Meeting: 999, Nashville, Tennessee, SS 13A, Special Session on Semigroup Theory

999-20-116 **Karen D. Aucoin*** (aucoin@mcneese.edu), Dept. of Math., Computer Science &Statistics, McNeese State University, Box 92340, Lake Charles, LA 70609. *Ideal extension and retraction properties in semigroups.*

A semigroup has the ideal retraction property (IRP) when each of its ideals is a homomorphic retraction of the whole semigroup. A semigroup has the ideal extension property (IEP) provided each ideal I of each subsemigroup T extends to an ideal J of the whole semigroup ($J \cap T = I$). Characterizations of certain classes of semigroups with each of these properties will be presented and connections between these properties will be discussed. In particular, the structure of semilattices with the ideal retraction property will be considered. (Received August 17, 2004)