

## **Abstract**

*One important role in the learning process is the existence of a learning media. With the learning media the abstract learning materials can be visualized to be more real. Most of the high schools (SMA) make books that only display text and images as the main learning media. The material about the Elementary Periodic System (SPU) is one material that requires direct visualization in the learning process. By utilizing AR (Augmented Reality) technology it can have a good impact on students to better understand the periodic system of elements, both in the introduction of atomic molecules until the merger between atomic molecules, because with AR students can see directly a 2D or 3D object that is very suitable for students' cognitive learning patterns. In this study using the goal-directed design method by identifying user goals and behavior, and translating them into a model of the user interface periodic system learning media. The user interface model that is generated through the implementation of goal-directed design, uses testing with QUIM parameters (Quality in Use of Measurements), with a percentage value of 89%, which means the user interface model meets usability and can be used as a system of learning media periodic not for high school students of class X.*

**Keywords:** *Learning Media, Elemental Periodic System, user interface, augmented reality, goal-directed design, QUIM.*