

# Graph JAEA

No. 5

January 2015

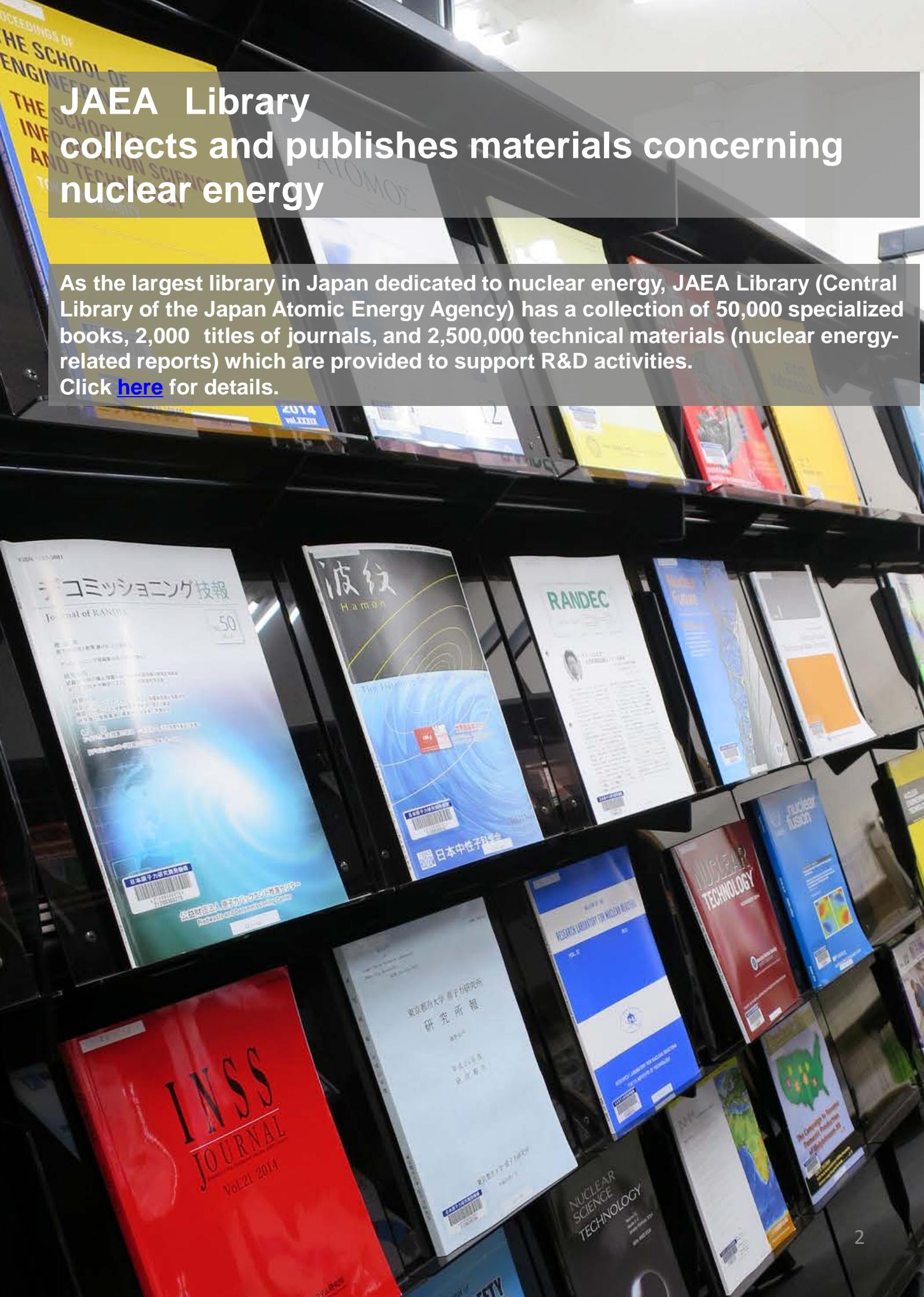
Using the Library

Japan Atomic Energy Agency



# JAEA Library collects and publishes materials concerning nuclear energy

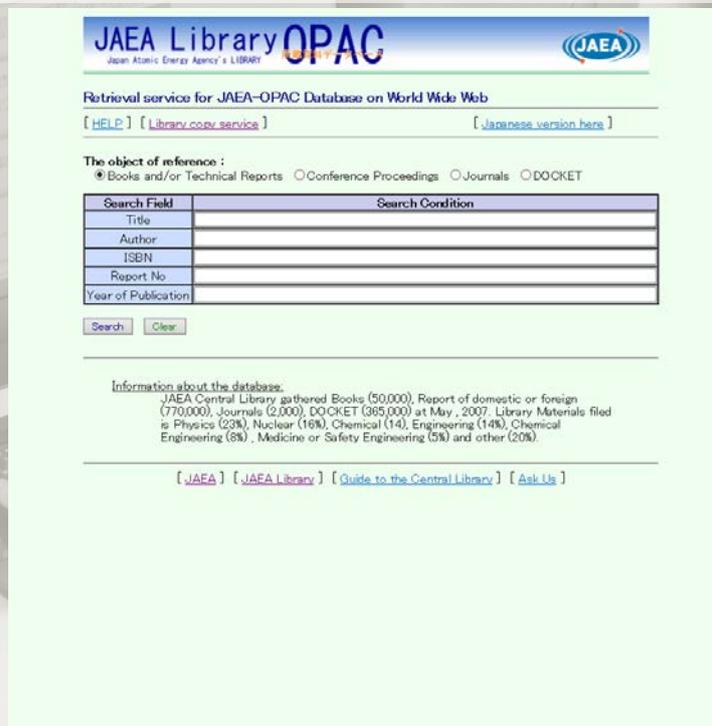
As the largest library in Japan dedicated to nuclear energy, JAEA Library (Central Library of the Japan Atomic Energy Agency) has a collection of 50,000 specialized books, 2,000 titles of journals, and 2,500,000 technical materials (nuclear energy-related reports) which are provided to support R&D activities. Click [here](#) for details.



# Searching for materials

You can check the holdings of materials in the library through the internet ([OPAC](#)). Click [here](#) for details.

In addition, you may also use the [photocopy service](#) of the collected materials. Click [here](#) for the application through the internet.



The search screen for the database of collected materials (OPAC)

## Using the library

JAEA Library is available to outside researchers, technical experts, students and the general public.

The library is also equipped with places (Research Commons) that can be used for meetings and presentations etc. among a small number of people. Click [here](#) for details.



Reading room (an area for reference books and standards etc.)



Research Commons

# We preserve information concerning the Fukushima Daiichi Nuclear Power Station accident

JAEA preserves information concerning the Fukushima Daiichi Nuclear Power Station accident which may otherwise go missing and be lost, and transmits it from the "[Fukushima Nuclear Accident Archive](#)". Click [here](#) for details.

We also transmit information on the result of R&D carried out by JAEA regarding measures to address the Fukushima Daiichi Nuclear Power Station accident as well as related foreign and domestic documents from our website for the "[Reference information about the Fukushima Daiichi nuclear power station accident](#)".

