

Project H-1: The IEA/DOE/SNL on-line hydride databases

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IEA HIA 2003 AR

The Databases

A series of comprehensive hydride databases have been constructed and made freely available on the Internet (URL <http://hydpark.ca.sandia.gov>). They include extensive listings of alloys reported to hydride, detailed engineering properties on selected hydrogen storage elements and alloys and a hydride applications database. All data are backed by a reference database compiled from the open literature. Additional databases cover metal-hydrogen organizations and upcoming open meetings in the area of material-hydrogen systems. The databases were created under the auspices of the International Energy Agency Hydrogen Implementing Agreement (IEA-HIA) with financial support from the U.S. Department of Energy (DOE) and Internet service support from the Sandia National Laboratories (SNL).

Status as of December, 2002

The Meetings list was converted from an HTML base to a more versatile database form, allowing more frequent updating. The hydride databases were somewhat neglected during 2003, and are in need of updating. The following table lists the current number of records.

List of IEA/DOE/SNL Hydride Databases (December 2003)

<u>Database</u>	<u>Records</u>
Hydride Alloy Listings	2706
AB ₅ Intermetallic Compounds	477
AB ₂ Intermetallic Compounds	625
AB Intermetallic Compounds	179
A ₂ B Intermetallic Compounds	122
Misc. Intermetallic Compounds	431
Solid Solution Alloys	263
Mg Alloys	375
Complex Hydrides	234
Hydride Properties	47
Hydride Applications	306
References	1534
M-H Organizations	24
M-H Meetings Calendar	Varies

Activities in 2004

The databases will be periodically updated with more diligence than in 2003. As always, M-H scientists are welcome to suggest new references for inclusion.