RESTful API for Searching and Accessing Thermophysical and Thermochemical Properties Contained in the NIST ThermoML Archive

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The NIST Thermodynamics Research Center (TRC) provides critically evaluated thermophysical and thermochemical property data complete with provenance and uncertainty. The collection/evaluation is an intensive process that is limited to published experimental data. We present a new, RESTful API for searching and retrieving data that is currently available in the ThermoML archive. Major goals of the API include: interoperability with other open sources of chemical information; enabling the discovery of data that may be used for validation, comparison, and the design of new experimental and theoretical investigations.