



THE UNIVERSITY  
OF QUEENSLAND  
AUSTRALIA

**LIBRARY**  
*Enriching world-class scholarship*

## **Earth Sciences Collection Development Policy**

Last Updated 26 August 2008

### **1. Purpose of the collection**

The Library purchases resources on earth sciences to support research and teaching activities in the School of Physical Sciences and associated centres, including the Earth Systems Science Computational Centre (ESSCC). Some sections of this material are also relevant to teaching and research in the School of Engineering, School of Molecular and Microbial Sciences, School of Geography, Planning and Architecture and the Centre for Mined Land Rehabilitation.

### **2. Primary user groups served**

The School of Physical Sciences offers a number of undergraduate degrees including B.Sc., B.Sc. (Hons), B.Sc.App. (Environmental Sciences), B.Sc.App.(Geophysics) and Postgraduate Diploma in Science. In addition to the degrees offered, the School teaches a number of interdisciplinary and service courses for Agriculture, Civil Engineering, Mining, Minerals and Materials Engineering, and Marine Sciences. These courses encompass a wide range of earth science subjects such as mineralogy, petrology, stratigraphy, palaeontology, palynology, structural and economic geology, tectonics, sedimentology, groundwater, geochemistry, mineral and fossil fuel exploration and marine geology.

The research interests of staff and graduate students of the Earth Sciences and centres are listed below.

- **Geochemistry, geochronology and isotope systems including:**

- Geochronology/Thermochronology
  - Trace Element Geochemistry
  - Stable Isotope Geochemistry

- **Environmental and marine studies including:**

- Environmental Geochemistry
  - Surficial Processes and Landscape Evolution
  - Marine Geology and Geochemistry
  - Geobiology of Past and Present Coral Reef

Palaeclimatology and Global Change  
Geoecology and Hydrogeology  
Quantitative Paleoecology and Paleobiology

- **Fossils fuels, ore geology, and exploration including:**

Ore Geology  
Fossil Fuels Geology  
Exploration Geophysics  
Structural Geology and Exploration

- **Crustal studies and tectonics including:**

Petrology and Crustal Evolution  
  
Volcanology

**ESSCC research interests:**

- Geodynamics, covering volcanology, solid state physics, planetary evolution and subduction processes
- Geomechanics, including fault zone processes, brittle rock failure, minerals comminution and granular dynamics
- Earthquake physics, including dynamic rupture, tsunami generation, geothermal energy, interacting faults and Queensland seismicity and hazard
- HPC software

**3. Description of existing collection**

The majority of the collection is housed in the Dorothy Hill Physical Sciences & Engineering Library, although some related material is in Biological Sciences Library and Social Sciences and Humanities Library. Some of the older less-used material may have been withdrawn to the on-campus warehouse.

The geology collection contains approximately 12,000 monographs and an extensive range of periodical titles. The collection is particularly strong in palaeontology, palynology, regional geology, petrology and geophysics.

There is a substantial map collection of over 30,000 sheets, some with explanatory notes.

The Dorothy Hill Physical Sciences and Engineering Library maintains a strong core reference collection that includes *Encyclopedia of earth system science*, *Encyclopedia of earth sciences*, *Encyclopedia of geochemistry*, and *Encyclopedia of paleontology*. The reference collection also includes an extensive collection of recent handbooks, general encyclopaedias, dictionaries and indexes. The full text of 1200 Elsevier Science journals is available through *Science Direct*.

*Science Citation Index* is available as part of the *Web of Science* database from 1945 onwards. *GeoRef* (1693-) is part of the CSA Illumina suite of databases until the end of 2008, but is also available via the Engineering Village suite of databases. Other databases relevant to earth sciences are: Compendex (1969-), Geobase (1980-), INSPEC (1969-) and SciFinder Scholar (1907-). *GeoRom* is available on CD-ROM. The full text of 2000 Elsevier Science journals is available through *Science Direct*.

Current awareness services are facilitated by *Web of Science*, *ScienceDirect* and *GeoRef* electronic databases.

#### **4. Interdisciplinary relationships**

The earth sciences collection is supported by titles in civil and mining engineering, physics, chemistry, mathematics, computer science, environmental science and biological sciences eg soil sciences.

An agreement exists with the Library of the Queensland Department of Minerals and Energy, whereby a number of publications received on exchange are redirected to the Dorothy Hill Physical Sciences and Engineering Library.

#### **5. Scope of current collecting**

##### **1. Languages collected**

Both monographs and periodicals are acquired in a wide range of languages. Japanese and Chinese language materials have been purchased with specially sought funds.

##### **2. Geographical areas collected**

No geographical area is excluded, but the collection principally supports the geology of Australasia, the Pacific Rim region, North America, China, Africa and the Antarctic. Exchange agreements have given extensive coverage of the government geological publications of the USA and Canada

##### **3. Chronological periods collected**

Material is collected relevant to all geological periods.

##### **4. Types (formats) of material collected**

All forms of material are collected, although printed books, periodicals and maps predominate. Microfiche and electronic formats (CD-ROM and floppy disks) are included. All University of Queensland Honours theses from the School of Life Sciences are held in addition to higher degree theses. Other unpublished material is not collected.

Selected Internet sites are catalogued.

To ensure timely access to core journals by teaching and research staff, journal titles which become available in electronic format are purchased unless costs are prohibitive.

## **5. Publication dates**

No publication date is excluded. Gaps in serials and out-of-print monographs are actively sought from donation funds.

## **6. Special considerations**

None.

## **7. Conspectus**

Earth Sciences collection was assessed as a Level 4 collection. A number of the previous exchange agreements have ceased as other institutions reconsider their exchange programs. Where possible, subscriptions have been taken out to continue previous exchange agreements. Continued collection will probably be at a Level 3B.