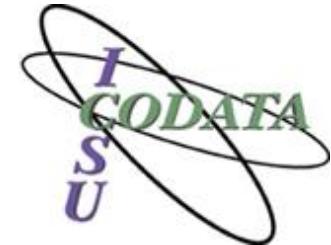


# ***Collaborations and Partnerships***

John Broome  
CODATA-International

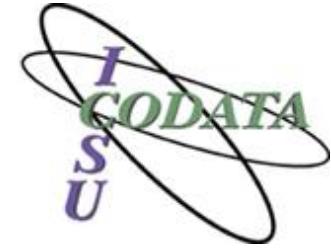
# CODATA-International



**One of the fundamental roles of CODATA is to facilitate collaboration and partnerships in the management of research data.**

**This is accomplished via:**

- 1) Bi-annual international conference**
- 2) Task Groups**
- 3) Targeted workshops**
- 4) Advisory role to ICSU, its Unions, and initiatives.**
- 5) Web site, Data Science Journal**
- 6) Early Career Scientists support**

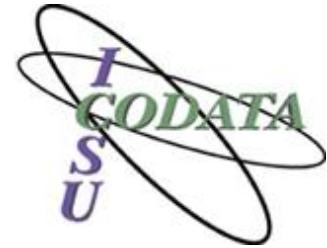


# Current Task Groups

1. Advancing Informatics for Microbiology
2. Anthropometric Data and Engineering 
3. Data at Risk 
4. Data Citation Standards and Practices 
5. Earth and Space Science Data Interoperability 
6. Exchangeable Materials Data Representation to Support Scientific Research and Education
7. Fundamental Physical Constants 
8. Global Information Commons for Science Initiative
9. Linked Open Data for Global Disaster Risk Research
10. Octopus: Mining Space and Terrestrial Data for Improved Weather, Climate and Agriculture Predictions
11. Global Roads Data Development
12. Preservation of and Access to Scientific and Technical Data in/for/with Developing Countries (PASTD)

Related Int. Initiatives:

# World Data System (WDS)



- WDS created at the ICSU 29th General Assembly based on the 50-year legacy of the ICSU World Data Centres (WDCs).
- Objectives:
  - Transition from existing stand-alone data centres/services to a common, globally interoperable, distributed data system.
  - Foster disciplinary and multidisciplinary applications for the benefit of the international scientific community.
  - Develop a broader disciplinary and geographic base and become a world-wide 'community of excellence' for data stewardship and delivery.
- WDS has 49 Member organizations in Oct. 2012.
- CODATA works closely with WDS
  - In 2014, CODATA/WDS will jointly convene a Conference.
  - Partnership approach to Future Earth, Research Data Alliance, etc.



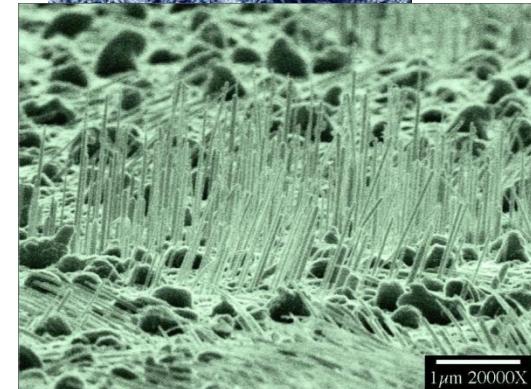
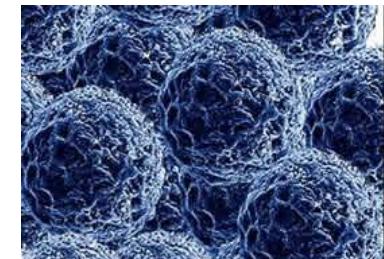
<http://www.icsu-wds.org/>

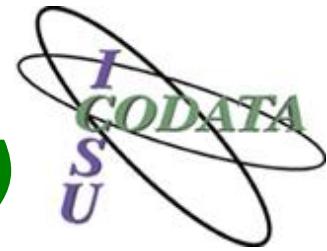
# Nanomaterials

**Nanomaterials:** Natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate, and where most of the particles have external dimensions in the size range 1–100 nm.

CODATA is working with the Centre For BioNano Interactions (CBNI) School of Chemistry and Chemical Biology preparing a funding application focussed on **"FutureNanoNeeds : The Description of Materials on the Nanoscale".**

The proposed project will deliver a coherent set of tools and decision criteria for describing and establishing which are the relevant features of complex nanomaterials that determine their health and environmental risk profiles.





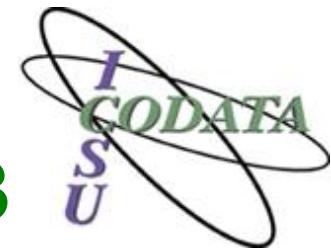
# ***Research Data Alliance (RDA)***

- The “Research Data Alliance” is an emerging international organization whose goal is to accelerate data-driven innovation through the sharing and exchange of research data.
- The official launch of RDA will take place this week in Sweden.
- CODATA is collaborating with RDA in preparation of a Working Group proposal on: “***Legal Interoperability of Data***”.
- CODATA will be represented at the launch.