The screenshot shows the homepage of the Fukushima Nuclear Accident Archive. It features a search bar, navigation links for Home, Communities, Collections, Issue Date, Author, and Subject, and a search function. The page is titled "Fukushima Nuclear Accident Archive" and includes a brief description of the archive's purpose.

The screenshot shows a table with multiple columns, likely representing data from the archive. The columns include various identifiers and dates. The table is organized into sections, with a header row and several rows of data below.



The image shows two overlapping screenshots of JAEA research reports. The top one is a document with a header "Journal of Environment & Public Health" and contains text in Japanese. The bottom one is a document with a prominent "JAEA-Research" logo and contains text in Japanese.

The screenshot shows a page titled "Reference information about the Fukushima Daiichi nuclear power station accident". It lists five categories of references: 1. Fukushima Nuclear Accident Archive (User's Guide) 2015/1/23 Update, 2. JAEA R&D results on Fukushima Daiichi nuclear power station accident (2-1. JAEA Reports, 2-2. Papers, 2-3. Oral Presentations), 3. Useful bibliographies related to the Fukushima Daiichi nuclear power station accident, 4. Reports related to the Fukushima Daiichi nuclear power station accident, and 5. References in "STI/PUB/1238: Environmental consequences of the Chernobyl accident and their remediation - twenty years of experience / report of the Chernobyl Forum Expert Group 'Environment'". The page footer includes the JAEA logo and contact information for the Intellectual Resources Management and R&D Collaboration Department.

Full texts of R&D reports etc.

