Data Metallogenica – building the global encyclopaedia of ore deposits

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Data Metallogenica (www.datametallogenica.com) is the world’s largest mineral deposit database, a unique information system made possible through outstanding support by over one hundred sponsors. DM is a self-funding but not-for-profit enterprise, owned and operated by AMIRA International on behalf of the global minerals industry and associated institutions.

The international minerals community has funded Data Metallogenica so that it may continue to develop as a major reference, training and educational resource available to all.

Its primary objectives are to be:

- A primary web portal for “high-level” information on global ore deposits
- An information source and rock reference base for experienced geologists and regulators
- A training resource for younger geologists in companies
- An educational and research resource for students and teachers in universities
- A permanent and easily accessible repository of much “fragile” and transient data held by individuals and companies
- A fast integrated link to detailed and supporting quality data sets elsewhere

The nucleus of DM is the world’s most comprehensive and representative sample collection of ores, alteration, host rocks and regolith from more than 3,000 deposits in over 70 countries – now over 70,000 samples in total and still growing. This is being increasingly supported by other deposit information including maps, sections and field photographs being supplied by sponsors, other companies and individuals as a “community” beneficial activity.

Data Metallogenica online www.datametallogenica.com is a continuously expanding searchable database for global mineral deposits with over 40,000 image and text files containing:

- Professional quality digital images of 3,400 plate-mounted sets of mini-specimens (the bulk of the full collection) and 6,000 photographs of individual samples from important representative deposits. Images are of extremely high resolution (up to 18 Mb) and use advanced data compression for fast web transmission.

- Deposit descriptions, typical cross-sections, map and image data galleries, district overviews and exploration case histories, which are constantly being expanded as a permanent data repository.

- Spectral mineralogy from more than 5,500 altered samples from epithermal and porphyry deposits, together with selected other deposit styles.

- Development of a complete listing of all Australian university theses, including summaries of all theses related to mineralisation, related regional studies and exploration technologies.
A powerful and extremely fast text-based search and select capability, allowing searching by deposit name, geological province, country, state, commodity and deposit type.

The website has been designed for good access by local dial-up, although clearly broadband gives even faster downloads. All material on the website is downloadable.

Current priorities, established by the project sponsors, are to concentrate on expanding the supporting data (such as maps, sections, field and petrographic photographs) on the website while still maintaining growth in the physical collection, particularly for key missing deposits.