The screenshot shows the homepage of the Research Data Alliance (RDA) website. The URL in the address bar is <http://rd-alliance.org/>. The page is displayed in Windows Internet Explorer. The main content area features a large photograph of a small green plant with a single water droplet on its leaf. To the left of the photo, the text reads: "RESEARCH DATA ALLIANCE" and "Researchers around the world sharing and using research data without barriers". Below this is a vertical menu with the following items: "About", "Organisation", "Working Groups", "Participate", "News & Events", "First Plenary", and "Documents & Presentations". To the right of the photo, there are several sections: "Research Data Alliance" (describing the organization's purpose), "Launch" (mentioning the March 18-20, 2013 meeting), "Participate" (inviting anyone to participate), and "Purpose" (explaining the alliance's mission to accelerate data-driven innovation). The overall design is clean and professional.

[\*\*http://rd-alliance.org/\*\*](http://rd-alliance.org/)

CODATA Initiatives:



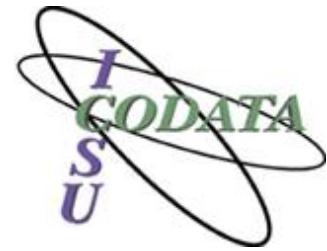
# World Social Sciences Forum 2013

- CODATA and WDS will jointly chair a panel at the World Social Science Forum, WSSF Conference in October 2013. <http://www.wssf2013.org/>
- The panel will focus on “***Data Management Challenges For Social And Natural Sciences***”





# OneGeology



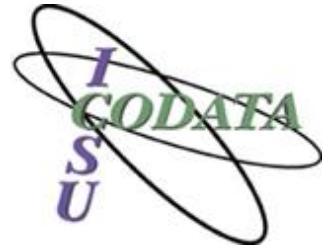
- “Making Geological Maps of the world Accessible”
- Initiative of international geological surveys
- 120 countries since 2007
- Provides access through a distributed network of data sources
- Content is the responsibility of the source.
- Utilizes OGC and other standards.
- Promotes a discipline standard (GeoSciML)
- Becoming a registered non-profit.
  
- OneGeology offers online access to the CGMW Circum-Polar geological Map.

The screenshot shows the OneGeology website homepage. At the top, there's a banner with the text "Making Geological Map Data for the Earth Accessible". Below the banner, there's a sidebar with links like "What is OneGeology?", "Participants", "Organisation", "Getting involved", "Technical overview", "Technical detail for participants", "Meetings", "Portal", "OneGeology eXTRA", and "Press information". The main content area features a large image of a globe with geological maps, a "Monthly news" section with a thumbnail of a newspaper, a "Geodiversity" section with a map of the world, and a "Monthly feature" section for February 2013, which highlights a geological map of Uganda. There are also sections for "Accreditation Scheme" and social media links for Blogger and Twitter.

<http://onegeology.org/>

New ICSU Initiative:

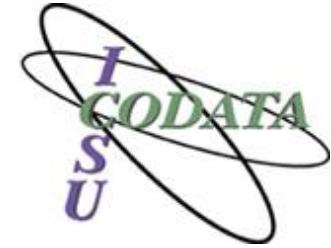
# Future Earth



- Future Earth is a new 10-year international research initiative that will develop the knowledge for responding effectively to the risks and opportunities of global environmental change and for supporting transformation towards global sustainability in the coming decades.
- CODATA & WDS co-chaired a “Data Management Break-out Session” at the *“Future Earth: Global Earth Change Community”* Workshop (Paris, Nov. 2012)
- CODATA and WDS have submitted a nomination for a member of the *Future Earth Scientific Committee*.

The screenshot shows the Future Earth website as it appeared in Internet Explorer. The header includes the ICSU logo and navigation links for Who, Vision, What's new?, and Media centre. A main banner reads "Strengthening international science for the benefit of society" and "Future Earth - research for global sustainability". Below the banner are several images related to environmental science and development. On the right side, there is a video player showing a video titled "Johan Rockström introduces Future Earth" from Future Earth YouTube. The video player includes a play button, a progress bar, and a Vimeo logo.

<http://www.icsu.org/future-earth>



# Collaborative Trends

- Effective teamwork remains one of the most critical keys to success.
- Collaboration and integration are closely related and complementary.
- Daily time spent in mobile apps surpasses desktop and mobile web consumption.
- Cloud-based collaboration is growing – organizations whose data are locked behind their firewall are at a disadvantage.
- Virtualized open data supports work as an “activity”, rather than a “place”.
- “Big data – the Fourth Paradigm (observation, theory, simulation and modelling, data exploration)
- “Big judgement” is required to link correlation and causation – new technology and training required.