

**Thesis:**

**The Development of Physics E-Modules Assisted By Flip PDF Corporate On  
Mechanical Wave Material Based On Problem Based Learning  
In Senior High School.**

Name : Lasma Enita Siahaan  
IDN : 4182121010  
Study Program : Bilingual Physics Education  
Department : Physics

Approved by :  
Thesis Supervisor,

  
Prof. Dr. Sahyar, M.S., M.M  
NIP. 19600426 198503 1 003

Acknowledge by :

Physics Department  
Head,


Bilingual Program  
Coordinator,

  
Dr. Dewi Wulandari, M.Si  
NIP. 19780120 200801 2 014

  
Dr. Ely Djulia, M.Pd  
NIP. 19660724 199103 2 012

FMIPA Unimed  
Dean,



  
Prof. Dr. Fauziyah Harahap, M.Si.  
NIP. 19660728 199103 2 002

Date of Graduate: October, 11<sup>th</sup> 2022

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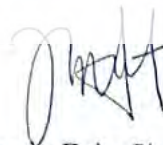
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## BIOGRAPHY



Lasma Enita Siahaan was born in Hutagurgur, North Sumatera on May 15<sup>th</sup> 2000. The author's father's name is Jamian Siahaan and her mother's name is Cahaya Jullita Nurlala Hutauruk. The author is the five child of five siblings. In 2006, the author entered SD Negeri 173135 Lumban Baringin and graduated in 2012. In 2012, the author continued her studies at SMP Negeri 1 Sipoholon, and graduated in 2015. In 2015 the author continued her studies at SMA Negeri 1 Sipoholon, and graduated in 2018. In 2018 the author was accepted in the Bilingual Physics Education Study Program, Department of Physics, Faculty of Mathematics and Natural Science in State University of Medan through SBMPTN. During college, the author was active in participating in campus organizations such as being a staff of Research and Development at UKM KSR PMI UNIMED, a staff of Education at the Ikatan Keluarga Besar Kristen Fisika (IKBKF), a member of Elyada small group at UKMKP and had the opportunity to take part in the Kampus Mengajar programs held by the Ministry of Education and Culture.

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