Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-11-507 **Michael Filaseta**, **Carrie E Finch*** (cfinch@math.sc.edu) and **Charles Nicol**. *Two Questions Concerning 0,1-Polynomials.*

We consider an infinite set $S = \{k_1, k_2, \ldots\} \subseteq \mathbb{Z}^+$. In this paper, we answer the following two questions. Is it possible for S to have the property that for every subset $S' = \{e_1, \ldots, e_n\}$ of S, the polynomial $f(x) = 1 + x^{e_1} + \cdots + x^{e_n}$ is reducible? Next, is it possible for S to have the property that for every subset S', the polynomial $f(x)$ is irreducible? (Received September 17, 2004)