

The New IAEA Classification of Uranium Deposits

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Since the last classification published in 1993 by the IAEA and based on 582 deposits, a large amount of scientific research has been published and a huge amount of junior company data have been made available especially during several stages of elevated uranium price and exploration activity over several 2 decades. Such a This wealth of new information on uranium deposit geology was used by a working group of international experts coordinated by the IAEA to revise and improve the previous 1993 classification. The present classification scheme is a descriptive one based on geological features and is complimentary to genetic schemes. It is intended to be used not only by geologists but also by international organizations.

The IAEA classification presented here was officially accepted in 2013 and has been already used in the 2014, 2016 and 2018 joint OECD-NEA/IAEA Uranium Resources, Production and Demand (Red Book) publications. The classification scheme was published in detail in 2018 (2) and is based on 1807 deposits listed in 2015 in the IAEA UDEPO Database of uranium deposits (1).

Fifteen main types of deposits, and 50 37 subtypes and 14 classes have been distinguished. The characteristics of typical U deposits representative of each of the categories are described in (2).

Further refinements and insights into the highest grade deposit type, Proterozoic unconformity uranium deposits, were provided in a further recent publication (3) (IAEA, 2018c). This publication complements previous information published by the agency on several other deposit types.

By the end of 2018, more than 3000 uranium deposits were listed in the UDEPO Database which is regularly updated.

1. INTERNATIONAL ATOMIC ENERGY AGENCY, World distribution of uranium deposits (UDEPO), IAEA-TECDOC-1843, IAEA, Vienna (2018a).

2. INTERNATIONAL ATOMIC ENERGY AGENCY, Geological Classification of Uranium Deposits and Description of Selected Examples, IAEA-TECDOC-1842, IAEA, Vienna (2018b).

3. INTERNATIONAL ATOMIC ENERGY AGENCY, Unconformity-related Uranium Deposits, IAEA-TECDOC-1857, IAEA, Vienna (2018c).

Keywords uranium geology, classification, unconformity