INIS: creating digital information repositories and preserving nuclear information

Looking for trusted nuclear information?  
Want to preserve your nuclear information?  
Need help creating a digital scientific information repository?

For 50 years, since the establishment in 1970 of the International Nuclear Information System (INIS) as the IAEA’s main nuclear repository, the INIS team has worked with Member States from all over the world to collect, process and preserve nuclear information.

With more than 4.3 million bibliographic references and access to 2 million full-texts, INIS offers free, easy to find, global nuclear information. Full-text articles such as “Human aspects of nuclear safety: Challenges of the COVID-19 pandemic. Getting the balance right: Effective nuclear regulation during a pandemic” can be easily found and downloaded by searching the INIS repository.

The oldest record existing in the repository dates back to 1929 and was input by the French INIS centre: "Researches on the electrolysis of metal oxides dissolved in boric anhydride or in melt borates. New methods of preparation of amorphous boron, borides and some metals”.

“As one of the world’s largest repositories of nuclear information, INIS records can be found through all major search engines,” said Dobrica Savić, Head of the Nuclear Information Section in NE. “Google Scholar alone offers 1.6 million search records coming directly from the INIS repository. Last year, INIS was visited by 1.4 million unique visitors, who opened 3.6 million web pages.”

Around 100,000 bibliographic records are added annually to the repository, including 10,000 full texts. In June – despite much of the world working under lockdown conditions – INIS had its highest

“Member States from all over the globe continued to contribute their national nuclear literature and, thanks to the remote IT support of our Systems Development and Support Group colleagues, the INIS Unit was able to input a huge number of records,” said Brian Bales, INIS Coordinator.
Preserving information

One recent project has been to support the transition of records of the IAEA Contact Expert Group (CEG), which operated between 1995 and 2015, from an obsolete database to INIS. The data transferred contained information on all the CEG projects, which have helped to address radioactive waste management, arising from the Cold War, in Russia. The CEG project records contain information on results achieved, organisations and experts involved and include presentations, reports, photos and web links. All the records have been carefully catalogued and indexed by INIS colleagues.

“Fostering the exchange of scientific and technical information lies at the core of the Agency’s mandate,” said Ian Gordon, Head of the Waste Technology Section in NE. “I was really impressed by the helpful and thorough way in which INIS colleagues preserved the vital records of the CEG.”

Creating digital information repositories

Thanks to digital copies saved at INIS, the Yerevan Physics Institute (YerPhi) in Armenia was able to recover more than 1000 research papers on high-energy physics and astrophysics which, after being locked away in dusty storage rooms, had become so dirty that it was impossible to clean them without causing damage.

“In the 60s, 70s and 80s we distributed our research papers among all large laboratories and transferred them to the IAEA,” said Ashot Chillingarian, Director of YerPhi. “Fortunately, INIS had digitized and preserved all the archives, which are now accessible to us in digital form. They have been literally saved.”

The INIS team assisted YerPhi in setting up a digital scientific repository and made all of the recovered research papers available via a dedicated web site.

You can search the INIS repository here. For help preserving your information or setting up a digital repository contact us here.