Collaborations and Partnerships

John Broome

CODATA-International

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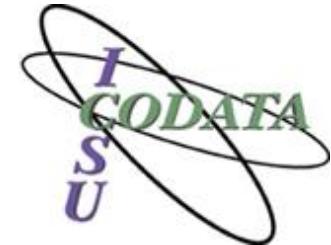
One of the fundamental roles of CODATA is to facilitate collaboration and partnerships in the management of research data.

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
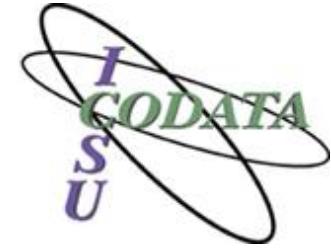
# Current Task Groups

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)

World Data System (WDS)
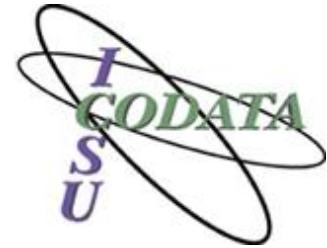
- WDS created at the ICSU 29th General Assembly based on the 50-year legacy of the ICSU World Data Centres (WDCs).

- 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/

ICSU
WORLD DATA SYSTEM

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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 working 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.
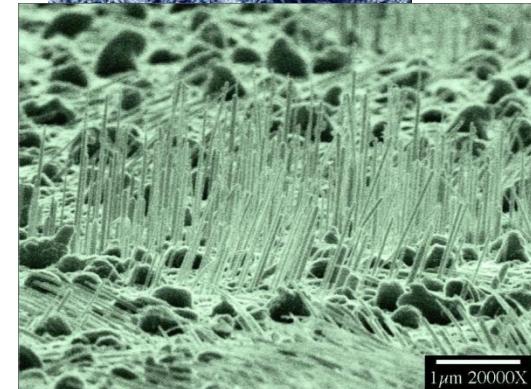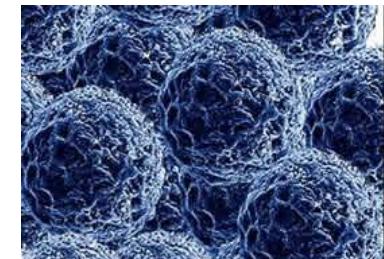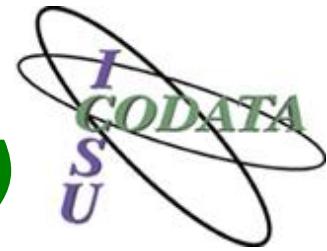
Research Data Alliance (RDA)

- 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.

http://rd-alliance.org/
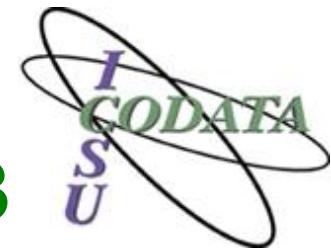
World Social Sciences Forum 2013

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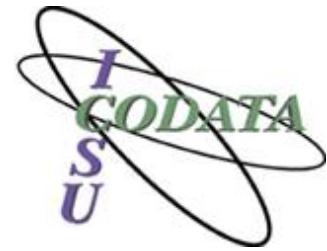
- "Making Geological Maps of the world Accessible"
- Initiative of international geological surveys
- 120 countries since 2007
- Provides access through a distributed network of data sources
- Content is the responsibility of the source.
- Utilizes OGC and other standards.
- Promotes a discipline standard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

- OneGeology offers online access to the CGMW Circum-Polar geological Map.

http://onegeology.org/

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.*

http://www.icsu.org/future-earth
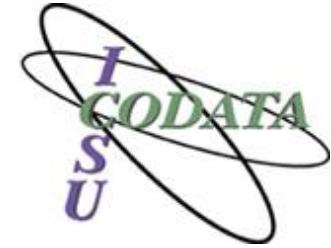
Collaborative Trends

- 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.