

**MAGNETOPHORESIS OF POLY(SODIUM 4-STYRENESULFONATE)/Fe<sub>3</sub>O<sub>4</sub> CLUSTERS: THE INFLUENCE OF COLLOIDAL STABILITY**

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**2016**

**MAGNETOPHORESIS OF POLY(SODIUM 4-STYRENESULFONATE)/Fe<sub>3</sub>O<sub>4</sub>  
CLUSTERS: THE INFLUENCE OF COLLOIDAL STABILITY**

**by**

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**Thesis submitted in fulfilment of the  
requirements for the degree of  
Doctor of Philosophy**

**June 2016**

## ACKNOWLEDGEMENT

Finally, it comes to the time for me to allocate my acknowledgement, which is the moment that I have been waiting for since five years ago. It is kind of mixed feelings circulating inside my heart now as I couldn't believe that I managed to finish this piece of work. The PhD journey is tough and challenging, definitely, I couldn't have gone through it without the help from every single one of you.....

My utmost gratitude assigned to my main advisor, Dr. Lim Jit Kang. Thanks for accepting me as your first PhD student. I have learned a lot from you, also, I have made a lot of trouble for you as well. My sincerest heartfelt apologies for the arguments that I have done. Thanks again for never giving up on me. I will keep in mind all the knowledge, sharing, and encouragement that you have given me. For my co-advisors, Dr. Ooi, Prof. Latif, and Dr. Low, thanks for guiding and supporting me. Also, my appreciation to the administrative and technical staffs of SCE for their kind assistance.

For the "CRAZY"-mates of mine, JingYao, HueyPing, Zeinab a.k.a Zeena, PeyYi, LiPeng, Jonathan, JingXiang, QianWen, KinHang, GuatWei, JianJie, thanks for being crazy with me and accompanying my every moment of ups and downs. Not forgetting, my beloved seniors and juniors, Dasmond, PeckLoo, MK, BeeWah, Qling, ChuanChun, LeeMuei, HuiSun, Salwa, QiHwa, Susan, SimSiong, Azimah, QianYee, ChunYu, FooKean, KhimMay, WeiJie, HaziYana, and etc., you guys are awesome as always and make my PhD life full of sweet memories. Your companionship means a lot to me, really. The only word best to express my feelings now is "T.h.a.n.k.s".

Last but not least, my gratitude to my dad and my brother, for always believing in my ability, supporting me, and allowing me to further my education to higher level.

*Sincerely, Swee Pin*

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## LIST OF ABBREVIATIONS

Ace	Acetic acid
ATR-FTIR	Attenuated total reflectance-Fourier transformed infrared spectroscopy
B&W	Black and white
BET	Brunauer-Emmett-Teller
BSA	Albumin from bovine serum
c.c.c	Critical coagulation concentration
CMC	Carboxymethyl cellulose
DCB	Divalent cation bridging
DLCA	Diffusion-limited colloid aggregation
DLS	Dynamic light scattering
DLVO	Derjaguin-Landau-Verwey-Overbeek
DOMs	Dissolved organic matters
EPM	Electrophoretic mobility
EQA	Environmental Quality Act
FWHM	Full width at half maximum
Gly	Glycine
HA	Humic acid
HGMS	High gradient magnetic separation
IEP	Isoelectric point
LDV	Laser doppler velocimetry

LGMS	Low gradient magnetic separation
MNPs	Magnetic nanoparticles
N	North
NaAlg	Sodium alginate
PAA	Poly(acrylic acid)
PAM	Polyacrylamide
PAP	Polyaspartate
PDI	Polydispersity index
PSS	Poly(sodium 4-styrenesulfonate)
QCM-D	Quartz crystal microbalance with dissipation
RLCA	Reaction-limited colloid aggregation
RNIP	Reactive nanoscale iron particles
S	South
SMCL	Secondary Maximum Contaminant Level
TEM	Transmission electron microscopy
TGA	Thermogravimetric analysis
U.S. EPA	Environmental Protection Agency United States
VSM	Vibrating sample magnetometer
XRD	X-ray diffraction