Current status of the NSR project

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a passion for discovery



Office of

NSR Compilations

- NSR team: 1.5 NNDC (B. Pritychenko, J. Totans), 2 contractors (B. Singh, E. Betak) and 1 IAEA collaborator (V. Zerkin).
- Our goal is provide the coverage for current publications; however, due to many historical and technical reasons a substantial number of articles was missed in the past and we are we are proactively recovering these references.
- Our major requirement is speed, prompt creation of entries for ENSDF.
- NSR Quality Assurance: Manager + Users + Evaluators + Compilers inputs. We do not have a bug database, we just fix bugs immediately.
- Direct communication with Phys. Rev. C: ~15% of authors submit keywords to NSR.
- NSR database is updated 2-3 times a week (Most frequently-updated nuclear database).



NSR Operation in FY2015

- NSR References
 - 4,215 new articles vs. 3,100 required; including 1,159 missing articles from EXFOR
 - 189 modified (corrected) article entries
 - 3,058 keyworded article abstracts
- NSR computer operation
 - 120 database content updates
 - 209,415 Web retrievals worldwide (>50% by researchers)
- NSR Dictionaries content update
 - 1,908 new authors
 - 6 new journals
 - 178 new nuclides
 - 147 new reactions
 - 21 new decays



FY 2016 NSR Statistics

- NSR References:
 - 3263 new article entries, total NSR: 222684 (10 times bigger than EXFOR)
 - 859 modified (bug fixes) article entries
 - 1856 keyworded article abstracts
- NSR Dictionary updates:
 - 1750 new authors, total NSR: 96685
 - 7 new journals, total NSR: 516
 - 225 new reactions, total NSR: 7904
 - 408 new nuclides, total NSR: 6415
- NSR Database updates: 117 in FY 2016
- NSR Web retrievals: 442175



Oak Ridge Library for NSR Users

- NSR like ENSDF has been started at Oak Ridge National laboratory and transferred to Brookhaven in 1980.
- Oak Ridge library had many unique and valuable publications that of importance for ENSDF evaluations.
- In May of 2016, NSR technical staff member Joann Totans travelled to Oak Ridge and recovered unique publications: 35 boxes of reports, private communications and theses that have been published prior to 1980. Oak Ridge employee C. Nasaraja has helped Joann.
- These publications have been shipped to NNDC, and J. Totans is presently processing them as time permits.
- We are planning to add these publications to a common PDF database.
 V. Zerkin (IAEA) is working with J. Totans.



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 have started the import of missing references from EXFOR database.
- We have started to work on a joint E-library for EXFOR and NSR.
- I apologize for not attending NSDD 2017 due to conflict with the NRDC meeting. I hope to attend the next meeting in two years from now.

