



**STATE UNIVERSITY OF MEDAN**

**DEVELOPMENT OF CONTEXTUAL-BASED CHEMISTRY  
TEACHING MATERIALS ON THE SUBJECT OF BUFFER  
SOLUTION IN SENIOR HIGH SCHOOL**

**THESIS**

**Submitted to Fulfill The Requirements for  
The Degree of Bachelor of Education**

**Catherine Juperta Hotmatua Marbun  
IDN 4203331023  
Bilingual Chemistry Education Study Program**

**CHEMISTRY DEPARTMENT  
FACULTY OF MATHEMATICS AND SCIENCE  
MEDAN  
JULY 2024**