Editorial: Review Articles Welcome in JPCRD

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Beginning in 2018, the *Journal of Physical and Chemical Reference Data* (JPCRD) will publish a limited number of Review Articles in a separate section. Some of these reviews will be solicited, but unsolicited submissions of Review Articles will also be considered for publication. Since most JPCRD articles already have review-like qualities (comprehensive evaluation of available data on a topic), some explanation is needed of what we envision. We expect that JPCRD Review Articles will fall into one of the following categories:

(1) *Description and documentation of a reference database.* There may be cases where a database is not itself suitable for publication in JPCRD (for example, because it exists on the Internet), but there is a need for an archival paper describing the data collection and curation, the way in which data are evaluated, functions and features of the database, future enhancements, etc.

(2) *Review and analysis of the data situation in a field.* While most JPCRD articles will produce recommended values for a category of data, there is value in articles that critically survey the existing data in a field and point out where existing data are adequate and where more or better data are needed. We expect a JPCRD Review Article in this category to cover a wide range—for example, examining the data situation for some property only for sodium chloride would probably not be suitable, but an examination of all chlorides might be.

(3) *Overview of a series of JPCRD articles.* Sometimes sustained efforts result in a series of articles, such as one for each of a family of chemicals. If the number of such articles is large, it may be helpful to write an overview at the end of the series that will point readers to the previous articles, explain the overall context, and give readers perspective on what has been accomplished (and perhaps what remains to be done).

(4) *Critical review of reference-quality measurement techniques.* While general reviews of experimental methods are not suitable for JPCRD, we welcome reviews that focus on "reference-quality" measurements, by which we mean methods producing the most accurate data that would be foundational input for typical JPCRD content. Articles in this category should inform the reader of the best available techniques and point out areas (classes of chemicals, temperature or pressure ranges, etc.) where there is significant room for improvement.

(5) *Review of data evaluation methods.* We welcome papers that, while not focused on specific sets of data, review the state of the art in methods for critically evaluating data in order to produce reference data. Articles might review data evaluation methods for a particular field or might cover general methods applicable to any data. Estimation methods can be included to the extent they play a role in critical data evaluation; papers that mainly present new data estimation methods are not envisioned for this category.

Please contact one of the Editors if you have questions about whether a particular article would be appropriate for this new section.

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