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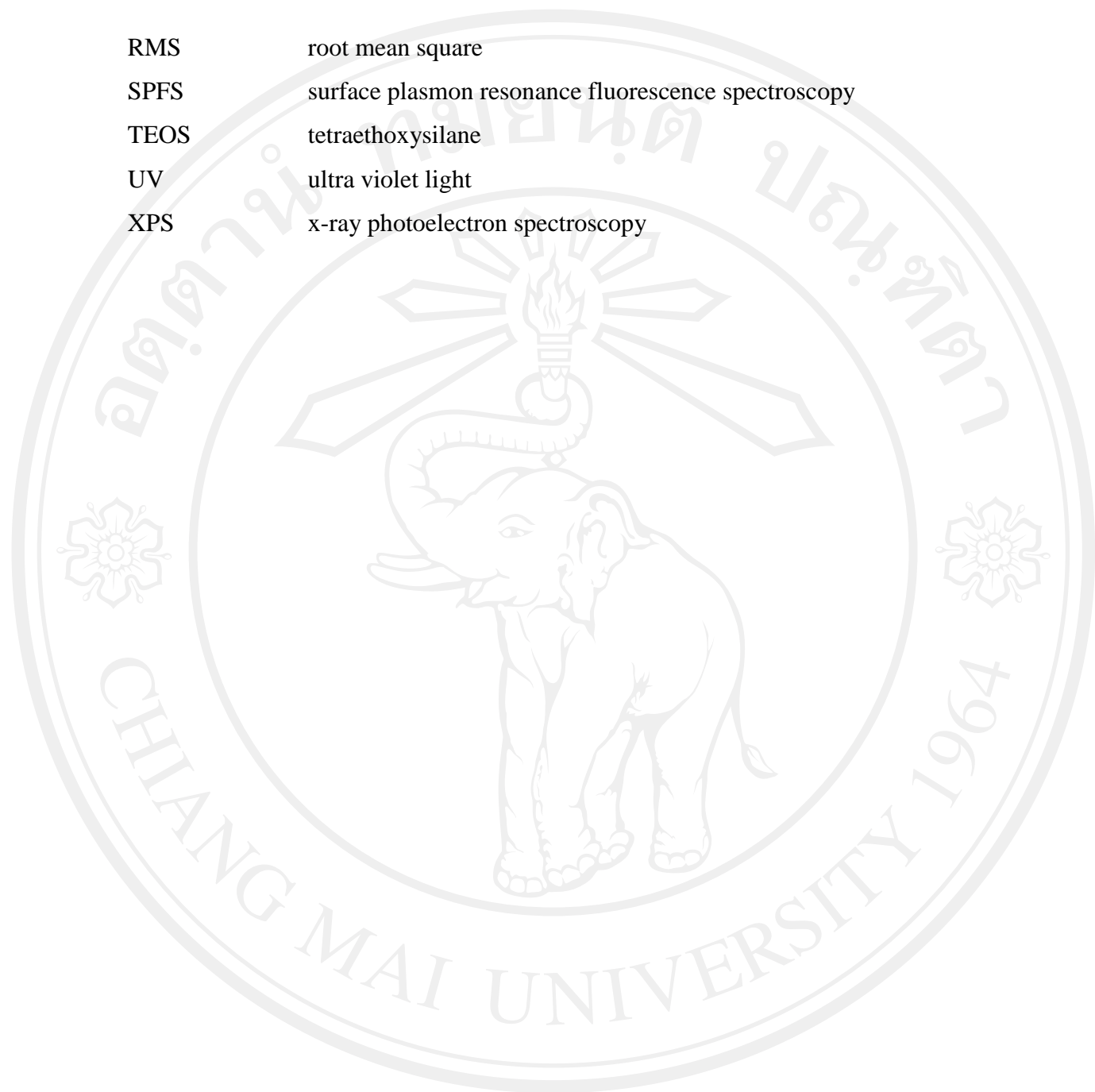
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## LIST OF ABBREVIATIONS

AFM	atomic force microscope
ATR-FTIR	attenuated total reflectance Fourier transform infrared spectroscopy
BSA	bovine serum albumin
CCDs	charge-coupled devices
CCP	capacitive coupled RF plasma
CHF	fluorohydrocarbon polymer
CTMS	chlorotrimethylsilane
ECM	extracellular matrix
Fib	fibrinogen
Fn	fibronectin
FTIR	Fourier transform infrared spectroscopy
FWHM	full width at half maximum
He-APGD	helium atmospheric pressure glow discharge
HMDSO	hexamethyldisiloxane
HSA	human serum albumin
ICP	inductive coupled RF plasma
IgG	immunoglobulin-G
Ip	isoelectric point
OES	optical emission spectroscopy
OMCTS	octamethylcyclotetrasiloxane
PBSu	poly (butylenes succinate)
PDLLA	poly (D,L-lactic acid)
PECVD	plasma enhanced chemical vapor deposition
PHEMA	poly (hydroxyethyl methacrylate)
PLA	poly (lactic acid)
PLLA	poly (L-lactic acid)
PMAA	poly (methacrylic acid)
QCM	quartz crystal microbalance
RF	radio frequency

RMS	root mean square
SPFS	surface plasmon resonance fluorescence spectroscopy
TEOS	tetraethoxysilane
UV	ultra violet light
XPS	x-ray photoelectron spectroscopy



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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## ข้อความแห่งการริเริ่ม

- 1) วิทยานิพนธ์นี้ได้ศึกษาการดัดแปรผิวของพอลิแลกติกแอซิด ซึ่งเป็นวัสดุที่สามารถย่อยสลายได้ทางการแพทย์ชนิดหนึ่งด้วยเทคนิคพลาสมา พบว่าผลของหมู่ฟังก์ชันมีขี้ว ทำให้วัสดุมีความชอบน้ำมากขึ้น
- 2) วัสดุมีความชอบน้ำ ลดการยึดเกาะของโปรตีนในน้ำเลือดกับพอลิแลกติกแอซิด ทำให้เซลล์มีการยึดเกาะได้ดี และมีการเพิ่มทวีของเซลล์ดีขึ้น

## STATEMENT OF ORIGINALITY

- 1) This study involved the incorporated polar groups to the PLA enhanced its hydrophilicity.
- 2) Hydrophilicity surface inhibit blood plasma protein adsorption on the surface is advantageous for cell adhesion and proliferation.

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