

Physical Science Paper 1 Memorandum September 2013

Contains the full texts of all Tax Court decisions entered from Oct. 24, 1942 to date, with case table and topical index.

Plates 1 and 2 in PDF format included.

Proceedings of the Royal Irish Academy

Review of the Bureau of Reclamation's Corrosion Prevention Standards for Ductile Iron Pipe

Keeping the Lights on

Specifications to Support Classification, Standards of Accuracy, and General Specifications of Geodetic Control Surveys

Archibald Liversidge, FRS

Catalog of Copyright Entries. Third Series

When Archibald Liversidge first arrived at Sydney University in 1872 as reader in geology and assistant in the laboratory he had about ten students and two rooms in the main building. In 1874 he became professor of geology and mineralogy and by 1879 he had persuaded the senate to open a faculty of science. He became its first dean in 1882. Liversidge also played a major role in the setting up of the Australasian Association for the Advancement of Science which held its first congress in 1888. For anyone interested in Archibald Liversidge, his contribution to crystallography, mineral chemistry, chemical geology, strategic minerals policy and a wider field of colonial science.

The European Union's (EU) common Energy Policy commits the EU to generating 20 per cent of total energy consumption from renewables by 2020. The European Commission proposed national renewable energy targets for each Member State and it was suggested that 15 per cent of UK energy be derived from renewables by 2020.

Dynamics of Scientific Progress

Resources in Education

A New Guide to the Collections in the Library of the American Philosophical Society

Monthly Catalog of United States Government Publications

Mathematical, astronomical, and physical science

An Imperative for Maintaining U.S. Leadership in Space Exploration

Study & Master Physical Sciences Grade 12 has been especially developed by an experienced author team for the Curriculum and Assessment Policy Statement (CAPS). This new and easy-to-use course helps learners to master essential content and skills in Physical Sciences.

A highly readable history of the University of Melbourne that examines its growth from a small provincial institution, educating the elite of a relatively narrow society, to a major teaching and research institution - changes of a magnitude which could never have been envisaged in 1935 when the story begins.

Foundations and Natural Scientists, 1900-1945

Sessional Papers

Book catalog of the Library and Information Services Division

ESSA Science and Engineering, July 31, 1965 to June 30, 1967

Millennial Biology: The National Science Foundation and American Biology, 1975-2005

Ductile iron pipe (DIP) was introduced about 50 years ago as a more economical and better-performing product for water transmission and distribution. As with iron or steel pipes, DIP is subject to corrosion, the rate of which depends on the environment in which the pipe is placed. Corrosion mitigation protocols are employed to slow the corrosion process to an acceptable rate for the application. When to use corrosion mitigation systems, and which system, depends on the corrosivity of the soils in which the pipeline is buried. The Bureau of Reclamation's specification for DIP in highly corrosive soil has been contested by some as an overly stringent requirement, necessitating the pipe to be modified from its as-manufactured state and thereby adding unnecessary cost to a pipeline system. This book evaluates the specifications in question and presents findings and recommendations. Specifically, the authoring committee answers the following questions: Does polyethylene encasement with cathodic protection work on ductile iron pipe installed in highly corrosive soils? Will polyethylene encasement and cathodic protection reliably provide a minimum service life of 50 years? What possible alternative corrosion mitigation methods for DIP would provide a service life of 50 years?

NSA is a comprehensive collection of international nuclear science and technology literature for the period 1948 through 1976, pre-dating the prestigious INIS database, which began in 1970. NSA existed as a printed product (Volumes 1-33) initially, created by DOE's predecessor, the U.S. Atomic Energy Commission (AEC). NSA includes citations to scientific and technical reports from the AEC, the U.S. Energy Research and Development Administration and its contractors, plus other agencies and international organizations, universities, and industrial and research organizations. References to books, conference proceedings, papers, patents, dissertations, engineering drawings, and journal articles from worldwide sources are also included. Abstracts and full text are provided if available.

Engineering Vulnerability

Oral and Written Evidence

1948

Nuclear, Renewables and Climate Change; Sixth Report of Session 2005-06

Directory of Engineering Document Sources

A Bibliography, 1978-1982

Spacecraft require electrical energy. This energy must be available in the outer reaches of the solar system where sunlight is very faint. It must be available through lunar nights that last for 14 days, through long periods of dark and cold at the higher latitudes on Mars, and in high-radiation fields such as those around Jupiter. Radioisotope power systems (RPSs) are the only available power source that can operate unconstrained in these environments for the long periods of time needed to accomplish many missions, and plutonium-238 (²³⁸Pu) is the only practical isotope for fueling them. Plutonium-238 does not occur in nature. The committee does not believe that there is any additional ²³⁸Pu (or any operational ²³⁸Pu production facilities) available anywhere in the world. The total amount of ²³⁸Pu available for NASA is fixed, and essentially all of it is already dedicated to support several pending missions--the Mars Science Laboratory, Discovery 12, the Outer Planets Flagship 1 (OPF 1), and (perhaps) a small number of additional missions with a very small demand for ²³⁸Pu. If the status quo persists, the United States will not be able to provide RPSs for any subsequent missions.

