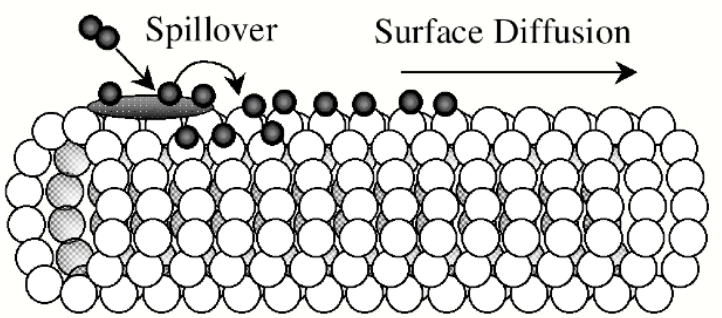
Hydrogen storage at ambient temperature

New adsorbents for hydrogen storage by spillover

Michigan Memorial Phoenix Energy Institute



Hydrogen storage materials use hydrogen spillover via an added catalyst in nanostructured carbons.

Objective:

To develop new sorbent materials for hydrogen storage at near ambient temperatures that do not have the deficiencies of metal hydrides and cryogenic storage.

Approach:

- Exploit the hydrogen spillover mechanism that is well known in catalysis (at mild temperatures).
- Develop new techniques for spillover

Impact:

- New sorbents for hydrogen storage for on-board automotive applications
- New sorbents for hydrogen storage for niche applications

Contact:

Ralph T. Yang
Chemical Engineering
mailto:yang@umich.edu

(734) 936-0771

http://www.engin.umich.edu/dept/cheme/people/yang.html