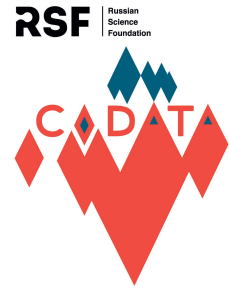


# International CODATA 2017 Conference “Global Challenges and Data-Driven Science”



**Save the Date! 8-13 October 2017, Saint Petersburg, Russia**

**The International CODATA 2017 Conference, “Global Challenges and Data-Driven Science” will explore the fundamental issues relating to the availability, (re-)use and scientific analysis of data that relate to the most significant contemporary global challenges.**

Global science is increasingly data-driven. Major international scientific programmes contribute to a collective endeavour to understand contemporary global processes and phenomena that are of deep relevance to contemporary societies. The unprecedented volume of data generated by the digital revolution of recent decades has led to the emergence of distinctive and powerful means of characterising and understanding the complex systems that are at the heart of many global challenges. These developments raise major questions around data collection, stewardship and analysis; and there are timely lessons to be shared between the academic and commercial sectors.

This major scientific conference aims to explore the intersection between data-driven technological and scientific approaches and specific global challenges. It will explore the nexus between:

1. Approaches that permit vast quantities of data to be created, stored, recombined and analysed, with the capacity to integrate data from disparate domains to reveal unanticipated relationships, and with the use of powerful learning algorithms to establish deep relationships in complex systems.
2. And their application to major global challenges including disaster risk, smart cities and urban development and global environmental change.

## Scope of the Conference

Topics to be covered by the conference include:

- concrete achievements in data-driven science across all research areas;
- data collection, analysis and integration for Earth observations and the study of the Earth’s system;
- data collection and analysis for disaster risk research;
- data-driven cities and sustainable urban development;
- shared data challenges, Big Data Management and analysis in the scientific and commercial sectors;
- the fundamental and practical issues of data analysis, event recognition and application;
- coordination and development of national and international data services;
- the development of research data services in universities and other research organisations;
- coordination of data standards and interoperability;
- issues around “Intelligently Open” and FAIR data.

The conference will be of interest to researchers in many domains, and particularly those relating to the global research programmes sponsored by the International Council of Science (Future Earth, Integrated Research on Disaster Risk, Urban Health and Wellbeing), as well as research around the Sustainable Development Goals, ecological and environmental challenges and assessments and the Sendai Framework on disaster risk reduction. The conference will foster constructive and continued dialogue between transdisciplinary research activities and data experts.

The conference is co-organised by ICSU-CODATA, the Committee on Data of the International Council of Science <http://www.codata.org/> and the Geophysical Center of RAS (GC RAS) <http://www.gcras.ru/> and is supported by the Russian Science Foundation (RSF) <http://rscf.ru/en/> and the Ministry of Education and Science of the Russian Federation <http://минобрнауки.рф>

**The Call for Sessions and Papers will be released shortly: <http://codata2017.gcras.ru/>**