

[Form 2 (to be reported to Committee on Countermeasures for Contaminated Water Treatment and to be disclosed to public)]

Technology Information	
Area	<input checked="" type="checkbox"/> 1 (Select the number from "Areas of Technologies Requested")
Title	<u>Upsalite. A recently synthesized extremely hygroscopic mineral</u>
Submitted by	Dr. Juergen Buchmann
<p>1. Overview of Technologies (features, specification, functions, owners, etc.)</p> <p>Swedish scientists recently have been successful in synthesizing dehydrated Magnesium Sulfate (MgSO₄/ Upsalite), see http://en.wikipedia.org/wiki/Upsalite. This substance being provided with a surface of 800 square metres (8,600 sq ft) per gram is capable of absorbing enormous quantities of water which might be useful to converting liquid nuclear waste into solid.</p>	
<p>2. Notes (Please provide following information if possible.)</p> <p>- Technology readiness level (including cases of application, not limited to nuclear industry, time line for application)</p> <p>A large-scale technical production of the new material seems to be both technically easy and inexpensive.</p>	