

DISSERTATION

***IN SILICO* DESIGN, SYNTHESIS, AND MOLECULAR MECHANISM OF
CHLOROTHIOPHENE-BASED CHALCONE AND PYRAZOLINE
DERIVATIVES AS ANTICANCER AGENTS**

***DESAIN IN SILIKO, SINTESIS, DAN STUDI MEKANISME MOLEKULER
SENYAWA TURUNAN KALKON DAN PIRAZOLINA BERBASIS
KLOROTIOFENA SEBAGAI AGEN ANTIKANKER***

μ

Dissertation

To fulfill the requirements for achieving a Doctoral degree



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**DOCTORAL PROGRAM IN CHEMISTRY
DEPARTMENT OF CHEMISTRY
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
UNIVERSITAS GADJAH MADA
YOGYAKARTA
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RATIFICATION PAGE

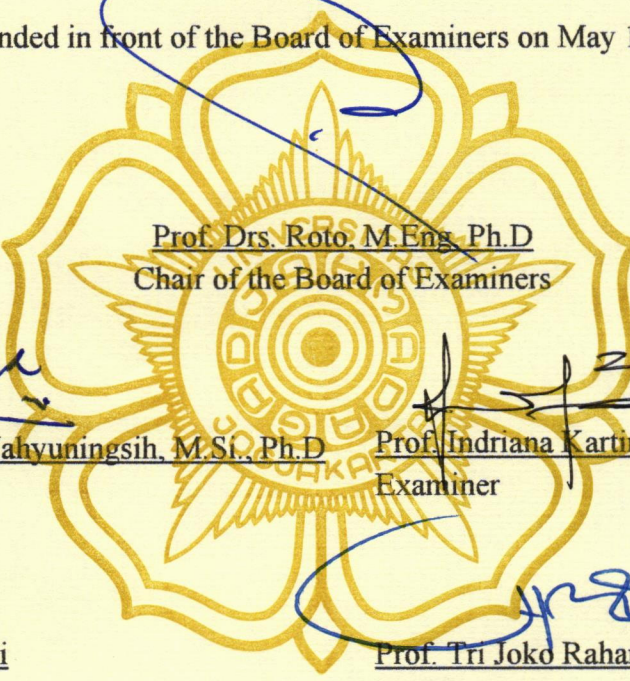
DISSERTATION

***IN-SILICO* DESIGN, SYNTHESIS, AND MOLECULAR MECHANISM OF CHLOROTHIOPHENE-BASED CHALCONE AND PYRAZOLINE DERIVATIVES AS ANTICANCER AGENTS**

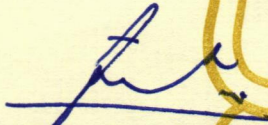
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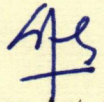
Defended in front of the Board of Examiners on May 15th, 2025



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Chair of the Board of Examiners

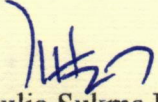

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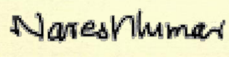

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Mengetahui,
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