

BOONTHARIKA THAPSUKHON

Ph.D.



Contact

School of Science,
University of Phayao

Address:

19 Moo 2, Pha-hol Yothin Road, Maega
District, Phayao, Thailand.

Phone:

+66 (0)9 1859 3296

Email:

boontharika.th@up.ac.th

Languages

Thai
English

Experiences

2012 – Present
Lecturer (Physical chemistry);
Department of Chemistry, School
of Science, University of Phayao,
Thailand

Academic Position

Lecture in Chemistry

Education

- Doctor of Philosophy: Chemistry - 2013 Chiang Mai University, Thailand
- Master of Science: Chemistry - 2005 Chiang Mai University, Thailand
- Bachelor of Science: Chemistry - 2002 Chiang Mai University, Thailand

Specializations

- Polymer Synthesis and Characterization
- Biodegradable Polymers
- Biomedical Polymers

Scholarships

- 2006 – 2011 Ph.D. Scholarship supported by The Commission on Higher Education (CHE)
- 2006 – 2008 Ph.D. Scholarship supported by Center of Excellence for Innovation in Chemistry (PERCH-CIC), Chiang Mai University

Awards

- 2021 Best poster presentation awards in “Tin(II) n-hexoxide as a new initiator for the ring-opening polymerization of ϵ -caprolactone: Isoconversional kinetic analysis by non-isothermal DSC” at The 1st International Conference on Advanced Materials for Printed Electronics and Sensors (ICAMPS2020), E-Conference, Chiang Mai University, Chiang Mai, Thailand.
- 2018 Poster presentation awards in “Biodegradable plasticized blends to improve properties of poly(lactic acid)/poly(butylene adipate-co-terephthalate) from blend preparation to solvent casting: A comparative study between poly(ethylene glycol) and polyester adipate” at The 10th National Science Research Conference (src10), Mahasarakham University, Mahasarakham, Thailand.

Awards (continued)

- 2017 Poster presentation awards in “Preparation of poly(L-lactide)/poly(butyleneadipate-co-terephthalate) blend films using a solvent casting method and their properties testing”, นิทรรศการโครงการงานนิสิต ครั้งที่ 7, มหาวิทยาลัยพะเยา (รองชนะเลิศอันดับที่ 1).
- 2015 Poster presentation awards in “Urea released behavior and encapsulation of microcapsule with poly(Llactide)/poly(butylene succinate) by emulsion polymerization” at The 7th National Science Research Conference (SRC7), Naresuan University, Phitsanulok, Thailand.
- 2011 Oral presentation awards in “Effect of Porous 3-Dimensional Scaffolds of Poly(L-lactide-co-caprolactone) on the Biocompatibility of Mesenchymal Stem Cells” at The 7th International Congress for Innovation in Chemistry (PERCH-CIC Congress VII).

Research Project

- 2020 Polyester-releasing sesamin by electrospinning technique for the application of bone abnormalities. Funding agency: University of Phayao
- 2020 Adsorbable of methylene blue by activated carbon produced from coffee bean residue impregnated alginate beads. Funding agency: University of Phayao
- 2019 Preparation and characterization of electrospun nanofibers from poly(L-lactide-co-caprolactone) copolymer containing corn silk extract for wound dressing. Funding agency: National Research Council of Thailand (NRCT)
- 2019 Adsorption isotherm, kinetic and thermodynamic studies of alginate beads for methylene blue and methyl orange removal from water. Funding agency: University of Phayao
- 2018 Preparation, characterization and release of tetracycline from electrospun copolymer and polymer blend of poly(L-lactide)/poly(ϵ -caprolactone) for periodontitis treatment. Funding agency: University of Phayao
- 2015 Kinetic Study of the Ring-opening Polymerization of Some Cyclic Esters Using Tin(II) octoate and n-Hexanol as Initiator by Gravimetry. Funding agency: University of Phayao
- 2015 Synthesis of urea microcapsules encapsulated with Polymer blends and Homopolymer. Funding agency: University of Phayao

Publications

1. W. Punyodom, W. Limwanich, P. Meepowpan, **B. Thapsukhon***. Ring-Opening Polymerization of ϵ -Caprolactone Initiated by Tin(II) Octoate/*n*-Hexanol: DSC Isoconversional Kinetics Analysis and Polymer Synthesis. *Designed Monomers and Polymers*. 24(1), 89-97 (2021). <https://doi.org/10.1080/15685551.2021.1908657>
2. **B. Thapsukhon**, W. Limwanich, P. Meepowpan and W. Punyodom. Tin(II) *n*-Hexoxide as New Initiator for the Ring-Opening Polymerization of ϵ -Caprolactone: Isoconversional Kinetics Analysis by Non-Isothermal DSC. *Chiang Mai Journal of Science*. 48(2), 276–291 (2021).
3. D. Daranarong, **B. Thapsukhon**, N. S. Wanandy, R. Molloy, W. Punyodom and L. J. R. Foster. Application of low loading collagen in electrospun poly(L-lactide-co- ϵ -caprolactone) nanofibrous scaffolds to promote cellular biocompatibility. *Polymer International*. 63(7), 1254-1262 (2014).
4. **B. Thapsukhon**, D. Daranarong, P. Meepowpan, R. Molloy, K. Inthanon, W. Wongkham and W. Punyodom. Effect of Topology of Poly(L-lactide-co- ϵ -caprolactone) Scaffolds on the Response of Cultured Human Umbilical Cord Wharton's Jelly-derived Mesenchymal Stem Cells and Neuroblastoma Cell Lines. *Journal of Biomaterials Science, Polymer Edition*, 25(10), 1028-1044 (2014).
5. **B. Thapsukhon**, R. Molloy, P. Meepowpan, P. Supaphol and W. Punyodom. Effects of Copolymer Microstructure on the Properties of Electrospun Poly(L-lactide-co- ϵ -caprolactone) Absorbable Nerve Guide Tubes. *Journal of Applied Polymer Science*. 130, 4357-4366 (2013).
6. P. Piyakunakorn, B. Khumraksa, **B. Thapsukhon**, S. Rassameemasmaung, R. Molloy, K. Suchiva, W. Punyodom, Synthesis, processing and testing of A poly(DL-lactide-co- ϵ -caprolactone) resorbable electrospun membrane for guided tissue regeneration, *Adv. Mater. Res.*, 506, 110-113, (2012).

