

## ABSTRAK

Inggit Pratiwi. 2023. *Pengembangan Modul Elektronik Berbasis Discovery Learning Pada Materi Laju Reaksi Untuk Siswa SMA/MA*. Skripsi. Tanjungpinang: Program Studi Pendidikan Kimia, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Maritim Raja Ali Haji. Pembimbing I: Dr. Nancy Willian, S.Si., M.Si. Pembimbing II: Dina Fitriyah, S.Pd., M.Si.

**Kata Kunci:** *Discovery Learning, Laju Reaksi, Modul Elektronik*

Sistem belajar dimasa pandemi membuat berkurangnya minat belajar siswa. Salah satunya pada mata pelajaran kimia pada bagian materi Laju Reaksi. Menurut siswa, materi tersebut sangat sulit jika di pelajari melalui *online*, tidak bisa dipahami jika dalam bayangan saja. Materi tersebut juga kebanyakan berbentuk hafalan rumus. Penelitian ini bertujuan untuk mengembangkan modul elektronik berbasis *discovery learning* pada materi laju reaksi untuk siswa SMA/MA yang valid dan praktis serta dapat digunakan dalam kegiatan pembelajaran. Penerapan model *discovery learning* diharapkan mampu meningkatkan kemandirian siswa untuk terlibat langsung dalam memecahkan masalah pembelajaran. Penelitian ini menggunakan jenis penelitian pengembangan atau R&D (*Research and Development*) dengan model pengembangan ADDIE yang terdiri dari 5 tahapan, yaitu: *Analysis* (Analisis), *Design* (Desain atau Perancangan), *Development* (Pengembangan), *Implementation* (Implementasi), dan *Evaluation* (Evaluasi). Penelitian ini dilaksanakan di SMA Negeri 5 Tanjungpinang dengan subjek penelitian yang terdiri dari 1 validator ahli materi, 1 validator ahli media serta subjek praktikalitas terhadap 31 siswa kelas XI MIPA 1 dan 1 orang guru kimia. Berdasarkan hasil validasi media dan materi dari penelitian dan pengembangan modul elektronik berbasis *discovery learning* pada materi laju reaksi untuk siswa SMA/MA diperoleh hasil 81,25% dan 70,5% dengan kategori valid/dapat digunakan namun perlu revisi kecil. Sedangkan pada hasil uji praktikalitas modul elektronik berbasis *discovery learning* pada materi laju reaksi untuk siswa SMA/MA terhadap 1 guru kimia dan 31 siswa diperoleh hasil 84,02% dan 88,1% dengan kriteria sangat praktis dapat digunakan tanpa revisi. Dengan demikian hasil penelitian ini dapat disimpulkan bahwa modul elektronik berbasis *discovery learning* pada materi laju reaksi untuk siswa SMA/MA valid dan praktis serta dapat digunakan dalam proses pembelajaran.

## **ABSTRACT**

Inggit Pratiwi. 2023. *Development of Discovery Learning Based Electronic Module on Reaction Rate Material for High School/MA Students*. Thesis. Tanjungpinang: Department of Chemistry Education, Faculty of Teacher Training and Education, University of Raja Ali Haji Maritime. Advisor I: Dr. Nancy Willian, S.Si., M.Sc. Advisor II: Dina Fitriyah, S.Pd., M.Si

**Keyword: Discovery Learning, Electronic Module, Reaction Rate**

The learning system during the pandemic has reduced student interest in learning. One of them is in the chemistry subject in the Reaction Rate material section. According to students, the material is very difficult to learn online, it can't be understood if it's only in the shadows. The material is also mostly in the form of rote formulas. This study aims to develop an electronic module based on discovery learning on the reaction rate material for high school / MA students that is valid and practical and can be used in learning activities. The application of the discovery learning model is expected to increase students' independence to be directly involved in solving learning problems. This study uses the type of research development or R&D with the ADDIE development model consisting of 5 stages, namely: Analysis, Design, Development, Implementation, and Evaluation. This research was conducted at SMA Negeri 5 Tanjungpinang with research subjects consisting of 1 material expert validator, 1 media expert validator and practicality subject to 31 students of class XI MIPA 1 and 1 chemistry teacher. Based on the results of media and material validation from the research and development of electronic modules based on discovery learning on the reaction rate material for high school/MA students, the results obtained are 81.25% and 70.5% with categories valid/usable but need minor revisions. While the results of the practicality test of electronic modules based on discovery learning on the reaction rate material for high school/MA students to 1 chemistry teacher and 31 students obtained results of 84.02% and 88.1% with very practical criteria that can be used without revision. Thus the results of this study can be concluded that the electronic module based on discovery learning on the reaction rate material for high school / MA students is valid and practical and can be used in the learning process.