

# **NEUTRONIC FLUX AND POWER DISTRIBUTION IN A NUCLEAR POWER REACTOR USING WIMS-D4 AND CITATION CODES**

**MAHER N.SARSAM & BASHAIR MOHAMMED SAIED**

<sup>1</sup>Alsalam University College, Iraq

<sup>2</sup>Bagdad University-college of education ibn Al-Haitham, Iraq

## **ABSTRACT**

The flux and power distribution of a WWER- 440 nuclear power reactor using CITATION code was calculated. The calculation of the neutronic cross sections values was done using WIMS-D4 code. The comparison between results and benchmark values of the power distributions shows a very good agreement.

**KEYWORDS:** WWER- 44, CITATION, WIMS-D4 code.