

## HLWYM HEmails

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**From:** Tae Ahn  
**Sent:** Monday, April 28, 2008 9:53 AM  
**To:** Sheena Whaley  
**Cc:** Oleg Povetko; Hipolito Gonzalez; David Pickett  
**Subject:** RE: neutron absorbing materials

Sheena, I have reviewed most of these papers and I have received the same notes from Xihua too. In the last ASTM subcommittee meeting at NRC, we discussed large uncertainties associated with (I) general corrosion data and (ii) the extent of susceptibility to localized corrosion, for borated stainless steel. Actually, ENG 4 needs to take an action about any tests on this issue. Before taking this action, I would like to learn more about any tests during the LA review. For example, the management may or may not recommend spent fuel tests during LA reviews. Based on this recommendation, we can have better plan for any tests on borated stainless steel too. Tae

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**From:** Sheena Whaley  
**Sent:** Monday, April 28, 2008 9:40 AM  
**To:** Tae Ahn  
**Subject:** FW: neutron absorbing materials

What do you think?

Sheena

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**From:** Oleg Povetko [mailto:[opovetko@cnwra.swri.edu](mailto:opovetko@cnwra.swri.edu)]  
**Sent:** Friday, April 18, 2008 5:42 PM  
**To:** Sheena Whaley  
**Subject:** FW: neutron absorbing materials

Sheena,

I placed two INL NACE 2008 conference papers on neutron absorbers and Xihua's trip report on shared drive: [X:\Oleg Povetko\Criticality\Neutron Absorbers\NACE 08](#)

Please let us know if it would be potentially beneficial to acquire now borated stainless steel and Ni-Cr-Mo-Gd samples from INL. No tests will be performed at this time.

Oleg.

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**From:** Xihua He [mailto:[xhe@cnwra.swri.edu](mailto:xhe@cnwra.swri.edu)]  
**Sent:** Wednesday, April 09, 2008 1:41 PM  
**To:** Oleg Povetko  
**Cc:** David Pickett  
**Subject:** neutron absorbing materials

Oleg,

As I mentioned previously, there were two papers about the neutron absorbing materials presented at the NACE conference. I had a short summary on the papers in the trip report, which is at [S:\XHe\NACE2008](#) trip report. The two papers are at X: or N:\ENG4\NACE08590 and NACE08592. I had a chat with Ron Mizia. The tests at Idaho National Lab are not complete because of budget

issue. Based on their test results the fate of the boride particles in borated stainless steel is still uncertain. They have some borated stainless steel and Ni-Cr-Mo-Gd materials available to give to us if we want to do some tests. The results in the literature are very limited and not conclusive on the neutron-absorbing elements (B and Gd).

David,

If we need to do some tests in the future, I can ask Ron Mizia at INL to send the material to us. Please let me know if you want me to proceed.

Thanks,  
Xihua

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**From:** Tae Ahn

**Created By:** Tae.Ahn@nrc.gov

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