

13. Activities of Research Information Office (RIO)

1. Research Information Office (RIO)



The Research Information Office (RIO) was established aiming to consolidate research information of NIFS. The NIFS-Repository opens the research activities to the public through the Internet. The NIFS Article Information System (NAIS) which has been developed and is operated by RIO accumulates research information obtained through the research activities of NIFS including collaborative programs of the institute. The information disclosure of the latest study results is also an important function of RIO by publication of research reports such as an annual report, a NIFS report, etc.

2. NIFS-Repository



Nowadays Institutional Repository (IR) is recognized as one of the most important infrastructures for universities and institutes. For example, in a guide book of Japanese universities "Daigaku Ranking" published by Asahi Shimbun Publications Inc., IR is recognized as one of the evaluation indices of universities since 2009.

RIO is assigned as an operating organization for NIFS-Repository (<http://nifs-repository.nifs.ac.jp>). RIO organized a working group to implement this task. The system for NIFS-Repository was set up and started its operation at the end of Mar. 2009.

In general, a university-based IR is defined as; "A set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members". In other words, for in the case of NIFS, the IR is required to meet the social accountability of the Institute that is carrying out a large-scale project of nuclear fusion research and development.

Since FY2009 NIFS-Repository was partly supported by a grant from Cyber Science Infrastructure (CSI) Project for "Further expanding IRs and creating content" operated by National Institute of Informatics (NII). In FY2012 our efforts under this grant were mainly concentrated onto enrichment of its contents in NIFS-Repository. Namely, the retroactive input of the papers from Annual report and published papers was continued. As a result, by the end of FY2012 number of contents in NIFS-Repository increased to 8,171 items, including scientific articles published in various journals, NIFS-reports and Annual Report of NIFS, and 74,219 accesses in total (excluding that made by so-called robots) were recorded during FY 2012.

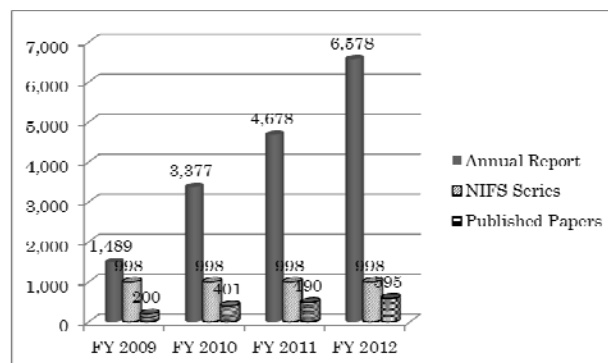


Fig. 1 Accumulated Numbers of Contents in NIFS-Repository (As of the end of each FY)

The "NIFS-repository" has been operated in NIFS based on "DSpace" and it is required to introduce a new version of the system including its operating system. The renewal of the working system needs complex procedure and cost, so we made consideration to use of "Software as a Service (SaaS)" for the new system. Utilization of the SaaS makes staff free from operation and maintenance works. In 2012, the configuration and data transfer to new system was completed and tested. The new system is expected to start its operation from April 2013.

NIFS is an Inter-University Research Institute (IURI) and serves as Center of Excellence, organizing collaborative researches in the field of fusion science nationwide and abroad, as well. There are many IURIs in Japan and the communication between these institutes is useful for the operation of the IR. Therefore we started "Information exchange meeting for IR at IURI" in FY2011.

In FY2012 we held the second meeting on October 25th and 26th at "National Museum of Ethnology (MINPAKU)" in Osaka. This meeting was also placed as a plan of "Open access week in 2012" and about 40 participants from 20 institutes or universities such as KEK, NII joined this meeting and following presentations were done.

- 1) TAKAHASHI, Y. (National Museum of Ethnology: MINPAKU) "Does the MINPAKU-Repository go forward by "Troika"?"
- 2) KIKUTANI, E. (HIGH ENERGY ACCELERATOR RESEARCH ORGANIZATION: KEK), "On database of KEK Research Products"
- 3) MURAKAMI, M. (National Institute for Physiological Sciences: NIPS), "Collaboration researches in NIPS and IR?"
- 4) NAMBA, C. (National Institute for Fusion Science : NIFS), "NIFS repository and the cooperation with other institutes and universities"
- 5) SUGITA, S. (Otaru University of Commerce) "Recent trend of the open access publication"

- 6) MANAKA, T. (University of Tsukuba) "Prospect of Society Copyright Policies in Japan (SCPJ) and open access"
- 7) SAKAMOTO, S.(Osaka University) "Repository in university; the present status at Osaka University"
- 8) SHIOZAKI, R. (National Institute of Informatics: NII) "The future of NII projects for IR promotion to universities"
- 9) TSUBOUCHI, N.(International Research Center for Japanese Studies: NICHIBUNKEN)"Current status of NICHIBUNKEN repository"
- 10) YAMAJI, K. (National Institute of Informatics: NII), "Development of WEKO and the future plan"
- 11) OIKAWA, A. (The Graduate University for Advanced Studies : SOKENDAI), "Role of a repository and the library"

The summaries of these presentations are available at http://www.nifs.ac.jp/ri/repository_2012_oaw.html.

This series of "Information exchange meeting for IR at IURI" is expected to be held annually at some IURI or at else where appropriate institute.



Fig. 2 A snap shot from Information Exchange Meeting.

3. NIFS Article Information System (NAIS)



Since 2006 the NIFS Article Information System (NAIS) has been operating for accumulating research activity information of NIFS and collaborating organizations. In 2012, the system program code was drastically revised to improve the database searching speed and also the user interface. Consequently, the query responding time becomes 10 or 20 times faster than the previous. The total records stored in this "NAIS Release 2" are 8,267 including both article publications and conference presentations. The number of records continues increasing by 300 or 400 annually.

NAIS-2 provides a new function which generates a personal list of scholarly achievements on a dedicated URL for each user. As it is openly accessible from the internet, it can be easily linked or included at every user's Web homepage. It helps reducing the burden in making and exhibiting every user's list of achievements very much.



Fig. 3 A list of personal achievements generated by NAIS

4. Publication of NIFS reports and Collection of Reports



Publication of the annual report and series of NIFS Research Report is also important task of RIO. NIFS series are the preprints for presenting promptly the results of a collaboration research work of NIFS.

NIFS Research Report

Present the results of research work for nuclear fusion, plasma physics and theory & simulation and experiments in related fields.

NIFS-PROC

Present the proceedings of international conferences or symposia organized by NIFS and the reports of the meetings for the collaboration research work of NIFS.

NIFS-TECH

Present the results of technical research development related to nuclear fusion and plasma physics.

NIFS-DATA

Present the data series compiling the evaluated basic data for fusion science and related fields.

NIFS-MEMO

Technical data and reference for newly developed devices, databases, hardware and software of computer codes.

Table 1 Number of published NIFS reports

	FY 1989-2011	FY 2012	TOTAL
NIFS	1019	53	1072
NIFS-DATA	113	1	114
NIFS-TECH	14	0	14

NIFS-PROC	90	1	91
NIFS-MEMO	60	4	64
Annual Report	23	1	24

The office also collects laboratory reports and other literatures concerning nuclear fusion and related fields from foreign institutions. The total number was approximately 36,750.

In order to save the space for storage and safekeeping, we keep them in the form of microfiche.

Now they, especially reports of early days of fusion research, have been constantly utilized by researchers not only in NIFS but also outside NIFS.

(Mito, T.)