

## A characterization of cycle-forced bipartite graphs

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A *forced cycle*  $C$  of a graph  $G$  is a cycle in  $G$  such that  $G - V(C)$  has a unique perfect matching. A graph  $G$  is a *cycle-forced graph* if every cycle in  $G$  is a forced cycle. In this paper, we characterize the cycle-forced bipartite graphs. For Hamiltonian bipartite graphs, we give a complete characterization. For general bipartite graphs, we give a partial characterization and obtained some useful properties.

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