

## **Thermophysical Research and Dynamic Data Evaluation: a Path to Interaction of Mutual Benefit**

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Dynamic Data Evaluation (DDE) appeared as an addition to thermodynamic research. It was designed to immediately update recommended values of thermophysical and thermochemical properties with the account of recent measurements. The experience of its use has shown that data evaluation generates a significant feedback so that it becomes an active part of the research process. That feedback may contain requests of clarification and additional information, revealed anomalies and inconsistencies. Several services powered by DDE are presently provided by NIST, covering experiment planning (ThermoPlan), literature search (ThermoLit), data access (ILThermo, Clathrate Hydrate Database, Web Thermo Tables), and revealing inconsistencies and anomalies (in-house ThermoData Engine checks in cooperation with major journals). However, the impact of DDE on thermophysical research needs to be and can be increased by wider involvement of the research community without increasing the complexity of the procedures. The existing and proposed self-services will be discussed and examples of the impact of DDE services on the quality of research reports will be shown. The aspects of availability, functionality, and ease of use will be considered. Recent contributions to the DDE technology will be represented and priorities of the future developments will be discussed.