

15. 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) accumulates research activity information related to the fusion science. Originated in the NAIS programs, the PERAS has been developed in RIO as an online peer-reviewing system. 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



RIO is assigned as an operating organization for NIFS-Repository. 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 (Institutional Repository) 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.

In 2009, the server for the NIFS-Repository was upgraded and the following enhancements of the system were performed for utilization.

- 1) The default group to the access from NIFS LAN was introduced. With this modification, the handling of the materials under the procedure for opening to public is available.
- 2) A function to suppress the display in the search results according to the non-public materials was installed.
- 3) Suitable index terms in the list are settled for each collection group. So, it dynamically changes in accord with the collection.

The individual researchers have been asked an "inclusive agreement for posting their articles to NIFS-Repository". This procedure makes researchers free from extra load for registering their research papers in NIFS-Repository. In parallel to the above mentioned activities, the retroactive input of the papers from Annual report and published papers was continued.

3. NIFS Article Information System (NAIS)



The NIFS Article Information System (NAIS) is the database that accumulates the information of research activities of NIFS and other collaborative universities, research institutes, and industrial

companies/organizations. RIO has developed the NAIS programs, and continues operating it since 2006. The most advantageous points of this system are as follows: (1) In order to reduce researchers' burden, it integrates the internal processes for obtaining sanction for article submission. (2) It can easily provide the lists of scholarly achievements for every researcher and also for the whole institute and collaborating organizations. Their statistical outputs are often used for some external evaluation/reports of the institute activities. (3) All the first- and co-authors are automatically recognized by individual, and therefore, it enables us to make a query for each author. The total number of registered articles/presentations in NAIS is about 6000 in 2009.

The primary design concept of NAIS was concentrated on handling the procedures for paper submissions. It has been extended afterward to deal with the conference presentations, however, the mixed handling of paper publications and other activities is now causing some heavy loads especially in outputting their query search results. To obtain a better responding speed of the NAIS database, we have started to remodel it into the new architecture that has individual tables for publishing articles, conference presentations, and other kinds of achievements. The new NAIS is planned to be completed in the next fiscal year of 2010.

4. NIFS PEer Review Assist Server (NIFS-PERAS)



Originated in the NAIS programs, another online peer-reviewing system named "PERAS" has been developed in RIO. It aims at assisting the program committee of the conference in online registration, accepting presentation submissions, and peer reviewing in online editorial board for the proceedings publication. It is also suitable for online journal publication, such as Plasma and Fusion Research (PFR) published by the Japan Society of Plasma Science and Nuclear Fusion Research (JSPF). Once adopted in some conference, it continues operating until the whole publication procedures completed. It often takes one year and more.

RIO maintains the PERAS operation for the NIFS hosting conferences, such as PET11, ICPP2008, and ITC

series. In case of 19th International Toki Conference (ITC-19) held in December 2009, the number of reviewed articles was 126. Some other conferences also used PERAS with commissioning a commercial company to maintain /support for the long-time operation.

5. Publication of NIFS reports and Collection of Reports



<http://www.nifs.ac.jp/report/index.html>

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

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

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 1989-2008	FY 2009	TOTAL
NIFS	948	11	959
NIFS-DATA	105	3	108
NIFS-TECH	14	0	14
NIFS-PROC	79	3	82
NIFS-MEMO	57	1	58
Annual Report	20	1	21

The office also collects laboratory reports and other literatures concerning nuclear fusion and related fields from foreign institutions. The total number was approximately 36300.

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.)