



International Atomic Energy Agency

EXFOR/CINDA Dictionaries

Otto Schwerer

IAEA Nuclear data Section

The dictionary system

- **Keywords and codes**
- **Dict. 1: System identifier keywords**
- **Dict. 2: Information-identifier keywords**
- **Dict: 24: Data headings**
- **Dict. 25: Data units**
- **All others: codes**
 - **Dict.3: Institute (shared with CINDA)**
 - **Dicts. 4-7: Reference codes (shared with CINDA)**
 - **Dict. 27: Nuclides**
 - **Dict. 36: Quantities (REACTION SF5-8)**
 - **Most others: Codes for various BIB keywords**

Dictionary representations

- **“EXFOR” dictionaries (latest: TRANS 9083)**
 - As described in (old) EXFOR Manual Chapter 6
 - Format similar to TRANS
 - Contains codes, expansion (=explanation of abbreviation), some flags, and additional explanations in free text
- **“DANIEL” dictionaries**
 - Contains codes, expansions and flags as above
 - Plus additional flags for check and plotting programs
 - No free text explanation
 - Originally VMS specific database
- **“Archive” dictionaries (see Appendix D of old Manual)**
 - ASCII files containing complete information from both “EXFOR” and “DANIEL” databases
 - Master library from which EXFOR and DANIEL databases can be produced

Show Table of dictionaries (Overhead)

- ...

Show listings of some dictionaries (from file)

- Dicts. 3, 24, 27, 36,

Show chart of dictionary connections (overhead)



New dictionaries to be introduced soon

- **Dict. 45 New CINDA quantities**
- **Dict. 47 Correspondence between old and new CINDA quantities**
- **Dict. 48 Energy values for spectrum averages**
- **Dict. 52 CINDA reader codes**
- **Dict. 113 Web retrieval quantities**
- **Dict. 144 Revised evaluated libraries codes**
- **Dict. 207 Books / previously within Dict.7**
- **Dict. 209 Compounds**
- **Dict. 227 Revised nuclides dictionary**
- **Dict. 235 Work types**
- **Dict. 236 New version of Dict. 36**

Dictionary maintenance

- Done by NDS on behalf of network, transmissions several times per year
- Frequent additions to some dictionaries (e.g. for ref. codes, quantities, labs)
- **OBSOLETE** codes: must no longer be used in TRANS files but might still exist in files
- **EXTINCT** codes: e.g. for discontinued journal. Not to be used for new literature but valid for old works
- Additions / changes usually proposed in memo
- Additions to some dictionaries (essentially quantities and keywords) require core center approval