

INTRODUCING METAL-LIGAND GEOMETRIES THROUGH SCIENCE WRITING HEURISTICS AND MODELLING AND MODELLING SKILLS IN HIGHER EDUCATION

*¹Sam, A., ²Eminah, J. K., ³Hanson, R. & ⁴Raheem, K.

^{1, 2, 3 & 4}Department of Chemistry Education, University of Education, P.O. Box 25, Winneba-GHANA

*All correspondence to: arkofuls@yahoo.co.uk

ABSTRACT

This study investigated the efficacy of using Science Writing Heuristics (SWH) and Modelling and Modelling Skills (MMS) by students to predict the geometries of metal complexes. A case study design within the Model of Educational Reconstruction approach was used. The accessible population were all third-year chemistry students in the University of Education, Winneba (UEW)-Ghana with sample size of twenty-nine (29) students. The study involved students in a class of 5 groups, comprising 5-6 students each over eleven-week period. The findings among others, showed that students were able to understand, use and draw metal isomeric structures correctly because they were aided by the interventional strategies (SWH & MMS) adopted during the study.

Keywords: Educational reconstruction, efficacy, heuristics, modelling skills.