



India - Russia
Scientific Webinar on Disaster Management Technologies
1 – 2 December 2021
10.00 (MSC) / 12.30 IST time onwards

2.30+MSC = IST

Streamed on :-

https://www.youtube.com/channel/UCfPV_TMsvDHq0aV1K_dsZ5A

1 December, Wednesday	
09:30 MSC 12:00 IST	STUDIO ROOM OPENS <ul style="list-style-type: none">● Staff officers from Russian and Indian sides log on, and IT Support log on● Audio/Visual Check
09:50 MSC 12:20 IST	STUDIO ROOM OPENS TO PUBLIC <ul style="list-style-type: none">● All speakers and staff from Russian and Indian sides in place● Registered participants allowed to enter
10.00 - 10.20 MSC 12:30 - 12:50 IST	<i>Welcome and Introduction Remarks:</i> <i>Prof. Anatoliy Soloviev, Dr Sci in Physics and Mathematics, Corresponding Member of RAS, Director of the Geophysical Center of the Russian Academy of Sciences (GC RAS)</i> <i>Prof. Kalachand Sain, FNA, FASc, FNASc, Director, Wadia Institute of Himalayan Geology (WIHG), Dehradun</i>
Chief Moderator – Dr Shishir Shrotriya, Counsellor (Science & Technology), Embassy of India in Moscow, Russia	
Session -1 “Disaster Risk Reduction and Resilient Technology Enabled Infrastructure” Chairperson/Moderator: Prof. N. Vinod Chandra Menon, Founder Member, National Disaster Management Authority (NDMA), Government of India	
10.20 – 10.40 MSC 12:50 - 13:10 IST	Mr. S.D. Patil, Dr. Shobhit Singh Chauhan Mr. Rishikesh Chormore Scientists, CSIR-CSMCRI <i>“Modular Indigenous desalination system mounted mobile/carrier for potable water solutions during disasters”</i>

10.40 – 11.00 MSC 13:10 – 13:30 IST	Dr. Victor Novikov , PhD, Head of Laboratory, Joint Institute for High Temperatures of Russian Academy of Sciences <i>“Is it possible to prevent catastrophic earthquakes? Insight from field and laboratory experiments on electromagnetic earthquake triggering”</i>
11.00 – 11.20 MSC 13:30 – 13:50 IST	Prof. Kapil Gupta , IIT Bombay <i>“Urban Flood disaster Risk Management”</i>
11.20 – 11.40 MSC 13:50 – 14:10 IST	Dr. Alexey V. Liseikin , PhD, Director SB GS RAS Alexey A. Bryksin , Senior Researcher, SB GS RAS <i>“Monitoring the physical condition of buildings, structures and operating equipment by seismic methods to reduce the risk of sudden collapse”</i>
11.40 – 12.00 MSC 14:10 – 14:30 IST	Prof. Ravi Sinha , Professor of Civil Engineering, IIT Bombay <i>“Disaster risk reduction and resilient technology enabled infrastructure”</i>
12.00 – 12.20 MSC 14:30 – 14:50 IST	Dr. Roman Krasnoperov , PhD, Scientific Secretary, Geophysical Centre of the Russian Academy of Sciences <i>“Monitoring of geomagnetic activity in Russia and application of historical data for space weather studies”</i>
12.20 – 12.40 MSC 14:50 – 15:10 IST	Prof. Manasa Ranjan Behera , Associate Professor, Indian Institute of Technology, Bombay <i>“Resilient Infrastructure for Ocean and Coastal Disasters”</i>
12.40 – 13.00 MSC 15:10 – 15:30 IST	Prof. Vladimir Kossobokov , Dr. Sci. (Physics and Mathematics), Chief Scientist, Expert, Institute for Earthquake Prediction Theory and Mathematical Geophysics, RAS Dr. Anastasia Nekrasova , PhD (Physics and Mathematics), Senior Researcher, Institute for Earthquake Prediction Theory and Mathematical Geophysics, RAS <i>“Neo-deterministic seismic hazard and risk assessment based on the Unified Scaling Law for Earthquakes”</i>
13.00 – 13.20 MSC 15:30 – 15:50 IST	Panel discussion



