Carnegie Mellon IGERT Trainee Wins at 2012 Society of Risk Analysis Meeting

December 11- Amy Dale, a trainee with Carnegie Mellon's Nanotechnology Environmental Effects and Policy (NEEP)IGERT and CEINT affiliate won a best poster award at the December, 2012 Society of Risk Analysis (SRA) meeting in San Francisco, California. Her research poster entitled, "A Model of the Transformations of Nanosilver in Freshwater Sediments" presented model results for Ag nanoparticle transformations and fate in sediment using a biogeochemistry model that she has developed.

Dale is a second year Ph. D. student in the department of Engineering and Public Policy at Carnegie Mellon University and is co-advised by Professor Liz Casman, Engineering and Public Policy, and Professor Greg Lowry, Civil and Environmental Engineering.

Of Dale's research, Professor Casman said, "In the long run, most of the nanosilver that will enter aquatic environments will end up in river and lake sediments, so it is important to know what happens to the silver nanoparticles in these sediments. Amy Dale has developed the first model of nanosilver chemistry in aquatic sediments. This model has shown that in carbon-rich systems a large fraction of the nanosilver will be in the form of silver sulfide, an insoluble and much less toxic form of silver. The model has also shown that releases of toxic silver ion from the sediments to the overlying water will fluctuate seasonally with temperature and availability of organic carbon. This model advances our understanding of the fate of nanosilver in aquatic environments."