The performance of a new gamma-gamma coincidence spectrometer system for environmental samples analysis at the Center for Nuclear Technologies of the Technical University of Denmark (DTU) is reported. Nutech Coincidence Low Energy Germanium Sandwich (NUCLeGeS) system consists of two HPGe detectors in a surface laboratory with a digital acquisition system used to collect the data in time-stamped list mode with 10 ns time resolution. The spectrometer is used in both anticoincidence and coincidence modes.