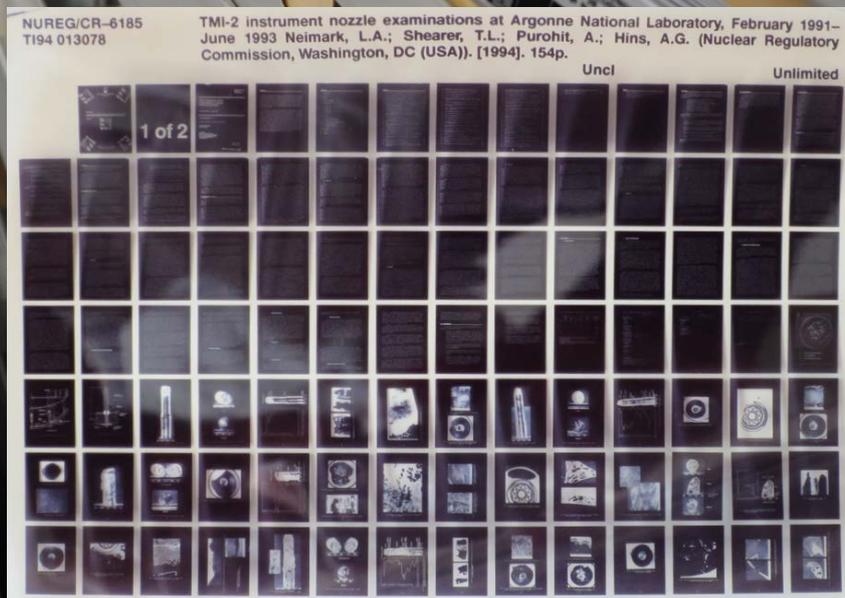
The screenshot shows a detailed research report or document with a header in Japanese and a list of numbered items. The text is in Japanese and appears to be a technical or scientific report.

A list of reference literatures (on the Chernobyl Nuclear Power Station accident etc.)

## We also possess these materials

JAEA Library holds no less than 2.5 million technical materials (nuclear energy reports) created by major foreign and domestic research organizations etc. in the form of micro materials.

Moreover, the Library actively collects materials called “gray literature” meaning hard to obtain from general bookstores, which includes documents such as materials for international conferences held both abroad and domestically.

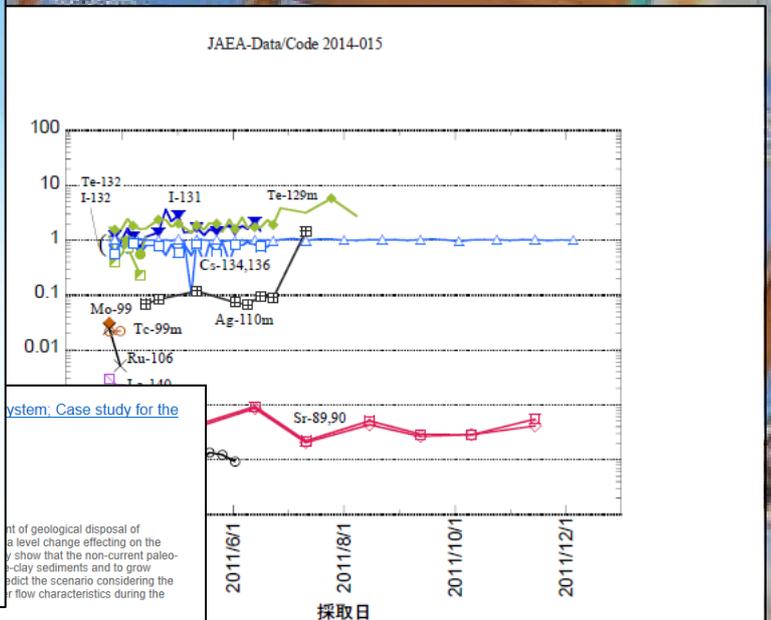


Microfiche  
(Material of the US Nuclear Regulatory Commission)

# We provide R&D results

JAEA Library makes efforts to disseminate information on the JAEA R&D reports and the academic papers written by JAEA staffs. Such information can be searched on the JAEA Library's web site, and the full text of the JAEA R&D reports are available in pdf format. Click [here](#) to try searching.

