Selvi Kara Beyarslan* (selvi@southalabama.edu), Department of Mathematics and Statistics, 411 University Blvd. North, Mobile, AL 36688, Tai Huy Ha (tha@tulane.edu), Department of Mathematics, 6823 St. Charles Ave., New Orleans, LA 70118, and Augustine O’Keefe (aokeefe@conncoll.edu), Mathematics Department, 270 Mohegan Avenue Pkwy., New London, CT 06320. Algebraic properties of toric rings of graphs.

Let $G = (V, E)$ be a simple graph. We investigate the Cohen-Macaulayness and algebraic invariants, such as the Castelnuovo-Mumford regularity and the projective dimension, of the toric ring $k[G]$ via those of toric rings associated to induced subgraphs of $G$. (Received July 28, 2017)