

Carbon Nanotube Yarn. Credit: Mei Zhang, University of Texas at Dallas

# Organization for Economic Cooperation and Development (OECD)



Australia



Canada



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Korea



Netherlands



Poland



Spain



Turkey



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Republic



France



Hungary



Italy



Luxembourg



New Zealand



Portugal



Sweden



UK



Belgium



Denmark



Germany



Iceland



Japan



Mexico



Norway



Slovak  
Republic

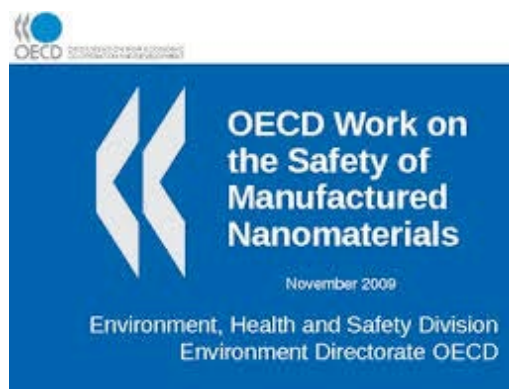
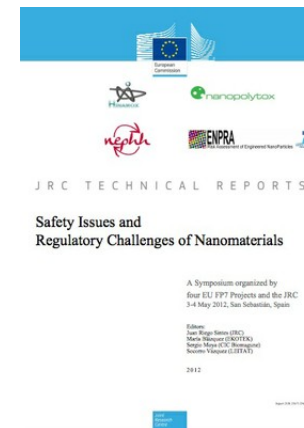


Switzerland



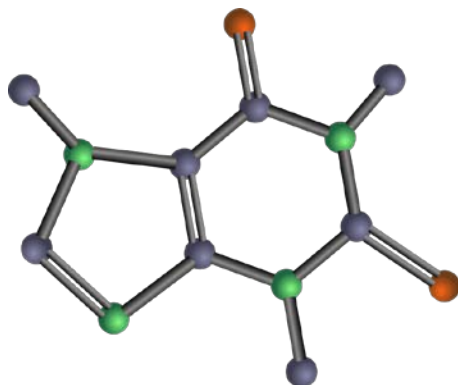
US

# Discourse and Practice

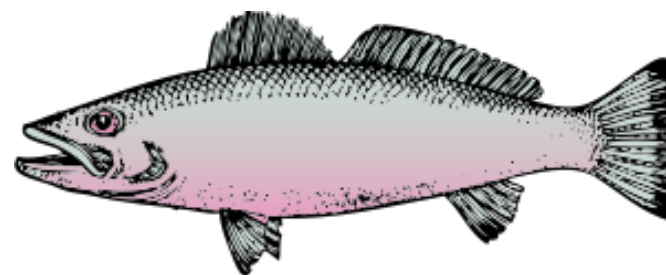


# The **MAD** Framework

Physical Chemical Properties



Effects on Biotic Systems



Degradation and Accumulation



Health Effects



# **WPMN Projects**

**Project 1.** Database on Safety Research

**Project 2.** Research Strategies on Manufactured Nanomaterials

**Project 3.** Safety Testing of a Representative Set of Manufactured Nanomaterials

**Project 4.** Manufactured Nanomaterials and Test Guidelines

**Project 5.** Cooperation on Voluntary Schemes and Regulatory Programs

**Project 6.** Cooperation on Risk Assessment

**Project 7.** Alternative Methods in Nano Toxicology

**Project 8.** Exposure Measurement and Exposure Mitigation

**Project 9.** Environmental Benefits and Green Nanotechnology





# Evolving the Chemicals Discourse

“Stakeholder viewpoints could be important in the absence of data (risk tolerance).”

“The environmental optimum is not always the economic optimum.”

“It remains in the interest of all stakeholder to apply prudent risk management approaches to nanomaterials in the current environment of scientific uncertainty.”

“Nanotechnology may provide an opportunity for upstream assessment of the physical and chemical properties of the materials (e.g. to inform the application of green chemistry approaches or selection of safer substances), which could lead to downstream risk reduction or avoidance.”

# Same OECD, Different Products

## WPMN Products (n=40)

- Guidance on Sample Preparation and Dosimetry
- Inhalation Toxicity Testing: Expert Meeting
- Important Issues on Risk Assessment
- Preliminary Review of OECD Test Guidelines
- National Activities on Life Cycle Assessment of Nanomaterials
- Environmentally Sustainable Use of Nanomaterials

## WPN Products (n=9)

- Considerations in Moving toward a Statistical Framework for Nanotechnology
- Inventory of National Science, Technology and Innovation Policies for Nanotechnology
- Responsible Development of Nanotechnology: Results of a Survey Activity
- Fostering Nanotechnology to Address Global Challenges: Water
- Planning Guide for Public Engagement and Outreach in Nanotechnology