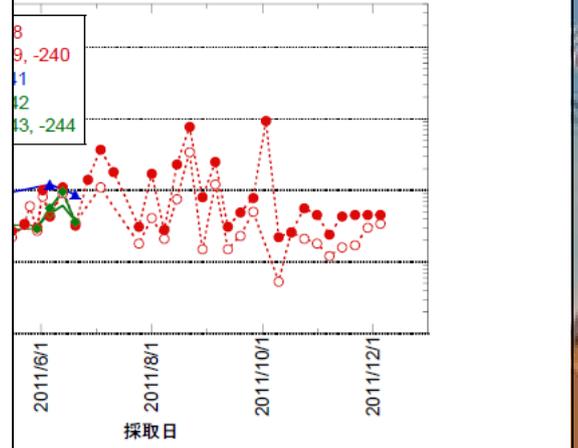
Additionally, we publish "[JAEA R&D Review](#)" providing the digests of our current achievements.



ystem. Case study for the

nt of geological disposal of a level change effecting on the y show that the non-current paleo-clay sediments and to grow edict the scenario considering the f low characteristics during the

観測された  $\gamma$  線放出核種及び Sr 核種の輸送比



料に観測された  $\alpha$  線放出核種の輸送比

- 6 [Comparative SINGAP-MAMuG test for the ITER neutral beam injector](#)  
 Taniguchi, Masaki; Kashiwagi, Mieko; Umeda, Naotaka; Dairaku, Masayuki; Watanabe, Kazuhiro; Inoue, Takashi; DeEsch, H.\*; Svensson, L.\*  
 JAEA-Research 2008-121, 2009/03  
[JAEA-Research-2008-121.pdf.5.95MB](#)
- For the ITER NBI, two accelerator concepts have been proposed. One is the SINGAP (single gap single aperture) developed at CEA Cadarache and the other is the MAMuG (Multi aperture multi gap) developed at JAEA. In order to assess the performance of the SINGAP and the MAMuG concepts at the same test facility under the same diagnostics, a collaborative test was performed between JAEA and CEA Cadarache under an ITER task agreement. For this purpose, the SINGAP accelerator was installed at the MTF of JAEA. From the viewpoint of voltage holding, maximum beam current and electron acceleration, the MAMuG showed better performance than the SINGAP, and it has been decided to choose the MAMuG as the baseline accelerator for the ITER NBI.
- 7 [Behavior of secondary-particles in a MeV-class electrostatic accelerator](#)  
 Mizuno, Takatoshi; Inoue, Takashi; Taniguchi, Masaki; Kashiwagi, Mieko; Umeda, Naotaka; Tobar, Hiroyuki; Dairaku, Masayuki; Watanabe, Kazuhiro  
 JAEA-Research 2008-120, 2009/03  
[JAEA-Research-2008-120.pdf.5.24MB](#)
- In an accelerator for a N-NBI, there are several processes of secondary-particle production such as the collision of  $H^+$  ions with  $H_2$  gas, extraction of  $H^+$  ions from beam plasma, and secondary-electron emission. The secondary particles cause heat load to the NBI components. It is necessary to analyze behavior of them in the accelerator. In this report, the secondary-particle behavior in MAMuG type MeV accelerator at JAEA has been analyzed by EAMCC. In the result, it is clarified that about 40% of  $H^+$  ions extracted from the ion source were lost by the stripping process in the MeV accelerator. More than 90% of the heat load to the intermediate grids was caused by collision of the electrons. A comparison of results obtained from experiments and present analyses showed different tendency in the currents flowing into the 2nd and the 3rd intermediate grids. This is supposed due to  $H^+$  ions extracted from beam plasma as a possible cause of the difference.
- 8 [Study on perturbation scenario for potential effect of uplift, denudation, subsidence and sedimentation on a HLW disposal system](#)  
 Kawamura, Makoto; Ebashi, Takeshi; Makino, Hitoshi; Niizato, Tadafumi; Yasue, Kenichi; Oi, Takao



The 37<sup>th</sup> Consultative Meeting  
of the INIS Liaison Officers

14-15 October 2014, Vienna



**We are transmitting Japan's nuclear energy-related information to the world**

JAEA Library submit input, i.e. nuclear literature published in Japan the International Nuclear Information System (INIS) Database of the International Atomic Energy Agency (IAEA), and contributes to transmitting the research results to the world. The [INIS Database](#) now stores over 3.7 millions records, and provides the information free of charge. Click [here](#) for details.



An overall view of the Library

JAEA Library was founded in 1959. Though a part of the building was damaged by the Great East Japan Earthquake in 2011, it was reopened in June 2014 after repair work.

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## *graph* JAEA

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JAEA Library

検索

