962-13-728 **Tiberiu Dumitrescu** (tiberiu@al.math.unibuc.ro), Facultatea de Matematica, Universitatea Bucuresti, Str. Academiei 14, RO-70190 Bucharest, Romania, and **Muhammad Zafrullah*** (zufrmuha@isu.edu), Department of Mathematics, Idaho State University, Pocatello, ID 83209-8085. *LCM-Splitting Sets in Some Ring Extensions.*

Let S be a saturated multiplicative set of an integral domain D. Call S an lcm splitting set if $dD_S \cap D$ and $dD \cap sD$ are principal ideals for every $d \in D$ and $s \in S$. The aim of this talk is to show that if R is an overring of D such that for all $a, b \in D$, $aD \cap bD$ principal, implies that $aR \cap bR$ is principal, and if S is an lcm splitting set of D, then the saturation of S in R is an lcm splitting set in R. Consequently, if D is Noetherian, S is generated by prime elements of D and if the integral closure of D_S is a UFD, then so is the integral closure of D. (Received September 23, 2000)