

National Chiao Tung University

Department of Materials Science and Engineering

PhD Thesis

Synthesis of Naphthalimide Derivative and Diketopyrrolopyrrole (DPP)-Based [2]Rotaxane/Polyrotaxane as Novel Chemosensor Materials and a Controllable Hierarchical Nano Self-Assembled Structure from Polyrotaxane

合成 Naphthalimide 衍生物與含 Diketopyrrolopyrrole (DPP) 為基底之 [2]Rotaxane/Polyrotaxane 作為新穎化學感測材料及可操控規則奈米自組裝結構之 Polyrotaxane

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Advisor: Hong-Cheu Lin, Ph. D. (林宏洲 教授)

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Dedicated to my beloved parents and brother

*“When I Asked God for Strength
He Gave Me Difficult Situations to Face*

*When I Asked God for Brain & Brawn
He Gave Me Puzzles in Life to Solve*

*When I Asked God for Happiness
He Showed Me Some Unhappy People*

*When I Asked God for Wealth
He Showed Me How to Work Hard*

*When I Asked God for Favors
He Showed Me Opportunities to Work Hard*

*When I Asked God for Peace
He Showed Me How to Help Others*

*God Gave Me Nothing I Wanted
He Gave Me Everything I Needed”*

Swami Vivekananda