

8. Fusion Science Archives

The main activities in the fiscal year of 2007 are as follows: resource sharing by means of EAD (encoded archival description), collection and registering of documents, disclosure of archives, and contribution to the special issue on 50th anniversary of the Japan Society of Plasma Science and Nuclear Fusion Research. Those were carried out under domestic collaborations.

The striking achievement was obtained in the resource sharing on the basis of EAD. Efforts were also made to enrich the finding aids for the purpose of making the retrieval convenient. It was accomplished through collaborations with NIJL (National Institute of Japanese Literature), KEK and IMS (Institute of Molecular Science). About 1,300 documents were open to public by using the server of NIJL.

The total number of database registered amounted to about 18,000. The documents were newly added from late Shigeo Nagao, Prof. Emeritus of Tohoku University, from Dr. Katsunori Abe, Prof. Emeritus of Tohoku University, from Dr. Yoichi Hirano of AIST (National Institute of Advanced Industrial Science and Technology to which former Electrotechnical Laboratory has been merged, and of which major activities of RFP experiments were terminated in March 2008) and from Museum of Future Science and Technology.

The collaboration research of this fiscal year consists of 7 research subjects by which an essential part of fusion archives is covered: 1) “Archival Studies on Nuclear Fusion Research”, 2) “Construction of Electronic Finding Aids for Fusion Science Archives Database”, of which achievements were mentioned briefly above, and the draft of rules for the disclosure was made, 3) “The Role of Inter-University Institute for Nuclear Fusion Research in Early Period”, 4) “Compilation of Chronology Based on NIFS Fusion Science Archives”, of which activities have been closely related to the 50th anniversary of the society, 5) “Archival Studies on Devices of Fusion Science”, 6) “Archival Studies on Development of Heliotron Devices”, 7) “Chronological Studies on International Collaboration of Nuclear Fusion Research in Universities of Japan”, where an elaborative chronology was made on the international collaboration. The general meeting on collaboration researches was held in February 2008, where the collaborators nationwide took part in to discuss the status and strategy of collaboration researches. The presenters were from Sokendai, KEK, NIJL, IMS, Nagoya Univ.,

Kyoto Univ., Univ. of Tsukuba and NIFS. Along with discussions on seven collaboration research subjects, the database sharing on the basis of EAD and tasks related to the disclosure of archives were discussed in detail, and the progresses in fusion archives in Kyoto Univ. and in Univ. of Tsukuba were introduced, respectively.

Achievements of collaboration researches were presented 1) at the annual meeting of JOHA (Japan Oral History Association), 2) at the international symposium on “Strategies for Studying Contemporary Sciences in Japan and the US” held at Sokendai and at KEK in August 2007, 3) at the annual meetings of the Japan Society of Plasma Science and Nuclear Fusion Research in December 2007, 4) at the spring meeting of the Physical Society of Japan in March 2008. In the meetings mentioned above, the followings were presented, respectively: 1) “Oral History in NIFS Fusion Science Archives”, 2) “Activities of NIFS Fusion Science Archives”, 3) “Archival Studies on History of IAEA Fusion Energy Conference” and 4) “Survey of conference reports on the 1st IAEA Conference”, “On the presentation from Japan at the 1st IAEA Conference”, and “How fusion community responded when the fusion research was difficult”. In addition, the paper on the NIFS Fusion Science Archives was published, in March 2008, in the Japanese journal “Records & Archives” in Japanese.

The transcription of the interview to Dr. Shoichi Yoshikawa (PPPL) was completed and registered in NIFS Fusion Science Archives. Continuous efforts have been made to finalize the transcriptions of the interview to Dr. Kenneth Young (PPPL) conducted in Dec.2005. Informed consent and Deed of Gift appropriate for NIFS FSA were near completion.

The Japan Society of Plasma Science and Nuclear Fusion Research started the program “History of Fusion Research” commemorating its 50th anniversary, to which NIFS FSA is expected to make substantial contribution. In fact, collaborators made a great contribution in planning and presiding over round-table discussions in the viewpoint of various aspects of the history of fusion research. Members of NIFS FSA provided the round-table talkers with a detailed chronology and a flow diagram of events of great interest.

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