## 1047-01-159

C. Huneke, Department of Mathematics, University of Kansas, Lawrence, KS 66045, D. Katz\* (dlk@math.ku.edu), Department of Mathematics, University of Kansas, Lawrence, KS 66045, and J. Validashti, Department of Mathematics, University of Kansas, Lawrence, KS 66045. Uniform equivalence of symbolic and adic topologies.

Let (R, m) be a local ring. We study the question of when there exists a positive integer h such that for all prime ideals  $P \subseteq R$ , the symbolic power  $P^{(hn)}$  is contained in  $P^n$ , for all  $n \ge 1$ . We show that such an h exists when R is a reduced isolated singularity such that R either contains a field of positive characteristic and R is F-finite or R is essentially of finite type over a field of characteristic zero. This partially generalizes previous work by Ein-Lazarsfeld-Smith and Hochster-Huneke. (Received January 27, 2009)