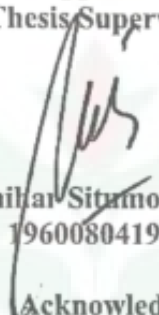


**Thesis:**

**The Development of Innovative Learning Material with Project to Improve Student Critical Thinking Skills on The Teaching of Redox Titration**

Name : Gielf Justin Salisia Silrumson Silalahi  
IDN : 4183131026  
Study Program : Bilingual Chemistry Education  
Department : Chemistry

Approval:  
Thesis Supervisor,

  
Prof. Dr. Manihai Situmorang, M.Sc., Ph, D  
IDN. 196008041986011001

Acknowledge:

Chemistry Department  
Head,



Dr. Ayi Darmana, M. Si  
IDN. 196608071990101001

Bilingual Program  
Coordinator,



Dr. Ely Djulia, M.Pd  
IDN. 196607241991032012

EMIPA Unimed  
Dean

  
Dr. Ani Sutiani, M.Si  
IDN. 19680730 199203 2 001  
FMIPA

Graduated: January 17, 2024

## ORIGINALITY STATEMENT SHEET

Author declared that the manuscript of this thesis is author's work, and all sources, both quoted and referenced in the manuscript, have been correctly stated in the sources of quotations and bibliography.

If in the future it is known and can be proven that there are elements of plagiarism in this manuscript, then author's willing if this thesis were canceled and processed in accordance with the applicable laws and regulations (UU No.20 Tahun 2003, pasal 25 ayat 2 dan pasal 70).

Medan, 28 January 2024

Declarer,



METERAI  
TEMPEL

BTDEAALX065535052

*J. S. S. Silalahi*  
J. S. S. Silalahi  
IDN. 4183131026

UNIVERSITAS NEGERI MEDAN  
UNIMED  
THE  
*Character Building*  
UNIVERSITY

## PUBLICATION APPROVAL SHEET

As an academic community member of the Universitas Negeri Medan, the undersigned:

Name: Gielf J. S. S. Silalahi

ID Number: 4183131026

Program: Bilingual Chemistry Education

Faculty: Mathematics and Natural Science

Genre: Thesis

For the scientific development, agreed to give for Universitas Negeri Medan Non-Exclusive Royalty Free Right for my thesis entitled:

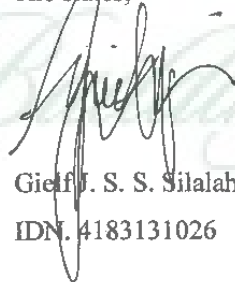
**“The Development Of Innovative Learning Material With Project To Improve Student Critical Thinking Skills On The Teaching Of Redox Titration”**

Along with existing equipment (if needed). With this Non-Exclusive Royalty Free Rights, Universitas Negeri Medan has the right to save, concert/format, manage in the form of database, maintain, and publish my final project if I still include my name as the author/creator and ad the owner of the copyright. Thus, I have made this statement properly so that it can be used properly.

Made in : Medan

At the date : 28 January 2024

The states,



Gielf J. S. S. Silalahi

IDN. 4183131026