**Scientific experimental data representation standard through knowledge metadata representation model**

ABSTRACT

The growth of data from scientific experiments is increasing nowadays. These data came from different experiments done through various laboratory instruments or machines. It became an issue to manage and analyse scientific experimental data because of the heterogeneous nature of data structure and format. This paper proposed a knowledge metadata representation model to standardise the scientific experimental data representation to make it a standard structure. We discussed the methodology of the proposed model and gives the analysis of results. The evaluation and validation of the knowledge metadata representation model, as well as the verification of the metadata elements extraction, show promising results.