

§21. Archival Studies on the Nuclear Fusion Research at Universities in Japan (I) –NIFS Nuclear Fusion Archives Database–

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Background

1. Nuclear Fusion Researches initiated in 1950s have been conducted at universities under MOE (Monbusho) and JAERI and other institutions under STA (Science and Technology Agency in Japan. In 2001 STA and MOE were reorganized to be MEXT (Ministry of Education, Culture, Sports, Science and Technology).
2. Institute of Plasma Physics at Nagoya University, Plasma Physics Laboratory at Kyoto University, and Fusion Theoretical Center of Hiroshima University were reorganized to establish National Institute for Fusion Science in 1989.
3. Important historical documents tend to be scattered and lost away, especially in the case the institutions were reorganized. As a joint university research institute, NIFS has to collect fusion archives at universities in Japan. It is urgently necessary to furnish database for archives.
4. Nuclear fusion research is one of big projects, a good example from the viewpoint of science history.

Objectives

1. To explore documents and records of meetings and committees which are stored in NIFS.
2. To provide database of these records for archives so that any scientists can access for retrieval.
3. To circulate these database through internet.
4. To furnish the database through interviews with key persons (oral history technique).

Database

- The number of records: approximately 10,300
- Each record has its own ID, and is stored in an envelope: 033-03-01, for example.
- Several records are kept in a cardboard box; each box has its own box number: B033
- The number of boxes: approximately 310.
- In future, planned to be stored in NIFS library in order to release to the public.

Some features of the database

- Sources are localized, highly dependent on the contribution from individuals.
- Temporal fluctuations are observed, coincident with establishment of institutions or initiation of big projects. The reason for the most increasing number of the records around 1980 is that there have been a lot of events, such as deliberation on R-project, JT-60 operation and SCJ (Science Council of Japan) reformation.
- Decrease in the number of very recent records, especially after 1995.

Materials Collection

Materials concerning ITER were collected through internet and some recent ones from the professor recently retired. Archiving materials are constantly collected.

Oral History

Interview with Prof. Matsuura Kiyokata, the group leader of the R-project

On the previous interview with Professor Sekiguchi, T., he indicated that the R project and its accompanying facts remained historically unexplored. (NIFS-MEMO 40). R-project (Reacting plasma experiment) was the core program of the third future plan decided at IPP in 1980; and it was withdrawn in 1986. Since there was the limitation of the written sources, we made an interview to understand the fusion research circumstances and background, and the relations among a lot of organizations of those days.

1. Interview subject: "On the Circumstances of the R-Project in Institute of Plasma Physics, Nagoya University"
 2. Interviewee: Matsuura Kiyokata, Professor Emeritus of Nagoya University
 3. Interviewer: Terashima Y., Obayashi H., Fujita J., Namba C., Kimura K.
- Observer: Matsuoka K. (Director of the Center)
4. Date and place: 2004.1.19, 1:30-4:00 pm. at the conference room of Heating Experiment Building in NIFS
 5. Objectives:

- (1) To supplement the archiving materials concerning the R project in the context of the future plan in IPP
 - (2) To collect historical evidence through personal experience
6. Transcription. To be published in 2004.