rain and social impact in Albania | Liri Mucaj and Eglantina Bruci | Albania | Corine land cover changes in Bulgaria for the period 2000 – 2006 | Rumyana Vatsseva and Anton Stoimenov | Bulgaria |
| 11:00-11:30 | coffee break | | | coffee break | | |

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| 11:30-11:45 | Climate change and human health: today's vision | Roman Corobov | Moldova | Long-term trends of lead-210 activity concentration in the ground-level air in Finland and Bulgaria | Jussi Paatero | Finland |
| 11:45-12:00 | Bioclimatic conditions in Bulgarian Black seaside in the XXI century | Ani Tzenkova et al. | Bulgaria | Integration of bioethanol fuel cell cogeneration systems into Latvian energy supply system | Darja Markova | Latvia |
| 12:00-12:15 | Effects of air pollution on red blood cells in children | Maja Nikolic and Dragana Nikic | Serbia | Eco-efficiency : general concept, approaches and methods | Snezhana Kostova et al. | Bulgaria |
| | Session 8A: Topic 6 FROM GLOBAL TO LOCAL AND VICE VERSA, Chairperson: Sladjan Maslac | | | Session 8B: Topic 6 FROM GLOBAL TO LOCAL AND VICE VERSA, Chairperson: Natalija Aceska | | |
| 12:15-12:30 | Drought management center for Southeastern Europe | Gregor Gregoric | Slovenia | Globe program in Macedonia schools | Natalija Aceska | Macedonia |
| 12:30-12:45 | The role of local communities in revising the National Action Programme for mitigating drought, preventing and combating desertification: lessons from Romania | Doru Irimie et al. | Romania | Decreasing atmospheric pollution resulting from land application of farm liquid wastes | Svetla Marinova et al. | Bulgaria |
| 12:45-13:00 | Western Balkan regional environmental programme | Sladjan Maslac | Montenegro | Waste products contribution to global warming | Tzvetomir Kalchev | Bulgaria |

13:00-14:00 lunch break

Discussion, conclusions, round table

14:00-15:00 Chairpersons: Gregory Knight, Martin Felix Gajdusek and Vesselin Alexandrov

15:00 Adjourn

after 15:00 Departure of participants

Posters

| Topic | Title | Author(s) | Country | Title | Author(s) | Country |
|-------|---|-------------------------------------|----------|---|--------------------------------------|-----------|
| 1 | Ozone and Black carbon over the Western Mediterranean | Krum Velchev | Italy | Prognosis of CO2 emissions from Bulgarian power sector | Todor Todorov | Bulgaria |
| 2 | Global changes and climate change in Bulgaria | Boris Peev and Valentin Kazandjiev | Bulgaria | Precipitation and potential evapotranspiration in Republic of Macedonia in the 21 st century, as a result of climate changes | Pece Risteovski et al. | Macedonia |
| 2 | Dynamics for a long standing period and some rainfall peculiarities in spring | Tencho Cholakov | Bulgaria | Slovenian glacier as indicator of climate changes | Katarina Polajnar and Bojan Erhartic | Slovenia |
| 2 | Seasonal variability of atmospheric circulation and extremes during winter in Bulgaria | Teodossia Andreeva | Bulgaria | Global warming or climate changes - climatic characteristics in South Bulgaria | Kalinka Kuzmova | Bulgaria |
| 2 | Interaction between reference evapotranspiration and the meteorological parameters in FAO 56 Penman-Monteith equation | Milena Moteva | Bulgaria | Surface air temperature changes at the Stara Zagora region, Bulgaria, in the last 108 years | Nikolay Takuchev and Tanya Tasheva | Bulgaria |
| 3 | Frost resistance assessment of wheat and rape | Vera Tzenova | Bulgaria | Soil parameters changes as a result of global degradation soil processes | Nadejda Todorova | Bulgaria |
| 3 | Water deficit influence on the rape varieties development | Sevdalina Manolova | Bulgaria | Soybean evapotranspiration upon weather during the growing period | Georgi Georgiev, Alexander Matev | Bulgaria |
| 3 | The light and soil moisture as factors, determining the growth processes and some of qualitative characteristics of Chinese cabbage | Ivanka Mitova and Hristo Stoykov | Bulgaria | Weather impacts on irrigated and rainfed soybean near Pavlikeni, North Bulgaria | Alexander Matev and Georgi Georgiev | Bulgaria |
| 3 | The climatic circumstances and the phosphoric norm as components for assimilation of the main food elements from tomatoes | Ivanka Mitova and Hristo Stoykov | Bulgaria | Ecological problems of agriculture produced by the anthropogenetic activity, Saving global climate– global problems during XXI century" | Kalinka Kuzmova | Bulgaria |
| 3 | Droughty velocity of root soil layer upon cereal agrotechnology | Stefka Alexieva | Bulgaria | The combination relief and climate as a precondition for frequent air pollutions in Stara Zagora region, Bulgaria | Nikolay Takuchev | Bulgaria |
| 3 | Spatial distribution of soil organic carbon /SOC/ in Rila mountain | Yavor Yordanov and Maria Sokolovska | Bulgaria | Modeling and forecasting of the turbulent characteristics | Rumen Gadjev | Bulgaria |

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| 3 | Global changes in the ecosystem and its influence on the structure of natural waters | Stefan Todorov and Lidia Todorova | Bulgaria | | Prediction and determination of pulsation speeds under | Rumen Gadjev | Bulgaria |
| 3 | Climate variability in the Sakar regions and related impacts | Violeta Vateva and Elka Tzvetkova | Bulgaria | | The Future of Sustainable Energysupply in the Wienerwald Region) | Guenther Schwaerzler et al. | Austria |
| 3 | ADAGIO procect | Dimos Anastasiou | Greece | | | | |