Chapter 2 IMR Library

Head: Prof. T. GOTO

Chief (Administrative Official): E. OIKAWA, 2 Administrative Officials, 3 Part-time Employees

1. Preface

The IMR Library carries books and serials that cover a broad area of material science and technology from the 1800s to the present. IMR has a long history as a center for basic and applied research on metals in Japan. It is now taking on a responsibility as a national collaborative research institute attached to Tohoku University and also shares a position in state-of-the-art research on various aspects of metals and materials in the world.

The IMR Library is visited by many researchers from inside and outside the country as well as from IMR and Tohoku University.

The library is a section of IMR's General Affairs Department. The section is staffed with a chief, two administrative officials and three part-time employees. It operates under the management of the Information and Planning Division, which has organized a special committee on library digitization (Library Digitization Committee*).

The IMR Library has created an original operating system for purchasing and payment – cataloging/classification – registering, which eliminates the upward route through the central Tohoku University Library and allows procuring books and serials for researchers in a shorter time. This system applies only to the IMR Library, and has not been introduced to any other library within Tohoku University.

With the rapid progress of digitization of academic information, the library must quickly and appropriately deal with requests and inquiries. To meet this, the library is promoting digitization and improvements from the perspective of user convenience in collaboration with the Library Digitization Committee that mainly consists of young researchers. This committee is worthy of mention since collaboration between researchers and the library to improve the information infrastructure is being handled only at the IMR Library within Tohoku University. While many things are being done to tackle various issues, such as rising foreign journal prices and the introduction of electronic journals, the IMR Library always intends to meet user needs in its own way and provide a convenient and user-friendly environment.

*Library Digitization Committee

This committee was established in 1996 as a library digitization subcommittee as part of the general affairs committee until March 2004. A reorganization took place in April of that year and it now belongs to the Information and Planning Division. The committee supports digitization of the IMR Library (information retrieval services in particular) and makes proposals to enrich the library environment from the researchers' viewpoint. The committee, made up of two associate professors and six research associates, holds meetings about once every two months. The term of the committee members is two years. Two observers participate and one of these is a councilor from the Tohoku University Library.

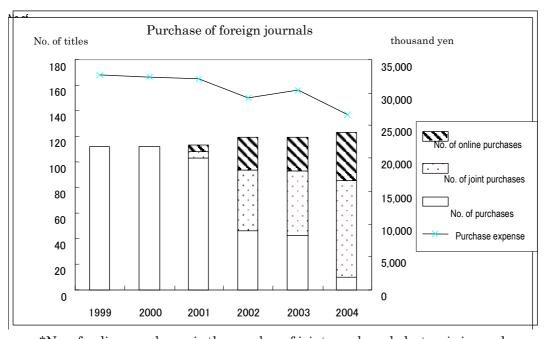
FY 2004's committee members: Yoshiichi Oyama (Chairperson), Seiji Sannya, Yaekou Koshiba, Kazuki Kudo, Zennki Fujita, Nobuyasu Nita, Tetsu Ichitubo, Yuko Nakamori

2. Steps to introduce electronic journals and improve the database

With rising prices of foreign journals and rapid dissemination of digitized journals and secondary information databases, systematic collection has become important for the whole university. To rapidly and precisely obtain academic information, "joint purchasing" started in FY 2001 and "control of overlapped purchasing" started in FY 2004. This led to the "Project to Improve Academic Information" at Tohoku University in FY 2003 that converted a system of purchasing foreign journals and databases as individual purchases into an expense sharing system.

With the person responsible for the Information and Planning Division of the IMR Library at the center (Prof. Goto in FY 2004), efforts have been made to promote the introduction of electronic journals and not reduce the number of foreign journals as much as possible. While the purchasing budget has continued decreasing, with a peak in 1999, systems of "joint purchasing by the whole university" and "control of overlapped purchasing" change every year in the "Academic Information Improvement Plan", which leads to difficulty in budgeting involved with the whole university.

