

Title of Article: Developing Clean Technology through Approximate Solutions of Mathematical Models..

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Abstract: In this paper, the role of mathematical modeling in the development of clean technology has been considered. One method each for obtaining approximate solutions of mathematical models by ordinary differential equations and partial differential equations respectively arising from the modeling of systems and physical phenomena has been considered. The construction of continuous hybrid methods for the numerical approximation of the solutions of initial value problems of ordinary differential equations as well as homotopy analysis method, an approximate analytical method, for the solution of nonlinear partial differential equations are discussed.