Abstract - Conjugate gradient methods are probably the most famous iterative methods for solving large scale optimization problems in scientific and engineering computation, characterized by the simplicity of their iteration and their low memory requirements. In this paper, we propose a new conjugate gradient method which is based on the MBFGS secant condition by modifying Perry's method. Our proposed method ensures sufficient descent independent of the accuracy of the line search and it is globally convergent under some assumptions. Numerical experiments are also presented.