On the other hand, introducing electronic journals and improving the user environment have significantly increased the use of the journals but a new problem of unfair use has come up. "Systematic downloading (high-volume downloads)" is regarded as "network piracy" and has the potential for all users within Tohoku University to be prohibited from access. The IMR Library has determined specific "Use Rules" and tackles countermeasures such as announcing prohibitions on non-fair use and asking for submission of agreements on fair-use by all users in IMR.



*No. of online purchases is the number of joint purchased electronic journals ${\bf r}$

FY 2004

- 1) Independent contract for English versions of electronic journals published in Japan: After examining various aspects, IMR independently made a contract for the electronic "Material Transactions" journal of the Japan Institute of Metals in FY 2004. It was not common in Japan to make purchase contracts for Japan's English electronic journals and IMR took the lead in introducing electronic journals. It may be a model case for introducing Japan's English journals to universities in Japan where this practice lags.
- 2) In FY 2004, there were 34 titles subject to the "control of overlapped purchasing" and, from these, 12 titles were decided to be purchased as electronic journals only. Purchase of an electronic journal published by the American Institute of Physics (AIP), with all back issues from the first issue, had been proposed to the Academic Information Improvement Exploratory Committee and was approved. Proposals for the university to joint purchase "inside web" and "ISI Proceedings" are under continued examination.
- 3) IMR guidelines for actions required when on-line access to electronic journals is interrupted (approved by the IMR Executive Committee), were updated following the conversion to a new network operating system.
- 4) There were discussions and agreement on publishing electronic versions of "RITU", an IMR journal, with the co-publisher, the Institute of Multidisciplinary Research for Advanced Materials.

3. Upgrading user services

IMR staff members are dedicated to convenient and user-friendly services by making best use of its location inside the IMR building.

3.1 Organizing a workshop and creating an instruction manual

As described before, the library is making efforts to introduce useful databases in co-operation with the IMR Library Digitization Committee and the Tohoku University Library. In order to facilitate easy and effective use of the databases, the library publishes an "Instruction Manual on Information Retrieval and Library Catalogs at the IMR Library" once every two years. It distributes copies to every research room in IMR, the Tohoku University Library, its branch library and the libraries at each institute and faculty/graduate school. This manual is planned and written by the Library Digitization Committee. It is highly appraised as understandable because it is written from the standpoint of researchers who, at the same time, are users. The manual is also on the Internet. In 2004, the manual was further enriched by adding SciFinder Scholar to the "Literature/Journals" and the Pauling File to "Materials", and its "FY 2005 Edition" (4th Edition) was published. In April each year, the library organizes events for new entrants. They include a lecture on IMR's major databases and library orientation by inviting a lecturer from the Library Digitization Committee.

When Tohoku University occasionally holds explanatory meetings, etc. on a new database, the

IMR Library provides its lecture hall and gives support to students and researchers for more effective use.

Date	Title	Hosted by	No. of participants
Apr 22, 2004	Workshop on Library Digitization Service	IMR Library Digitization Committee/Librarian Section	51
May 27, 2004	OVID&ENDNOTE Explanatory Meeting (Information Search Tools Explanatory Meeting 1)	Tohoku University Library	17
Jul 1, 2004	SciFinder Scholar Explanatory Meeting (Information Search Tools Explanatory Meeting 2)	Tohoku University Library	18
Jul 1, 2004	Web of Knowledge Version Up Explanatory Meeting (Information Search Tools Explanatory Meeting 3)	Tohoku University Library	25
Oct 10, 2004	Introduction to Web of Science Explanatory Meeting (Information Search Tools Explanatory Meeting 4)	Tohoku University Library	29

3.2 Information retrieval corner

With the support of the Library Digitization Committee, the IMR Library selects from many useful databases and improves the information retrieval corner of the library where visitors can freely use retrieval terminals. Older equipment was upgraded by installing an updated version of the CD-ROM Changer and four PCs with Windows XP to improve the environment for easier use. In FY 2004, one PC was added to the stack room, and one PC at the retrieval corner was changed from a Macintosh to Windows XP.

