962-41-42 **Elias Deeba*** (`deebae@dt.uh.edu`), Computer and Mathematical Sciences, University of Houston-Downtown, Houston, TX 77002, **Shishen Xie** (`xies@dt.uh.edu`), Computer and Mathematical Sciences, University of Houston-Downtown, Houston, TX 77002, and **Suheil Khuri** (`suheilk@hotmail.com`), Computer ScienceMathematics & Statistics, American University of Sharjah, P.O.Box 26666 Sharjah, United Arab Emirates. *An Algorithm for Solving Boundary Value Problems.*

In this paper a numerical algorithm, based on the decomposition technique, is presented for solving a class of nonlinear boundary value problems. The method is implemented to well known examples, including Troesch's and Bratu's problems which have been extensively studied. The scheme is shown to be highly accurate, and only few terms are required to obtain accurate computable solutions. (Received June 28, 2000)