Abstract

This paper studies the application of the variational iteration method to solve the Volterra integro-differential equation. This technique was developed in 1999 by He namely (VIM). This method is a very powerful method for solving a large amount of problems. It provides a sequence of iterated solutions which is converge to the exact solution of the problem. The VIM is a powerful method which considers the approximate solution of a non-linear integral equations as an infinite series which usually converges to the exact solution. firstly, the relevant literature is studied in understanding the importance and extent of applicability of the method in the applied science. Also, we solve several examples of the Volterra integro-differential equation to show that the method is efficient and applicable.