







Workshop II: Challenges

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- Broad scope of Federal research and development missions in science and technology
- Wide ranging interests of potential audiences
- Taxonomy issues given the broad scope and audience
- Blending resources from different agencies into cohesive functionality and page design
- Resources, funding and sustainability



SCIENCE.GOV **The Alliance Potluck Party** 17 organizations from 12 agencies

- **Department of Agriculture** National Agricultural Library United States Forest Service
- Department of Commerce National Institute of Standards and Technology National Technical Information Service
- Department of Defense Defense Technical Information Center
- Department of Education National Library of Education
- Department of Energy Office of Scientific and Technical Information
- Department of Health and Human Services United States Government Printing Office Food and Drug Administration National Institutes of Health National Library of Medicine
- Department of Interior United States Geological Survey National Biological Information Infrastructure
- Environmental Protection Agency Office of Environmental Information Office of Research and Development
- National Aeronautics and Space Administration Scientific and Technical Information Program
- National Science Foundation

 - With additional support from the **National Archives and Records Administration**







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	ering, and Evaluation Facility (ABREE) - Expertise in the development, design, production, and rage technologies [Department of Energy (DCE), Sandia National Laboratories]
	es and Documents - Provides links to resources and documents about alternative fuel and gies, programs, funding, regulations, contacts, and more [Department of Energy (DOE)]
Argonne Library\'s Resources on the In Argonne National Laboratory (ANL)]	ternet - Provides access to Agronnel's subject specific resources [Department of Energy (DOE),
	links to information about high-tech interactive Museum exhibits that explain the Los Alamos logy, and basic research projects, as well as the history of the Manhattan Project [Department of aboratory (LANL)]
Brookhaven National Laboratory Fact S (DOE), Brookhaven National Laboratory	Sheets - Provides links to scientific and technical information fact sheets [Department of Energy y (BNL)]
Brookhaven National Laboratory Resea Laboratory with links to associated high	arch Centers and Databases - Provides access to research centers at Brookhaven National hlights and documents [Department of Energy (DOE), Brookhaven National Laboratory (BNL)]
	sustainable design, improving energy efficiency, or incorporating renewable energy concepts in); Energy Efficiency and Renewable Energy Network (EREN)]



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5.		****	Hurricane Katrina Animal Relief Efforts veterinary students) to assist in Hurricane Katrina recovery efforts and in future Document is from: Science gov Veb Sites
6.		****	Hurricane Katrina, Questioning the Dutch solution', Enserink M, Bohannon J. Science, 2005 Sep 16:309(5742):1809. No abstract available. Document is from: PubMed Database
7.		****	Hurricane Katrina Response: Environmental Protection Agency Hurricane Katrina Response Document is from: Science gov Web Sites
8.		****	Hurricane Katrina Response: Environmental Protection Agency Hurricane Katrina Response; Environmental Protection Agency Hurricane Katrina Response Document is from: Science gov Web Sites
9.		****	Hurricane Katrina. Riding out the storm. Gramling C. Science. 2005 Sep 9;309(5741):1657. No abstract available. Document is from: PubMed Database
0		++++	Hurricane Katrina - U.S. Department of Defense



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Surface Web

Deep Web

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- Size: Estimated to be 8+ billion (Google) to 45 billion (About.com) Web pages
- Static, crawlable
 Web pages
- Large amounts of unfiltered information
- Limited to what is easily found by search engines

• Size: Estimated to be 5 to 500 times larger (*BrightPlanet*)

- Dynamically generated content that lives inside databases
- High-quality, managed, subject-specific content
- Growing faster than
 surface Web (BrightPlanet)

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	2.1 Sources pages of government science information.				
Science.gov Web Sites - searches an index of 1700+ agency-selected sites Agriculture & Food - Food Safety, Gardening, Pesticides, Veterinary Science AGRICOLA Agriculture Technology Transfer Automated Retrieval System FDA Food Safety and Applied Nutrition Applied Science & Technologies - Biotechnology, Electronics, Engineering, Transport DefenseLINK NIST Data Gateway NIST Publications STINET Report Collection U.S. Patent Server Astronomy & Space - Exploration, Planets, Space Technologies	Energy & Energy Conservation - Energy Use, Fossil Fuel, Solar, Wind DOE Alternative Fuels Data Center DOE Information Bridge Energy Citations Database Environment & Environmental Quality - Air/Water/Noise Quality, Cleanup, Climate Change EPA Environmental Information Management System EPA Office of Pesticide Programs General Science - Multidisciplinary resources National Technical Information Service (NTIS) Health & Medicine - Disease, Health Care, Nutrition, Mental Health Biologics Evaluation and Research ClinicalTrials.gov				
NASA Ástrophysics Data System NTRS: NASA Technical Reports Server NASA Spacelink Biology & Nature - Animals & Plants, Ecology, Genetics, Pest Control National Biological Information Infrastructure (NBII)	Drug Evaluation and Research MedlinePlus Health Information PubMed Natural Resources & Conservation - Ecosystems, Energy Resources, Forest Science, Mining USDA Forest Service Research Publications				
Earth & Ocean Sciences - Land, Maps, Natural Disasters, Oceans, Weather National Oceanic and Atmospheric Administration (NOAA) USGS Water Resource Reports	USDA Forest Service Research Publications Science Education - Homework Help, Teaching Aids, Science Internships ERIC Database NSF Publications				