For safety, virus checking and security shielding software was added. The environment for on-line access to the database from individual research rooms has recently improved but some important tools are only available in the library. Taking this into account, the library intends to further advance the information retrieval corner.

CD-ROM	Online			
ICDD Cards (updated version)	Online Catalog (Library holdings retrieval)			
Binary Alloy Phase Diagrams	Online Journal			
Ternary Alloy Phase Diagrams	Web of Science (from 1945 to the present)			
Pauling File (2004 New)	OVID Online (Current Contents, etc.)			
Phase Equilbria Diagrams (2004 New)	inside web (from 1993 to the present)			
Landolt-Bornstein Comprehensive index	SciFinder Scholar (from 1840 to the present) Journal Citation Reports Web			
Other electronic books	Industrial Property Digital Library (Japan Patent Office Website)			

3.3 Enhancing the IMR website

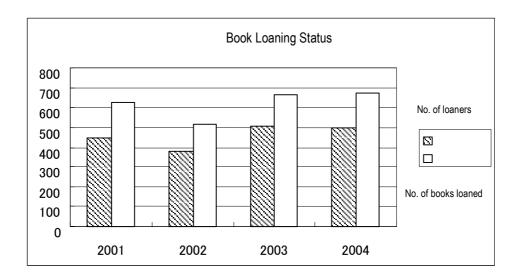
The library is constantly enhancing its website with useful information by releasing it on the "Information" page and giving links where available. The trend for electronic publication of foreign journals is progressing and the staff members of the library check to see if the links are working properly and conduct detailed maintenance to avoid inconvenience to the users.

The library homepage includes a link where new journals are introduced as well as a guide to using the IMR Library.

For the "Conference List" page, which is exceptional on other websites, questionnaires are sent to each research room asking to add conferences on this page. Regular website maintenance is important and is conducted at present by back-tracking 42 of the past conference proceedings that relate to IMR as well as continuously releasing the content of new holdings.

3.4 Other

Controlling the copy cards for the five copy machines at the library is done by each research room. A survey is conducted each year to determine the use status. With the increase of use of electronic data, such as journals and databases, loans of books are also increasing. In FY 2004, issues of conference proceedings, which lack a series, and both independent and serial books on the basics of materials were purchased to cover the gaps in the holdings.



4. Literature copying (interlibrary copying service)

The interlibrary literature copying service between libraries at Tohoku University and other universities is an important task of the IMR Library since academic journals and papers are very important to researchers. The library has a rapid connection with other libraries and can provide copies of papers in no longer than one week. Due to the progress of electronic journal publications, the number of interlibrary copying services is tending to decrease throughout Japan. The number of copying requests from outside libraries to the IMR Library is three times the number of requests from IMR to outside libraries. This is because the IMR Library holds important academic and

journal collections and, accordingly, the interlibrary copying service is gradually taking a higher portion of the library's time.

A picture image transmission system, with on-line sending of scanned documents converted into picture data, started in FY 2003 but it did not progress smoothly due to copyright issues. There are still issues such as the long time to process into picture data, color incompatibility and copyright, but its use will spread because sharp pictures can be simultaneously obtained regardless of the distance compared to facsimile.

Expanding the services such as lending literature and private use copying is a future challenge.

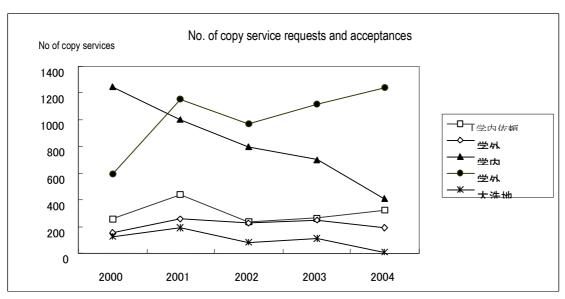


図 説

(上から下へ)

Internal request

External request

Internal acceptance

External acceptance

Acceptance from the Oharai district

	Request			Acceptance			
	Internal	External	Total	Internal	External	Oharai district	Total
FY 2000	258	151	409	1,249	588	121	1,958
FY 2001	439	256	695	998	1,154	189	2,341
FY 2002	232 (2)	226	458 (2)	792	967	79	1,838
FY 2003	259 (36)	249 (1)	508 (37)	699 (57)	1,118 (16)	108	1,925 (73)
FY 2004	320 (88)	190 (1)	510 (89)	410 (33)	1,236 (19)	10	1,656 (52)

^{*} Figures in the parentheses are the number of copying services via the picture image

transmission system.

