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A. V. Jayanthan and **Hema Srinivasan*** (srinivasanh@missouri.edu). *Complete Intersection Monomial Curves.*

Let $\mathbf{b} = (b_1, \dots, b_n)$ be an increasing sequence of positive integers and $S_{\mathbf{b}}(a) = k[x^a, x^{a+b_1}, \dots, x^{a+b_n}] \subset k[x]$ be a semigroup ring. We prove that for any \mathbf{b} , complete intersection semigroup rings $S_{\mathbf{b}}(a)$, if they occur for large values of a , do so periodically with period b_n . That is, the set of complete intersections in $S_{\mathbf{b}}(a)$ for any fixed \mathbf{b} are either finite or eventually periodic in a . We give a necessary and sufficient condition for the occurrence of complete intersections for large values of a . This proves the periodicity conjecture of Herzog and Srinivasan for complete intersections. (Received February 07, 2012)