Within a well-known class of algebras, we study a connection between noncommutative homological algebra and combinatorial topology. To a finite ranked poset $\Gamma$ we associate a finite-dimensional quadratic graded algebra $R_{\Gamma}$. Assuming $\Gamma$ satisfies a combinatorial condition known as uniform, $R_{\Gamma}$ is the quadratic dual of the associated graded splitting algebra $A'_{\Gamma}$. Gelfand, Retakh, Serconek and Wilson first introduced splitting algebras and a subset of these authors showed that a splitting algebra $A_{\Gamma}$ is quadratic if $\Gamma$ is uniform. Given a uniform $\Gamma$, we then ask a standard question in noncommutative homological algebra: Does $A_{\Gamma}$ satisfy the Koszul property? Applying standard techniques and assuming the uniform hypothesis, it is known that if $R_{\Gamma}$ is Koszul, then so is $A_{\Gamma}$. We therefore study Koszulity of $R_{\Gamma}$ in search of necessary and sufficient conditions on $\Gamma$. We have found that the Koszulity of $R_{\Gamma}$ is related to a combinatorial topology property of $\Gamma$ known as Cohen-Macaulay. This property is ubiquitous and it often connects the fields of algebra and topology. We prove: $\Gamma$ is Cohen-Macaulay if and only if $\Gamma$ is uniform and $R_{\Gamma}$ is Koszul. (Received September 16, 2013)