# ABSTRAK

**Cut Risma Audina, NIM 4203131049 (2024). Pengembangan Lembar Kerja Peserta Didik Elektronik (e-LKPD) Berbasis Literasi Sains dengan Konteks Pewarnaan Kain Batik pada Materi Ikatan Kimia.**

Penelitian ini dilatarbelakangi masalah pendidikan yang menjadi pertimbangan pemanfaatan teknologi digital dalam pembelajaran. Hasil wawancara dengan guru kimia SMA Swasta Nurul Iman Tanjung Morawa menyatakan bahwa guru belum pernah mengembangkan e-LKPD berbasis literasi sains dengan konteks pewarnaan kain batik. Penelitian ini bertujuan untuk mengukur hasil validasi ahli terhadap e-LKPD, meninjau respon guru terhadap e-LKPD, dan meninjau respon peserta didik terhadap e-LKPD. Jenis penelitian ini menggunakan metode penelitian dan pengembangan *Research and Development* (R&D) yaitu dengan model pengembangan 4D. Penelitian ini menggunakan sampel sebanyak 35 peserta didik dalam 1 kelas, 2 guru kimia, dan 4 validator ahli. Metode pengumpulan data yang digunakan yaitu (1) wawancara, (2) angket respon guru dan respon peserta didik, dan (3) validasi ahli. Hasil penelitian menunjukkan bahwa pengembangan e-LKPD berbasis literasi sains dengan konteks pewarnaan kain batik pada materi ikatan kimia sangat layak digunakan dengan hasil validasi ahli materi sebesar 84.1%, masuk dalam kategori sangat layak, dan hasil validasi ahli media sebesar 87,75%, masuk dalam kategori sangat layak. Hasil angket respon guru diperolah 96.8% masuk dalam kategori sangat layak, dan hasil angket respon siswa sebesar 89% masuk dalam kategori sangat layak.

**Kata kunci:** e-LKPD, Literasi Sains, Pewarnaan Kain Batik, Ikatan Kimia, Penelitian dan Pengembangan.

# ABSTRACT

**Cut Risma Audina, NIM. 4203131049 (2024). Development of Science Literacy-Based Electronic Learner Worksheets (E-LKPD) with The Context of Batik Cloth Coloring on Chemical Bonding Material**

This research is motivated by educational problems that are a consideration for the utilization of digital technology in learning. The results of interviews with chemistry teachers at SMA Swasta Nurul Iman Tanjung Morawa stated that teachers had never developed science literacy-based e-LKPDs with the context of batik cloth coloring. This study aims to measure the results of expert validation of e-LKPD, review teacher responses to e-LKPD, and review student responses to e-LKPD. This type of research uses the Research and Development (R&D) method, namely the 4D development model. This study used a sample of 35 students in 1 class, 2 chemistry teachers, and 4 expert validators. The data collection methods used were (1) interviews, (2) teacher response questionnaires and student responses, and (3) expert validation. The results showed that the development of science literacy-based e-LKPD with the context of batik cloth coloring on chemical bonding material is very feasible to use with the results of material expert validation of 84.1%, which is in the very feasible category, and the results of media expert validation of 87.75%, which is in the very feasible category. The results of the teacher response questionnaire were 96.8% in the very feasible category, and the results of the student were 89%, which fell into the very feasible category.



**Keywords**: e-LKPD, Science Literacy, Batik Fabric Coloring, Chemical Bonding, Research and Development