

NATIONAL NUCLEAR DATA CENTER

**Status Report to the
Consultants' Meeting
on Technical Aspects of Co-operation
of the Nuclear Reaction Data Centers
18-20 May 1999**

General

Since the last meeting of the Nuclear Reaction Data Centers in May 1998, we have hired a full-time staff member to assist on computer systems; there are currently ten FTE scientific/professional and four support staff. See Table I for list of visitors for this period.

Poster Session paper was presented by V. McLane at Nuclei in the Cosmos V, Volos, Greece: *The Nuclear Reaction Data Centers: How Can We Be of Service?*

Computer Facilities

In the past year the NNDC computer system has been upgraded to an Digital Alpha 4100. A diagram of the computer setup is attached.

The Windows NT server was upgraded to version 4.0 and is now running on a Dell Power Edge 4300, 450 MHz PC.

Bibliographies

The NSR compilation activity has continued.

The CINDA compilation activity continues with respect to those references associated with the experimental data compiled at the Center. In the period from June 1998 to May 1999, 6 CINDA transmissions were sent (BNL153-158).

Experimental Nuclear Reaction Data

The NNDC continues to compile neutron and charged-particle reaction data produced in the U. S. and Canada. In the period from June 1998 through May 1999, 5 neutron data transmission tapes (TRANS 1271-1275) and 6 charged-particle transmission tapes (C026-C031) were sent containing new and corrected entries.

The EXFOR Manual [1] and EXFOR Basics [2] have been updated. All EXFOR, CINDA, and DANIEL dictionary codes containing the year 2000 updates have been distributed.

Evaluated Nuclear Reaction Data

NNDC continues to coordinate the work of the Cross Section Evaluation Working Group.

ENDF/B-VI, Release 5, was distributed in November, 1998. Version 6.11.1 of the ENDF Utility codes was also distributed in November.

Said Mughabghab continues to work on the evaluation of fission product nuclei and average resonance parameters.

Nuclear Structure Data

NNDC continues to publish the *Nuclear Data Sheets*. As of April 1999, issues through Volume 85, #4 have been sent to Academic Press.

A database of experimental nuclear structure and decay data (XUNDL) has been initiated. More than 170 data sets have been added to the library.

Customer Services

CSISRS retrievals are now available from the NNDC Web site. Retrievals from CINDA, NSR, CSISRS, and XUNDL have been linked to the American Physical Society online journals and to European Physics Journal, allowing users access to the journal abstracts. Links through the STATUS records on CSISRS retrievals connect to the related data sets. Retrievals from CINDA have been linked the CSISRS database, allowing users to retrieve the data associated with the CINDA reference. Similarly links have been established from NSR to the XUNDL database.

The number of online retrievals continues to increase, primarily due to the availability of most databases on the Web. There are now about 1600 customer accounts for the Online Service with about 2,000 users. There are more than 13,000 retrievals per month from the combined Online Service, Web site, and anonymous ftp. A chart of online retrievals is attached.

A registry has been set up for retrievals from NSR and ENSDF, and is now in the testing phase.

References

- [1] V. McLane, EXFOR Manual, Brookhaven National Laboratory report **BNL-NCS-63330** (May 1999)
- [2] EXFOR Basics: a Short Guide to the Nuclear Reaction Data Exchange Format, Brookhaven National Laboratory report **BNL-NCS-63380** (May 1999)

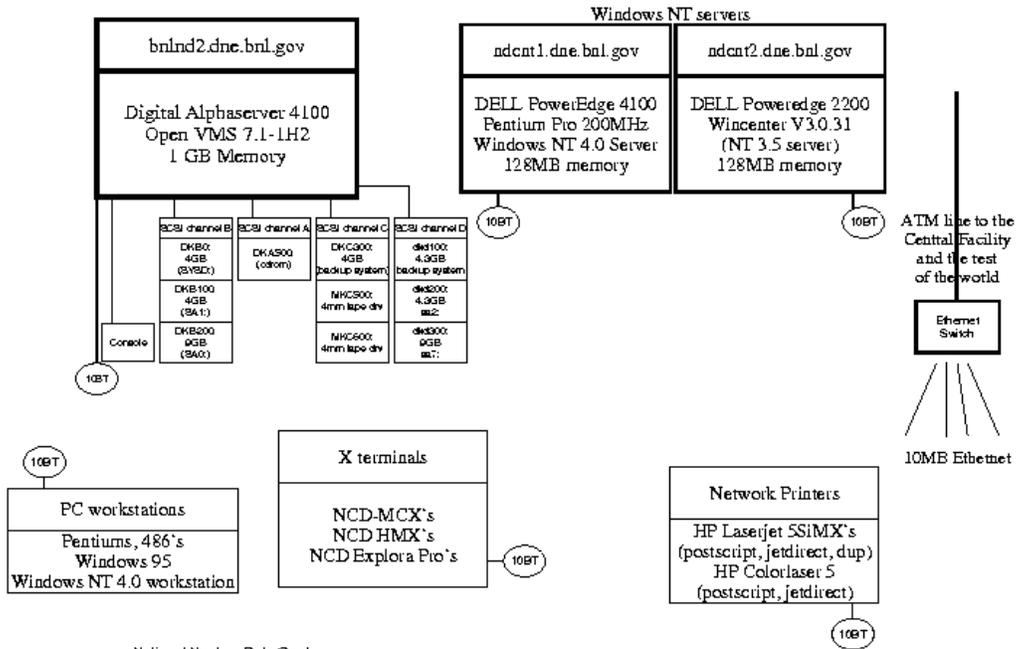
Table I.
Visitors to NNDC from June 1996 to May 1998

