



DKU CENTER FOR NATURAL RESOURCES AND SUSTAINABILITY

Colloquium for Young Researchers: Towards developing International Collaborations

Date: June 10, 2022, Friday

Starting time 14.00 PM (GMT +5, Almaty)

Zoom link:

<https://us02web.zoom.us/j/85866526378?pwd=cXQ3M0JqL2QyWVhjODJqN0F5bnRnZz09>



June 10, 2022, Friday
14.00-14.30 (GMT +5, Almaty)

OPENING Chair: Dr. Barbara Janusz-Pawletta, Kazakh-German University, Almaty, Kazakhstan

Welcome Speech: Dr. Wolrad Rommel, President of Kazakh-German University, Almaty, Kazakhstan

Colloquium overview: Altynai Yespembetova, Kazakh-German University, Almaty, Kazakhstan

June 10, 2022, Friday
14.30-17.30 (GMT +5, Almaty)

Session I: Water and Energy

N	Title of the abstract	Authors and affiliations	Editor(s)
1	Adsorptive removal mechanism for fluoride-contaminated water environments using biochar-based materials: Challenges and recommendations	Rakesh Kumar and Prabhakar Sharma , Nalanda University, India	Dr. Ankit Garg, Shantou University, China
2	Single-step synthesis of activated magnetic biochar derived from rice husk for hexavalent chromium adsorption	Rama Sinha, Rakesh Kumar, Prabhakar Sharma , Nalanda University, India	Dr. Ankit Garg, Shantou University, China
3	Phage therapy- Potential applications of bacteriophage as a promising alternative in controlling antibiotic resistant bacterial strains	Gurleen Singh, Prangya ranjan Rout, Manoj Baranwal, Dwarika nath Ratha , Thapar institute of engineering and technology	Dr. Ankit Garg, Shantou University, China
4	Seasonal forecasting of Amu Darya river discharge to help improve water planning and management in the basin	Shadurdyev Govshut , DKU	Dr. Abdullaev, Dr. Ankit Garg, Shantou University, China
5	Using Evaporation to Analyze the Hydrological Cycle of Lake Issyk-Kul	Asanakunova Gulzat , DKU	Dr. Abdullaev, CAREC Institute, China Dr. Ankit Garg, Shantou University, China
6	Updated vision of the pri-Tashkent groundwater basin	Abdullaev Botirjon , Institute of HYDROENGEO, Tashkent, Uzbekistan	Dr. Abdullaev, CAREC Institute, China Dr. Ankit Garg, Shantou University, China
7	Factors affecting the hydrodynamic state of the Sokh groundwater deposit	Dadajonov Boburjon , Institute of HYDROENGEO, Tashkent, Uzbekistan	Dr. Abdullaev, CAREC Institute, China Dr. Ankit Garg, Shantou University, China

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Session I: Water and Energy (continued)

	Title of the abstract	Authors and affiliations	Editor(s)
8	Relationship between bioelectricity and unsaturated properties of biochar aided PMFC	Boneng Chen, Weiling Cai , Shantou University, China	Dr. Ankit Garg, Shantou University, China
9	Resource carrying capacity evaluation based on fuzzy evaluation: Validation using karst landscape region in southwest China	Xinhao Min , Shantou University, China; Yanning Wang , Shantou University, China; China University of Mining and Technology, China	Dr. Ankit Garg, Shantou University, China

Session II: Land/Agriculture

N	Title of the abstract	Authors and affiliations	Editor(s)
1	A non-intrusive and cost-effective color technique to interpret soil surface moisture content	Vinay Kumar Gadi , Cardiff University, UK	Prof. Neelima Satyam, Professor, Department of Civil Engineering, IIT Indore
2	Applying biochar for soil-water conservation and landscape protection	Sihong Li , Shantou University, China	Prof. Neelima Satyam Professor, Department of Civil Engineering, IIT Indore
3	Impact of fertilizers on water-absorbing polymer in agrarian soil during water stress conditions: Towards developing environment-friendly approach for enhanced water retention	Bharat Rattan and Sreedeeep S. , Indian Institute of Technology Guwahati, India.	Prof. Neelima Satyam, Professor, Department of Civil Engineering, IIT Indore
4	A simple model for predicting hydraulic conductivity of MICP-treated sand	Longjian Huang , Shantou University, China	Prof. Neelima Satyam, Professor, Department of Civil Engineering, IIT Indore
5	Exploration of Feasibility of Biochar Amended Soil as a counter measure to Improve Agricultural Productivity in drought prone Central Asia	Tanwee Mazumder^{1,2}, Yuanxu Huang¹ and Ankit Garg¹ ¹ Shantou University, China ² L&T Construction, India	Prof. Neelima Satyam, Professor, Department of Civil Engineering, IIT Indore

