

Abstract Submitted  
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**Neutron Multiplicities in the Actinides** PETER H. SPRUNGER,  
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Accurate measurements of prompt, scission, and pre-equilibrium neutron multiplic-  
ities from the nuclear fission process are of great importance to nuclear technology.  
The variation of these quantities with mass division, the excitation energy of the  
fissioning system  $E^*$ , and the kinetic energy release to the fragments sheds light on  
the partition of energy during the large scale collective motion of the scission pro-  
cess. While some systems have been characterized very well, many others remain  
unknown. Instead of using the (n,f) reaction, we are using the surrogate (d,pf) reac-  
tion. Measurements performed recently at the CENPA yielded information on the  
 $^{237-239}\text{U}$ ,  $^{236-239}\text{Np}$ , and  $^{240}\text{Pu}$  fissioning systems. Analysis is in progress.

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