

Abstract Submitted
for the APR20 Meeting of
The American Physical Society

Present Status of Neutron-, Photo-induced and Spontaneous Fission Yields Experimental Data¹ BORIS PRITYCHENKO, Brookhaven National Laboratory, OTTO SCHWERER, Under contract with Brookhaven National Laboratory, JOANN TOTANS, Brookhaven National Laboratory, OLENA GRITZAY, Under contract with Brookhaven National Laboratory — Nuclear reaction data collection, evaluation and dissemination have been pioneered at the Brookhaven National Laboratory since the early 50s. These activities gained popularity worldwide, and around 1970 the experimental nuclear reaction data interchange or exchange format (EXFOR) was established. The original EXFOR compilation scope consisted only of neutron reactions and spontaneous fission data, while many other nuclear data sets were ignored. Fission yields play a very important role in applied and fundamental physics, and such data are essential in many applications. The comparative analysis of Nuclear Science References (NSR) and Experimental Nuclear Reaction (EXFOR) databases shows a large number of unaccounted experiments and provides a guide for the recovery of fission cross sections, yields and covariance data sets. The dedicated fission yields data recovery effort is currently underway in the Nuclear Reaction Data Centers (NRDC) network, and includes identification, compilation, storage and Web dissemination of the missing data sets.

¹Work at Brookhaven was funded by the Office of Nuclear Physics, Office of Science of the U.S. Department of Energy, under Contract No. DE-AC02-98CH10886 with Brookhaven Science Associates, LLC.

Boris Pritychenko
Brookhaven National Laboratory

Date submitted: 15 Jan 2020

Electronic form version 1.4