Research work presented in Conferences, Proceeding

- 2021 **Proceeding**, "Adsorbable of methylene blue by activated carbon produced from coffee bean residue impregnated alginate beads" at the National Conference on Phayao research conference 10, 25-28 January 2021, University of Phayao, Phayao, Thailand.
- 2021 **Poster (online)**, "Tin(II) *n*-Hexoxide as New Initiator for the Ring-Opening Polymerization of ϵ -Caprolactone: Isoconversional Kinetics Analysis by Non-Isothermal DSC" at the International Conference on The 1st International Conference on Advanced Materials for Printed Electronics and Sensors (iCAMPs2020), 10-11 September 2020, Faculty of Science, Chiang Mai University, Chiang Mai, Thailand.
- 2020 **Poster (online)**, "Investigation of tin(ii) octoate/*n*-hexanol (Sn(Oct)₂/*n*-hexanol) initiator for the ring-opening polymerization of ϵ -caprolactone by non-isothermal DSC: isoconversional kinetics analysis" at the International Conference on The 5th International Conference on Smart Materials and Nanotechnology (SmartMat@2020), 1-4 December 2020, Nongnooch Pattaya Garden and Resort, Thailand.

Research work presented in Conferences, Proceeding (Continued)

- 2018 **Proceeding**, "Effect of poly(l-lactide-co- ϵ -caprolactone) molecular weight on drug-loaded membranes prepared by electrospinning and film-casting for the treatment of periodontitis" at the International Conference on Advance and Applied Petroleum, Petrochemical and Polymer 2018 (ICAPPP 2018), Chulalongkorn Main Auditorium & Maha Chulalongkorn Building, Bangkok, Thailand.
- 2018 **Proceeding**, "Biodegradable plasticized blends to improve properties of poly(lactic acid)/poly(butylene adipate-co-terephthalate) from blend preparation to solvent casting: A comparative study between poly(ethylene glycol) and polyester adipate" at The 10th National Science Research Conference (src10), Mahasarakham University, Mahasarakham, Thailand.
- 2017 **Poster**, "Study of Drug Loading into Polyester Electrospun Nanofibers for Use in the Treatment of Periodontitis" at the 1st Materials Research Society of Thailand International Conference, Chiang Mai, Thailand.
- 2017 **Proceeding**, "Preparation of poly(L-lactide)/ poly(butylene adipate-co-terephthalate) blend films using a solvent casting method and their properties testing", นิทรรศการโครงการงานนิสิต ครั้งที่ 7, University of Phayao, Phayao, Thailand.
- 2016 **Proceeding**, "Synthesis of urea microcapsules encapsulated with Polymer blends and Homopolymer" at The 8th National Science Research Conference (src8), University of Phayao, Phayao, Thailand.
- 2016 **Proceeding**, "Release behaviour of urea microcapsules encapsulated with poly(L-lactide)/poly(butylene succinate)" at The 8th National Science Research Conference (src8), University of Phayao, Phayao, Thailand.
- 2014 **Poster**, "Synthesis and Electorspinning of Poly(L-lactide-co-glycolide) for Use as Nerve Guides" at the 2014 IUPAC World Polymer Congress (MACRO 2014), Chiang Mai, Thailand.
- 2015 **Proceeding**, "Urea released behavior and encapsulation of microcapsule with poly(Llactide)/poly(butylene succinate) by emulsion polymerization" at The 7th National Science Research Conference (src7), Naresuan University, Phitsanulok, Thailand.
- 2015 **Proceeding**, "Encapsulation of Urea Fertilizer with Poly(L-lactide) /poly(caprolactone) by Emulsion Polymerization" at The 7th National Science Research Conference (src7), Naresuan University, Phitsanulok, Thailand.
- 2015 **Poster**, "Polymer composite between Poly(L-lactide) and cellulose fibers from corn" at The 7th National Science Research Conference (src7), Naresuan University, Phitsanulok, Thailand.
- 2015 **Poster**, "Film composites between polyvinyl alcohol with carboxymethyl cellulose and cellulose fibers from corn" at The 7th National Science Research Conference (src7), Naresuan University, Phitsanulok, Thailand.
- 2015 **Poster**, "Polymer composite between Poly(L-lactide) and cellulose fibers from bamboo" at The 7th National Science Research Conference (src7), Naresuan University, Phitsanulok, Thailand.