Robert Kohler shows exactly how entrepreneurial academic scientists became intimate "partners in science" with the officers of the large foundations created by John D. Rockefeller and Andrew Carnegie, and in so doing tells a fascinating story of how the modern system of grant-getting and grant-giving evolved, and how this funding process has changed the way laboratory scientists make their careers and do their work. "This book is a rich historical tapestry of people, institutions and scientific ideas. It will stand for a long time as a source of precise and detailed information about an important aspect of the scientific enterprise. . . It also contains many valuable lessons for the coming years."--John Ziman, Times Higher Education Supplement

Physical Sciences, Grade 12

In Pursuit of Climate Adaptation

Permafrost

Restructuring Of Physical Sciences In Europe And The United States - 1945-1960, The - Proceedings Of The International Conference

Trademarks

Tax Court Memorandum Decisions

It is generally believed that doing science means accumulating empirical data with no or little reference to the interpretation of the data based on the scientist's theoretical framework or presuppositions. Holton (1969a) has deplored the widely accepted myth (experimenticism) according to which progress in science is presented as the inexorable result of the pursuit of logically sound conclusions from unambiguous experimental data. Surprisingly, some of the leading scientists themselves (Millikan is a good example) have contributed to perpetuate the myth with respect to modern science being essentially empirical, that is carefully tested experimental facts (free of a priori conceptions), leading to inductive generalizations. Based on the existing knowledge in a field of research a scientist formulates the guiding assumptions (Laudan et al., 1988), presuppositions (Holton, 1978, 1998) and "hard core" (Lakatos, 1970) of the research program that constitutes the imperative of presuppositions, which is not abandoned in the face of anomalous data. Laudan and his group consider the following paraphrase of Kant by Lakatos as an important guideline: philosophy of science without history of science is empty. Starting in the 1960s, this "historical school" has attempted to redraw and replace the positivist or logical empiricist image of science that dominated for the first half of the twentieth century. Among other aspects, one that looms large in these studies is that of "guiding assumptions" and has considerable implications for the main thesis of this monograph (Chapter 2).

National Science Foundation (NSF) is a unique federal agency because it supports scientific research financially, but does not engage in scientific work itself. Its history is known only in part because the NSF is a vibrant, expanding, and living entity that makes the final telling of its story impossible. Much can be learned from its beginning as well as its component parts. If the founding of the NSF in 1950 was couched in an era of physics, especially atomic physics, certainly by the end of the 20th century and the beginning of the 21st, biology was, and remains, the queen of sciences for the predictable future. This book highlights the elite status of America's biological sciences as they were funded, affected, and, to a very real degree, interactively guided by the NSF. It examines important events in the earlier history of the Foundation because they play strongly upon the development of the various biology directorates. Issues such as education, applied research, medical science, the National Institutes of Health, the beginnings of biotechnology, and other matters are also discussed.

Creativity in Research and Invention in the Physical Sciences

Guide to U.S. Government Publications

ESSA Science and Engineering

ESSA Science and Engineering, July 13, 1965 to June 30, 1967

Renewable Electricity - Generation Technologies

Official Gazette of the United States Patent and Trademark Office

Keeping the lights On : Nuclear, renewables and climate change, sixth report of session 2005-06, Vol. 3: Written Evidence

In Engineering Vulnerability Sarah E. Vaughn examines climate adaptation against the backdrop of ongoing processes of settler colonialism and the global climate change initiatives that seek to intervene in the lives of the world's most vulnerable. Her case study is Guyana in the aftermath of the 2005 catastrophic flooding that ravaged the country's Atlantic coastal plain. The country's ensuing engineering projects reveal the contingencies of climate adaptation and the capacity of flooding to shape Guyanese expectations about racial (in)equality. Analyzing the coproduction of race and vulnerability, Vaughn details why climate adaptation has implications for how we understand the past and the continued human settlement of a place. Such understandings become particularly apparent not only through experts' and ordinary citizens' disputes over resources but in their attention to the ethical practice of technoscience over time. Approaching climate adaptation this way, Vaughn exposes the generative openings as well as gaps in racial thinking for theorizing climate action, environmental justice, and, more broadly, future life on a warming planet. Duke University Press Scholars of Color First Book Award recipient

A Place Apart

The University of Melbourne : Decades of Challenge

Soviet Avalanche Research

Imperial Science under the Southern Cross

Avalanche Bibliography Update, 1977-1983

Radioisotope Power Systems

Keeping the Lights on Nuclear, Renewables and Climate Change; Sixth Report of Session 2005-06 The Stationery Office

Includes Part 1A: Books and Part 1B: Pamphlets, Serials and Contributions to Periodicals

Catalogue of Scientific and Technical Papers Published by the Former Mines Branch (since Renamed CANMET, Canada Centre for Mineral and Energy Technology) 1967-1974

Reports from Commissioners

Nuclear Science Abstracts

Rearming for the Cold War 1945 -- 1960

First, supplementary, and second reports, with minutes of evidence and appendices. 1872 (c.536)

Critical Appraisal of Physical Science as a Human Enterprise