

**UNDERGRADUATE THESIS**

**FRACTIONATION AND CHARACTERIZATION OF EXTRACELLULAR  $\alpha$ -AMYLASE**

**FROM *Paenibacillus pinisoli***



DHARMA VINCENTLAU

18/430295/PA/18808

**CHEMISTRY STUDY PROGRAM**

**DEPARTMENT OF CHEMISTRY**

**FACULTY OF MATHEMATICS AND NATURAL SCIENCE**

**GADJAH MADA UNIVERSITY**

**YOGYAKARTA**

**2023**

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Submitted as one of the requirements for obtaining a Bachelor of Science degree  
in Chemistry



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**LEGALIZATION PAGE**

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It has been prepared and arranged by

DHARMA VINCENTLAU

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Has been defended in front of the Assessor Team

On 11 October 2023

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Mengetahui,

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