Goldschmidt 2024 Abstract
https://doi.org/10.46247/gold2024.24585

PetDB & GEOROC: Reflections on a Joint Past, Present, and Future

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The joint 25th anniversary of GEOROC and PetDB is a reason to celebrate the scientific discoveries that were enabled by the databases, but also the vision, the dedication, the effort and persistence of the people who have enabled the success of the databases - data curators, software developers, program officers, researchers who supported the databases. It is not a small feat for databases to survive the changing tides of research priorities, community expectations, funding availability, technology, data policies, and community culture. GEOROC and PetDB have grown and matured into a widely used data infrastructure that is recognized for its demonstrated impact on science. The concept of these databases has inspired the creation of similar databases and has informed the design of research data infrastructure broadly. When reflecting on the lessons we have learned while developing and maintaining these databases and evolving them into the essential data resources they represent today for science and society, one of the most important aspects is collaboration.

From the beginning, the teams who designed, developed, and compiled the databases were dedicated to ensuring compatibility and complementarity. Co-design of data models, vocabularies, and functionalities have been critical to best serve the needs of the researchers. One of the greatest successes is the development of the EarthChem Portal that allows harmonized search and download of data across PetDB, GEOROC and four other databases. Even the low-points, inevitable in any 25-year relationship and largely caused by the necessity to attract funding, served to make both systems stronger as they learned from past challenges.Today, collaboration between EarthChem and DIGIS is multi-faceted and includes operational/technical developments such as vocabularies and curation tools, as well as community engagement and lobbying societies, publishers and funders for global standards. The persistence of the two systems and their collaborative effort has led to the understanding that the networking of our resources and the leveraging of capabilities and content helps us and the community to be more sustainable and to address the changing demands of researchers, their struggle with new policies of funders, publishers and editors, and the integration into the global data ecosystem.