Session – 2 “Integration of Multiple Weather Sensors, Satellite Imagery and Improving Disaster Forecasts” Chairperson/ Moderator: Dr. Victor Novikov, PhD, Head of Laboratory, Joint Institute for High Temperatures of Russian Academy of Sciences	
13.20 – 13.40 MSC 15:50 – 16:10 IST	Dr Sridevi Jade, Head of CSIR-4PI and Outstanding Scientist. <i>“Natural Hazards and real time GNSS”</i>
13:40 – 14:00 MSC 16:10 – 16:30 IST	Dr. Victor Novikov, PhD, Head of Laboratory, Joint Institute for High Temperatures of Russian Academy of Sciences <i>“Space weather and earthquakes: An overview of the problem and future research”</i>
14:00 – 14:20 MSC 16:30 – 16:50 IST	Prof. Bharat Lohani, IIT Kanpur <i>“LiDAR technology for disaster preparedness”</i>
14.20 – 14.40 MSC 16.50 – 17.10 IST	Dr. Vsevolod Moreido, PhD, Senior Researcher, Water Problems Institute, RAS <i>“Modelling approach for hydrological hazard identification and forecasting”</i>
14.40 – 15.00 MSC 17.10 – 17.30 IST	Dr. Laxman Singh Rathore, Former Director General of Meteorology, IMD International Consultant, The World Bank, UNDP <i>“Emerging frontiers in weather forecasting, including extreme weather events”</i>
15.00 – 15.20 MSC 17.30 – 17.50 IST	Dr. Nikita Ostudin, PhD (Engineering), Deputy Head of Department of Spatial Data, EMERCOM of Russia <i>“Space monitoring and modern technologies for prevention emergency situations”</i>
15.20 – 15.40 MSC 17.50 – 18.10 IST	Dr. Sunanda, INCOIS <i>“Tsunami Early Warning Infrastructure”</i>
15.40 – 16.00 MSC 18.10 – 18.30 IST	Dr. Kirill Kholodkov, PhD, senior researcher, Schmidt Institute of Physics of the Earth, Russian Academy of Sciences <i>“Data Processing at Russian Node of International Space Weather Consortium”</i>
16.00 – 16.20 MSC 18.30 – 18.50 IST	Prof. Subimal Ghosh, Ph. D., Professor, Indian Institute of Technology, Bombay <i>“Extreme Precipitation and Flood in a Changing Climate and their Forecasts”</i>
16.20 – 16.40 MSC 18.50 – 19.10 IST	Prof. Varun Dutt, IIT Mandi <i>“Low-cost landslide monitoring and warning through predictive analysis”</i>
16.40 – 17.00 MSC 19.10 – 19.30 IST	Panel Discussion

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2 December, Thursday	
10.00 – 10.20 MSC	Welcome and Introduction Remarks
12:30 - 12:50 IST	Mr SK Varshney , Head and Adviser International Co-operation DST, India Ms. Daria Chernoiwanova , Acting Head of the Department for International Cooperation, Russian Academy of Sciences
Session – 3 “Big-data Integration, Crisis Analytics and Scientific Methods to Disaster Prediction”	
Chairperson/Moderator: Prof. Anil Gupta , Ph.D., LLB, NIDM	
10.20 – 10.40 MSC	Prof. Anil Gupta , Ph.D., LLB, NIDM
12:50 - 13:10 IST	<i>“Sectoral Approach and Planning for Disaster Resilience with S&T and Innovation Integration”</i>
10.40 – 11.00 MSC	Prof. Sergey Pulinets , Dr. Sci. (Phys-Math., Principal Research Scientist, Space Research Institute, Russian Academy of Sciences
13:10 - 13:30 IST	<i>“The Physical model of the Lithosphere-Atmosphere-Ionosphere coupling as a basis for the operative earthquake forecast”</i>
11.00 – 11.20 MSC	Prof. Chandan Ghosh , NIDM
13:30 - 13:50 IST	<i>“Geotechnical Interventions, landslides”</i>
11.20 – 11.40 MSC	Prof. Olga Lozhkina , Dr. Sci. (Engineering), PhD (Chemistry), Professor, Chemistry and Combustion Processes Department, St. Petersburg University of State Fire Service of EMERCOM of Russia, Leading Research Fellow, Institute of Transport Problems, RAS
13:50 – 14:10 IST	<i>“Neural Network Approach for Big-Data Mining in Prognostication of Air Pollution by Peat Fire”</i>
11.40 – 12.00 MSC	Dr Vaibhav Kumar , IISER Bhopal
14:10 – 14:30 IST	<i>“Optimising the redevelopment cost of Urban areas to minimize Fire Susceptibility of heterogeneous Urban Settings in developing nations”</i>
12.00 – 12.20 MSC	Prof. Villiam Sarian , Dr. Sci. (Engineering), Radio Research and Development Institute, Academician, National Academy of the Republic of Armenia
14:30 – 14:50 IST	<i>“A new paradigm for reducing human and material losses in the event of emergencies of natural and human origination”</i>
12.20 – 12.40 MSC	Dr. R.J. Perumal , Scientist-F, Wadia Inst. of Himalayan Geology
14:50 – 15:10 IST	<i>“High-resolution mapping of Landforms and their sub-surface characterization to develop Resilient Infrastructures in Himalaya (RISE-Himalaya)”</i>

