Current status of the NSR project

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a passion for discovery



NSR Operation in FY2013

- Four people were directly involved in NSR operation (B. Pritychenko, E. Betak, B. Singh, J. Totans) plus occasional help from the IAEA (V. Zerkin)
- FY 2013 challenges for NSR operation
 - ND 2013 conference
 - NNDC move → Library move
 - NSR staff medical/retirement issues
 - Web Application Migration to new Linux servers
- We successfully operated in spite of all of the above



FY2013 NSR Statistics

- NSR References
 - 3,430 new articles, 90% published in 2012-2013, 10% from the previous years (missing articles)
 - 101 modified (corrected) article entries
 - 1,822 keyworded article abstracts
- NSR computer operation
 - 86 database content updates
 - 211,010 Web retrievals worldwide (>50% by researchers)
- NSR Dictionaries content update
 - 1,683 new authors
 - 10 new journals
 - 166 new reactions
 - 483 new nuclides



NSR & ENSDF Cooperation

- NSR serves as an indicator for new ENSDF mass-chain evaluations
- NSR provides references for ENSDF evaluations





NSR Database Scope

- We compile all low- and intermediate-energy references for broad use, not just nuclear structure and decay as before 90ies
- Nuclear Reactions papers
 - CINDA database is no longer supported
 - Consequently NSR is filling the gap for NRDC network
 - Extended keywords allow to extract statistics on product use, such EMPIRE/TALYS ratio,
- Theoretical papers
 - NSR is the only USNDP database where nuclear theory papers are systematically compiled



NSR Missing References

- NSR was driven by ENSDF project in the past
- NSR scope was changed 20 years ago from nuclear structure references to nuclear science references; It was extended to nuclear reactions and theoretical references, however, no effort was made to incorporate missing articles
- Several deficiencies such as nuclear astrophysics and history articles are already addressed
- Currently we conduct an exploratory work on importing ~6,000 experimental references from EXFOR in collaboration with the NRDC network



NSR Recent References

- In the past they were published in NDS
- Presently, one can retrieve these data with NSR

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Conclusions

- NSR project is in a good shape
- We will continue to support nuclear structure evaluations and do our best to support nuclear reactions and theory
- We will keep NSR website <u>http://www.nndc.bnl.gov/nsr</u> current and up-to-date
- We will continue to improve NSR completeness and address research needs
- We exploring the possibility of importing ~6,000 references from EXFOR database

