

APPROXIMATION OF SOLUTIONS OF EQUATIONS OF HAMMERSTEIN TYPE IN HILBERT SPACES

C.E. CHIDUME* AND Y. SHEHU**

*Mathematics Institute, African University of Science and Technology, Abuja, Nigeria
 E-mail: cchidume@aust.edu.ng

**Department of Mathematics, University of Nigeria, Nsukka, Nigeria
 E-mail: deltanougt2006@yahoo.com

Let H be a real Hilbert space. Let $K, F : H \rightarrow H$ be bounded, continuous and monotone mappings. Suppose that $u^* \in H$ is a solution to Hammerstein equation $u + KF u = 0$. We introduce a new explicit iterative sequence and prove strong convergence of the sequence to a solution of the Hammerstein equation.

Key Words and Phrases: Monotone operators, equations of Hammerstein type, strong convergence, Hilbert spaces, fixed point.

2010 Mathematics Subject Classification: 47H06, 47H09, 47J05, 47J25, 47H10.

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Received: July 25, 2012; Accepted: December 13, 2012.

