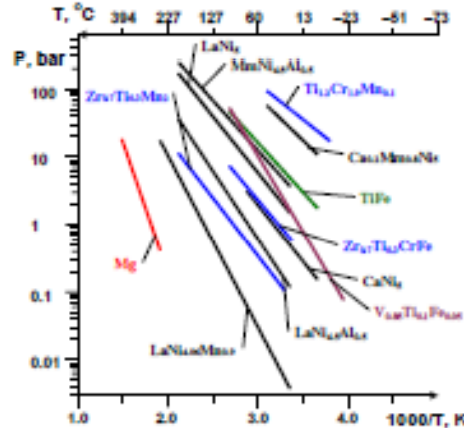
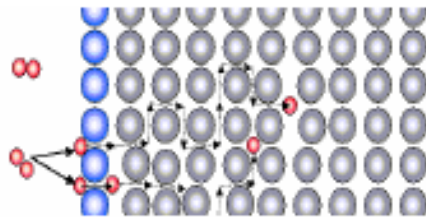


Solutions Based on MH Technologies

Metal Hydrides

Gas phase applications
 $M (s) + x/2 H_2 (g) \leftrightarrow MH_x (s) + Q$



Hydrogen Storage

H Compression; Heat Management

H Separation and Purification

Processes Involving H transfer

- ✓ Volume density of H in the metal lattice 1.5-2.0 times higher than for LH₂
- ✓ Fast and reversible H₂ absorption / desorption
- ✓ Extremely wide T / P operation ranges
- ✓ Significant heat effects: H₂ sorption is accompanied by heating and H₂ desorption by cooling of the MH bed
- ✓ Selectivity: only H₂ interacts with MH
- ✓ H activation by MH