

International Implementation of Registration and Identification Services for Physical Samples in the Digital Universe: the IGSN e.V.

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Physical samples of Earth materials and data generated by their study represent a primary foundation of Geoscience research and are key to our knowledge of Earth's dynamical systems and evolution. The digital age offers new opportunities to advance discovery, sharing, and re-use of samples, and to link and integrate diverse data types generated on a sample. An internationally unified approach is needed for the registration and identification of physical specimens in the Earth Sciences in order to take advantage of these opportunities.

An international non-profit organization, the IGSN e.V. (www.igsn.org), was founded in December 2011 to implement and promote standard methods for locating, identifying, and citing physical samples with confidence by operating an international registration service for the IGSN (International Geo Sample Number) with a distributed infrastructure for use by and benefit to its members. The IGSN is a unique identifier for Earth samples, developed by the System for Earth Sample Registration SESAR (www.geosamples.org) to overcome the problem of ambiguous naming of samples. The IGSN is now recognized as the primary solution for sample identification and registration, and supported by a growing user community that includes large sampling campaigns such as the International Continental Drilling Program and the US Extended Continental Shelf program, US and European core and sample repositories, and a wide range of geoscience data systems.