

Web of Science search criteria

To generate a bibliographic database of all Canadian papers utilizing neutron sources, we used the Advanced search feature of Web Of Science (Clarivate Analytics) to search by year and keyword. A search was constructed through trial and error to include common experimental techniques used at high-flux neutron sources and exclude the appearance of the keyword “neutron” in high-energy, nuclear, and astrophysical papers. An example of the search for the year 2017 is:

```
TS=((neutron AND
(diffraction OR
reflectivity OR
reflectometry OR
scattering OR inelastic
OR activation OR
radiography OR echo
OR profiling)) NOT
(star* OR stellar OR
pion* OR meson* OR
atlas OR edelweiss OR
drip-line OR gravit* OR
"level structure")) AND
CU=Canada AND PY=2017
```

The resulting data was downloaded in Bibtex format and curated manually (by examining the title, keywords, and abstracts) for the irrelevant papers that slipped through. For the years shown in Figure 11, each paper was accessed and analyzed for how neutrons were used, whether as new data or part of the discussion, and a keyword was added to the database according to the criteria discussed above.

An analysis program was written in Python using the `bibtexparser` package to extract author names and their affiliations. Foreign authors were identified by their country only, whereas for Canadian authors, a database of Canadian universities, companies, and public research institutes were created. Individual Canadian authors with multiple listed affiliations, or multiple papers, in a given year were identified by a match of the first initial, the first three letters of their last name, and overall name similarity scores. Authors may represent more than one institution in the overall count of in-

stitutions for a given year, but each author is counted only once per year. The data and Python scripts can be obtained at the website of the Canadian Institute for Neutron Scattering (<http://cins.ca/resources/cnbc/>). A discussion of possible refinements to the search methods can be found there as well.