Session II: Land/Agriculture (continued)

N	Title of the abstract	Authors and affiliations	Editor(s)
6	Utilization of Biochar for Stability of Expansive soil	Himanshu Soni, Vishal Raguwanshi, Jitendra Singh yadav (National Institute of Technology, India), Ankit Garg (Shantou University, China)	Prof. Neelima Satyam, Professor, Department of Civil Engineering, IIT Indore
7	Experimental investigation of bitumin level aging using bituminus Concrete combination	Ushma Gwale, Raghvendra Pratap Singh Rajput, Tanu chaturvedi, Samrat Ashok Technological Institute Vidisha M.P	Prof. Neelima Satyam, Professor, Department of Civil Engineering, IIT Indore
8	Impact of different soil cultivation and cover crops on greenhouse gas emissions on the example of Kazakhstan	Anel Syzdyk, Maxat Toishimanov, Timur Tamenov, Ardak Orazakhmet, Nursultan Nurgali, Maira Kussainova, Kazakh National Agrarian Research University, AgriTech Hub KazNARU	Dr. rer. nat. Gerd Schmidt, Dr. rer. nat. Peter Liebelt, Martin-Luther-Universität Halle-Wittenberg, Germany (TBC)



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Session III: Climate and Sustainable Mobility

N	Title of the abstract	Authors and affiliations	Editor(s)
1	Spatial distribution of precipitation in the central and western Pamirs and its impact on the isotopic composition of surface waters	Parviz Normatov , Mathematics Institute of the National Academy of Sciences of Tajikistan	Dr. Divya P. V. , Associate Professor Department Civil Engineering, Indian Institute of Technology Palakkad
2	Valorization of Loose Soil by Sustainable Employment of Recycled Concrete Aggregate	Himanshu Soni, Anant Saini, Jitendra Singh Yadav , National Institute of Technology Hamirpur, India	Dr. Divya P. V. , Associate Professor Department Civil Engineering, Indian Institute of Technology Palakkad
3	Impact of global warming on hydrological responses of biochar-amended clays	Lina Xiao, Weiling Cai , Shantou University, China	Dr. Divya P. V. , Associate Professor Department Civil Engineering, Indian Institute of Technology Palakkad
4	Hydromechanical properties and associated electrical conduction of biochar-amended sands	Xia Bao, Weiling Cai , Shantou University, China	Dr. Divya P. V. , Associate Professor Department Civil Engineering, Indian Institute of Technology Palakkad
5	Biochar-augmented pervious concrete: toward low-carbon cement industry	Siyi Zhang , Shantou University, China	Dr. Divya P. V. , Associate Professor Department Civil Engineering, Indian Institute of Technology Palakkad
6	Urban Slope Monitoring on Rainfall-Induced Slope Failure with Internet of Things (IoT)	Kumaran Subramaniam, Randhilini Liyanage, Vivi Anggraini (Monash University, Malaysia), Ankit Garg (Shantou University, China)	Dr. Divya P. V. , Associate Professor Department Civil Engineering, Indian Institute of Technology Palakkad

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Session III: Climate and Sustainable Mobility (continued)

N	Title of the abstract	Authors and affiliations	Editor(s)
7	Common reed: an unseen and underappreciated pillar of the local economy in the Syr Darya Delta	Aibek Samakov , University of Tübingen	Dr. Hans Holzacker, Chief Economist at CAREC Institute.
8	Microstructural and Strength Characterization of Expansive Soil stabilized with Agricultural Waste Materials	Ankur Abhishek , BITS-Pilani Hyderabad Campus, India	Dr. Divya P. V. , Associate Professor Department Civil Engineering, Indian Institute of Technology Palakkad

Colloquium presentation outline

1. Entrance of the Editors and official start of the colloquium session (1-2 min)
2. Research presentation . During this (10 min) presentation the young scientist will address the main research question(s), the design of the research and the subsequent results, conclusions and points of discussion.
3. The presenter will take on questions of the supervisors and the audience (5 min)
4. The Editors will assess the presentation and will also address some words towards the presenter, regarding the research (5 min)