

# A FINITENESS RESULT FOR ATTACHED PRIMES OF ARTINIAN LOCAL COHOMOLOGY MODULES (SCIE)

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## TÓM TẮT:

Let  $(R, \mathfrak{m})$  be a Noetherian local ring. For an integer  $s \geq -1$  and an Artinian  $R$ -module  $A$ , we introduce the notion of  $A$ -cosequence in dimension  $> s$  and show that the set of all attached primes  $\mathfrak{p} \in \bigcup_{i=1, \dots, k} \text{Att}_R(0 :_A (x_1^{n_1}, \dots, x_k^{n_k})R)$  satisfying  $\dim(R/\mathfrak{p}) \geq s$  is a finite set whenever  $(x_1, \dots, x_k)$  is an  $A$ -cosequence in dimension  $> s$ . As an application, we give a finiteness result for attached primes of certain Artinian local cohomology modules of a finitely generated  $R$ -module.