- * Requests for copying service from outside Tohoku University started in June 14, 2000.
- * The Oharai district corresponds to the number of the copying services that are requested from a facility in Oharai that is annexed to IMR.
- * The above figures do not include the number of the lending services requested from outside Tohoku University

5. Holdings management

With the transition to an independent administrative institution, the national asset of 77,810 book holdings (including journals bound in series) has succeeded to the holdings of the present IMR Library. Checking the holdings in the stack room is done twice a year to confirm that they are there.

5.1 Entering the database in an time ascending manner

Entering the books and serials to the IMR holdings database that were purchased before the introduction of the computer, is complete for the reading room, open stack room and No. 3 stack room. Entering the holdings in No. 215 stack room (books and serials registered in the holdings of the IMR Library before 1960) into the database, which started in FY 2003 in a time ascending manner is almost complete.

Each time books and serials are returned from research rooms, they are checked to see if they have been already entered into the Library database to allow them to be retrieved. In FY 2004, 1,003 holdings were re-classified into a new group of "KEN". Any overlaps were prepared for disposal.

5.2 Books and serial holdings by research rooms

With the transition to the independent administrative institution in FY 2003, the status of the library holdings as a national asset was investigated. The status of loaned books and serials kept in research rooms was checked. Systematically continuing the inquiry in cooperation with the relevant research rooms is required for those that could not be traced due to the transition of research rooms. Inputting the remaining 20,000 books and serials that have not been entered into the library database is planned.

5.3 Storage of IMR publications

The library has collected and stored as many reports and public relations magazines published by IMR as possible. However, it is necessary to discuss storing because there is a space problem and the difficulty of replenishing missing back issues.

6. Transition to an independent administrative institute

As the national universities have made the transition to independent administrative institutes, the IMR Library has been given the tasks of financial accounting and asset management. Expense transfers and payments between the IMR Library and Tohoku University Library, etc. are treated with transfer slips. There will be more communication between personnel in charge of accounting

at the IMR Library and the Tohoku University Library to effectively deal with the new tasks.

7. Other

The role of the IMR Library as a place to support research has become increasingly important. To meet the need for versatile services by the users of the library, the IMR Library staff members attend research and study meetings. As library staff, they participate in various committees and working groups, with Tohoku University at the center, and work for them as members. According to the Personal Information Protection Act put into effect in April 2005, the library takes measures to control directories and library data.

7.1 Training and study meetings

- Financial accounting system explanatory meeting
- Continuous seminars for library personnel (old Japanese and Chinese books, old Japanese documents, Western books and the Souseki Library)
- Information security seminars
- Office information seminars
- Homepage creation sessions for library personnel
- Exploratory meetings on various databases

7.2 Committees and working groups

- Meetings with personnel in charge of receiving books
- Meetings with personnel in charge of receiving journals
- Enlarged academic information improvement working group
- Office system design sessions
- · Academic information improvement review committee
- · Advanced system supervisors meeting
- · Library information education support working group
- Catalog working group
- · Working group on books, etc.

7.3 Improving the library environment

"LIBRARY" signboards are displayed beside the custodian's house on the $1^{\rm st}$ floor, in front of the elevator and at the reading room on the $2^{\rm nd}$ floor to indicate the location of the library to visitors. A network color printer was renewed and a B0 (1000 x 1414 mm) printer was installed in the printer room.

Following the guide of the Occupational Safety and Health Administration Committee, electric wiring was changed and accessories to prevent equipment from toppling were installed. At Cleanup Day at the end of the year, lighting fixtures and air conditioners were cleaned.