

## EXCITED STRUCTURE FOR EVEN–EVEN ISOTOPES FOR $_{46}\text{Pd}$ NUCLEUS

FATIMA ABDUL AMIR JASSEM AND RUSUL SAAD HADI

Physics Department, College of Education for Pure Science  
(Ibn Al-Haithem), University of Baghdad

### Abstract

Electromagnetic properties for even –even nuclides in neutron -rich  $_{46}\text{Pd}$  have been studied through ; the electric quadruple transitions  $[M(E2)]_{2W.u \downarrow}$  and the reduced transitions probabilities  $B(E2)_{W.u \downarrow}$  for  $\gamma$  transitions from first excited  $2_1^+$  states to the that ground states. The good information about the behavior for  $[M(E2)]_{2W.u \downarrow}$  and  $B(E2)_{W.u \downarrow}$  versus neutron numbers obtained. The reduced transition probabilities  $B(E2)_{e2b2\uparrow}$  also had been calculated and compared with the experimental results which provided the most accurate comparison to theoretical values are taken from different nuclear models.

-----  
**Keywords :** transition strength  $[M(E2)]_{2W.u \downarrow}$  , reduced transition probability  $B(E2)_{W.u \downarrow}$  and internal conversions coefficients  $\alpha$  total.