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Rehana Patel* (patelr@stjohns.edu), St. John's University, Department of Mathematics, 8000 Utopia Parkway, Queens, NY 11439. *Aspects of Certain Countable Universal H -Free Graphs.*

Given a fixed graph H , a graph G is said to be H -free if H does not embed into G as a subgraph, induced or otherwise. A countable graph is called a *universal H -free graph* if it is itself H -free, and every countable H -free graph embeds into it as an induced subgraph. There is an elegant model-theoretic criterion due to Cherlin, Shelah and Shi that guarantees the existence of a universal H -free graph, for certain finite, connected H . Using this condition, they show that there is a universal $(K_n + K_3)$ -free graph for each $n \geq 3$, $K_n + K_3$ being the graph on $n + 2$ vertices that consists of a K_n and a triangle which share exactly one point. We will describe in detail the structures of these graphs, and discuss some of their interesting model-theoretic properties. (Received September 28, 2005)