

On-line geological memoir of Hong Kong

Introduction

The Geotechnical Engineering Office (GEO) of the Civil Engineering and Development Department (CEDD), Hong Kong Special Administrative Region (HKSAR), China, has recently published an internet version of the geology of Hong Kong which is intended to make the available geological information more accessible to the local and international communities.

The on-line geological memoir is based largely on two recently published volumes, *The Pre-Quaternary Geology of Hong Kong* (Sewell et al., 2000) and *The Quaternary Geology of Hong Kong* (Fyfe et al., 2000), but with additions from the current map-updating programme now underway by the Hong Kong Geological Survey. The web-based geological memoir was compiled by Lee Chen-wah, with assistance from geologists of the Hong Kong Geological Survey.

The first memoir on the geology of Hong Kong was published by Davis (1952) and represented a compilation of geological data gathered during field and laboratory studies begun in the early 1920s. In the late 1960s, increasing demand for more detailed geological information led to the publication of a new memoir and accompanying 1:50 000-scale geological maps (Allen and Stephens, 1971). Some eleven years later, a complete revision of the geology of Hong Kong was commissioned following the establishment in 1982 of the Hong Kong Geological Survey within the Geotechnical Engineering Office (named the Geotechnical Control Office at that time). This led to the production of a set of fifteen 1:20,000-scale

geological maps and six accompanying memoirs, the last of which was published in 1996.

Accelerated demand for more detailed geological mapping resulted in the publication of several 1:5,000-scale geological maps and accompanying sheet reports for major development areas in Hong Kong. As a consequence of the enormous volume of new data available, the HKGS subsequently synthesised the available solid and superficial geological data into two volumes respectively with an accompanying set of 1:100,000-scale geological and thematic maps in year 2000.

Main characteristics of the on-line geological memoir

In addition to incorporating much of the information contained in the two published volumes on the pre-Quaternary and Quaternary geology described above, the on-line geological memoir includes details of the geology of specific areas in Hong Kong which have been extracted from earlier 1:20,000-scale geological maps and accompanying geological memoirs (Addison 1986, Strange and Shaw 1986, Langford et al., 1989, Strange et al., 1990, Langford et al., 1995, Lai et al., 1996).

The structure of the on-line geological memoir is designed to meet the wide-ranging information needs of the general public as well as professionals.

Users have several options of accessing the geological information. For users interested in a general overview of the geology of Hong Kong, a table of contents on the left-hand side of the webpage allows access to specific chapters which largely repeat those contained in the published pre-Quaternary geological memoir, with the addition of a summary chapter on the onshore superficial deposits extracted from the Quaternary geological memoir. Alternatively, users interested in the geology of a specific area can, by clicking the location on the geological map, obtain brief information such as the name and age of the rock formation present in that area, photographs showing

typical features of that rock type, and a simplified geological map showing the distribution of that rock formation in Hong Kong. Geotechnical and geological professionals requiring more detailed information can navigate further on pages detailing the lithology, structure, depositional environment and palaeontology according to specific needs. Information on specific rock formations can also be accessed quickly using a pull down menu on the top right-hand side of the webpage.

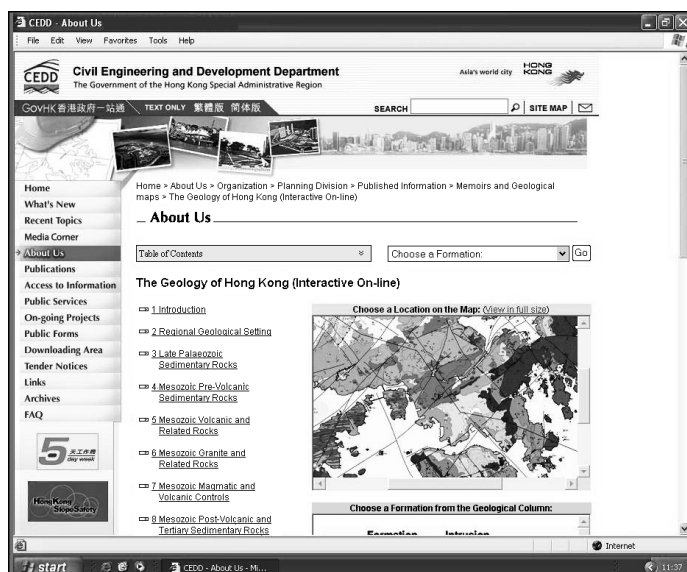
The on-line geological memoir of Hong Kong can be accessed at: http://www.cedd.gov.hk/eng/about/organisation/org_geo_pln_map.htm

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Opening screen of the homepage of the On-line Geological Memoir of Hong Kong.