Visitor	Host	Duration	Topic
Liam Costello	Y. Sanborn	1 week	Computer systems & Web
Mercury Vlasov	V. McLane	6 weeks	Neutron reaction data compilation
Sandor Takacs	V. McLane	6 weeks	Charged-particle reaction data compilation
Junghwa Chang	S. Mughabghab	3 months	Fission product nuclei evaluation
Vladimir Varlamov	V. McLane	3 months	Charged-particle reaction data compilation
Alexei Varlamov	T. Burrows	3 weeks	Web services
Svetlana Dunayeva	V. McLane	6 weeks	Charged-particle reaction data compilation
Soo Youl Oh	S. Mughabghab	3 months	Fission product nuclei evaluation

Table II.
Visits by NNDC Personnel to Other Centers

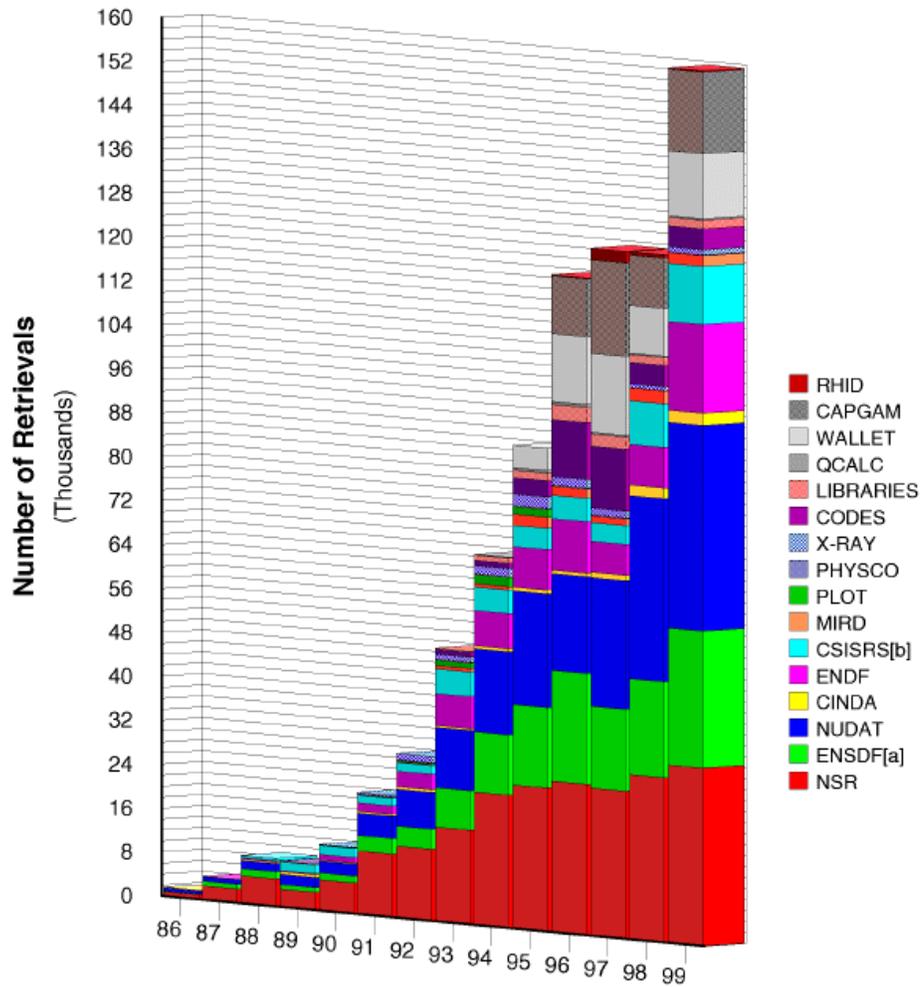
Staff Member	Host	Duration	Topic
R. Kinsey	IAEA/NDS	3 weeks	Web and EXFOR services

National Nuclear Data Center Computer Setup



National Nuclear Data Center
Brookhaven National Laboratory
Upton, N.Y. 11973
Mar 25, 1999 (by ys)

*NNDC On-Line Data Service, World Wide Web (W³), and FTP Retrievals 1986-1999**



* Extrapolated as of April 30, 1999.

^a Includes XUNDL retrievals since January 1 (OnLine) and January 11 (Web), 1999.

^b Added to Web May 11, 1998.