12.40 – 13.00 MSC 15.10 – 15.30 IST	Dr. Naresh Kumar , Scientist, WIHG <i>“Earthquake Precursory research through MPG”</i>
13.00 – 13.20 MSC 15:30 – 15:50 IST	Prof. Vladimir Lozhkin , Dr. Sci. (Engineering), Full Professor, Department of Fire and Rescue Equipment and Vehicles, St. Petersburg University of State Fire Service of EMERCOM of Russia <i>“Integration of Big-Data on Traffic Flows in Dangerous Air Pollution Forecast”</i>
13.20 – 13.40 MSC 15:50 – 16:10 IST	Dr. Sushil Kumar , Scientist 'G' & Head Geophysics Wadia Institute of Himalayan Geology, "Monitoring of seismic activities for Understanding and Assessment of Seismic hazard potential in the Himalayan region and surroundings for Disaster risk reduction
13.40 – 14.00 MSC 16.10 – 16.30 IST	Panel Discussion

Session - 4 “Use of Drones, Robotics, IOT Data Integration and Other Scientific Methods of Collecting and Processing Information for Improving Disaster Response”

Chairperson/Moderator: Prof. Olga Lozhkina, Dr. Sc. (Engineering), PhD (Chemistry), Chemistry and Combustion Processes Department, St. Petersburg University of State Fire Service of EMERCOM of Russia, Leading Research Fellow, Institute of Transport Problems, RAS

14.00 – 14.20 MSC 16.30 – 16.50 IST	Dr. Abhishek , Department of Aerospace Engineering, Indian Institute of Technology Kanpur <i>“Application of Innovative High Endurance Drones for Disaster Response”</i>
14.20 – 14.40 MSC 16.50 – 17.10 IST	Dr. Mark Mamchenko , PhD, Researcher, V.A. Trapeznikov Institute of Control Sciences, RAS <i>“The concept of using the IOT in emergency response activities”</i>
14.40 – 15.00 MSC 17.10 – 17.30 IST	Mr. Probir Roy , President, India Excellence Forum <i>“Curating role of crisis related big data analytics during disasters”</i>
15.00 – 15.20 MSC 17:30 – 17.50 IST	Mr. Alexey Altoukhov, Mr Alexey Lazarev, Mr Yuri Kashkin Archangel Ecosystem, Moscow State University, Science Park <i>“Ecosystem of unmanned aerial vehicles for emergency assistance and disaster management”</i>
15.20 – 15.40 MSC 17.50 – 18.10 IST	Mr. Smit Shah , Director, Drone Federation of India <i>“Use of drones, robotics and IOT data integration for improving disaster response”</i>
15.40 – 16.00 MSC 18.10 – 18.30 IST	Dr. Mikhail Burtsev , PhD (Engineering), Senior Researcher, Head of the Laboratory, Space Research Institute, Russian Academy of Sciences, <i>“Modern features and capabilities of remote sensing data distributed usage for emergencies and disasters analysis by the example of the "IKI-Monitoring" Center”</i>



16.00 – 16.20 MSC 18.30 – 18.50 IST	Prof. Hemendra Arya, IIT Bombay <i>“Drone Eco-system for disaster management”</i>
16.20 – 16.40 MSC 18.50 – 19.10 IST	Ms Ayushi Mishra, Founder Dronamaps, India <i>“Use of drone-based data for mapping, live video feeds, thermal, in combination with satellite based geospatial intelligence for command centres for disaster response”</i>
16.40 – 17.00 MSC 19.10 – 19.30 IST	Prof. Rajkumar S. Pant Aerospace Engineering Dept., IIT Bombay <i>Re-locatable Aerostat System for Swift Deployment of Communication Equipment in Disaster Struck Zones</i>
17.00 – 17:10 MSC 19.30 – 19.40 IST	<i>Panel Discussions</i>
17.10 – 17.20 MSC 19.40 – 19.50 IST	<i>Concluding Remarks</i>