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			Ranked results for: nanotubes	See Results by Source
1.		****	Narotube news. ; 2005-07-01 Smaller, faster computers, bullet-proof t-shirts, and itty-bitty robots—such are the promises of nan known as nanotubes. But for these exciting ideas to become realities, scientists must understand For, without nanoscience, there would be no nanotechnology. In a rec Document is from: ERIC	
2		****	Nanotube Sensors Under this project, we explored the feasibility of utilizing carbon nanotubes in sensing applications number of aspects of the electrical properties of carbon nanotubes in collaboration with other rese described below. Document is from: NASA Technical Reports Server	
3.		****	Nanotubes; controlling conductance, Nordlund K, Hakoren P. Nat Mater, 2005 Jul;4(7):514-5. No abstract available. Documert is from: PubMed Database	
4.		****	Nanotube films and articles Document is from: US Patent & Trademark Office Database	
5.		****	Nanotubes, nanoscience, and nanotechnology Cohen, Marvin L.; 2001 Feb 20 Document is from: Energy Citations Database	
6.		****	Nanotube Reinforcement of Adhesively Bonded Joints Over the past five years there has been much excitement about the development of nanotubes are enhancing electrical and mechanical properties of systems. The purpose of this paper is to preser using nanofibers as a neinforcement to make high performance composite materials. Document is from: NASA Technical Reports Barver	
7.		****	Nanotubes May Break Through 'Chip Wall' In 1965, just four years after the first planar integrated circuit (IC) was discovered, Cordon Moore grown exponentially. He predicted that this would continue, and the media soon began to call his p validated by the technological progress achieved in the semiconductor industry. Document is from: NASA Technical Reports Server	
8.		****	Nanotube/Quantum Dot-Polymer Solar Cells Single wall carbon nanotubes used or this study were synthesized using the pulse laser vaporizat condensed region on the quartz tube cuiside the fumace and purified by modification of the previo Document is from: NASA Technical Reports Server	

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2			Single Wall Carbon Nanotubes: in Single Wall Carbon Nanotubes: Nanotubes: 2 nd Joint Wor Gaithersburg, Maryland January 26-28, 2005	kshop on Measurement Issues in Single Wall Carbor	n
3.	8	Nanotech News - Moving DNA into Nanotubes Nanotech News - Moving DNA into Nanotub	es		
6.			n condenses in an atmosphere of inert gas, fullerenes include a wide he initial discovery was recognized by the 1996 Nobel Prize in Chemir		
5.	8	Nanotechnology Gallery Carbon Nanotubes Growing Carbon Nano	btubes		
В.		Workshop on Reliability Issues in Nanomaterial Measurement Issues in Single Wall Carbon leaders in the carbon nanotube community to jo	Nanotubes This invitation-only workshop on Measurement Issues	in Single Wall Carbon Nanotubes brought together	
		Nanotechnology Research News Carbon nanotubes boost hydrogen storage -	- Nanotech Web One millions nanotubes could fit into this period.	Boston Globe	
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7. 3. 9.		MSD Research Highlight	ding favorable elastic modulus and Indeed, multiwalled nanotuber	(MWNTs) are an essential component	







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5 *** *	Spectral editing in MAS MMR of aprotic solids. 31P-113Cd cros filtering studies in II-IV-V2 semiconductor alloys. Franke D, Hudalla C, Eckert H; 1993	s-polarization and heteronuclear double-quantum	mark Link
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			Physical review letters.		
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			Source: DOE Information Bridge		
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OMB Report to Congress

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The White House Office of Management and Budget (OMB) reported to Congress on March 1, 2005, that in the implementation of the E-Government Act of 2002, Science.gov was one of the two efforts, government-wide, that is satisfying the requirements of Section 207 "...so citizens can access the results of Federal research."

