

NJOY/MACFARLANE-09 - 19 November 1993

**New MATXS Libraries Available**

by

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From: SMTP%"postmaster@t2.LANL.GOV" 19-NOV-1993 19:35:35.30  
To: SARTORI  
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Subj: Re: send 930913a

Date: Fri, 19 Nov 93 11:34:34 MST  
Message-Id: <9311191834.AA17894@t2>  
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To: SARTORI@nea.fr  
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Three new multigroup cross section libraries in MATXS format have been put onto the system. They are based on ENDF/B-VI through Release 2. The new ENDF/B-VI.2 materials in these libraries with cross-section changes are N-14, Sc-45, Co-59, Cu-63, Cu-65, U-238, and Pu-239. There are also fission-product isotopes with new cross-section data, but they are not included in these files. Some actinide materials were corrected by including missing sections for MF1/MT458 or MF4/MT18, and the effects of those changes are also included.

These new libraries were processed (mostly) by NJOY 91.91. Please check the file njoy/njoy91/readme91 for more details on the things fixed in NJOY recently. You should expect to see changes in damage and kerma (especially fission heating). Some materials had errors in photon production matrices that have been fixed.

The new libraries are MATXS10 (30x12), MATXS11 (80x24), and MATXS14 (175x46). As usual, INDEXnn and TEXTnn are available (the text files are compressed in the FTP area). MATXSnn files are also provided on some systems. See the transx/transx2 area. Also see /lib30/6u, /lib80/6u, and /lib175/6u on the LANL CFS system. Also see /005005/transx2 on the NERSC CFS system.