1052-13-20   **Laura Ghezzi*** (`lghezzi@citytech.cuny.edu`), Department of Mathematics, New York City College of Technology, CUNY, Brooklyn, NY 11201. *Cohen-Macaulayness and the vanishing of Hilbert coefficients.*

A conjecture on the vanishing of the first Hilbert coefficient $e_1(Q)$ is solved affirmatively, where Q is a parameter ideal in a Noetherian local ring. The invariance of $e_1(Q)$ for parameter ideals Q and its relationship to Buchsbaum rings are studied. This is joint work with S. Goto, J. Hong, K. Ozeki, T.T. Phuong, and W.V. Vasconcelos. (Received July 04, 2009)