

Asst. Prof. Dr. Sutthira Sutthasupa

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Education:

2003: B. Sc (Packaging technology) 1st class honour, Chiang Mai University, Thailand

2004: Research student (Monbukagakusho scholarship), Kyoto University, Japan

2007: M. Eng (Polymer Chemistry), Kyoto University, Japan

2010: PhD of Engineering (Polymer Chemistry), Kyoto University, Japan

Research Interests:

- : Design and synthesis of monomers and polymers base amino acids
- : Polymers characterization
- : Scaffolds and porous polymer
- : Macromolecular nanotechnology
- : Polymer chemistry and self-assembly; micelles for drug loading and controlled release
- : Biomaterials and composite materials

Current Research Projects

- : Brush-like copolymers based oligo(lactic acid) stereocomplex and amino acid functionalized polynorbornene: Synthesis, characterization, properties, and stimuli-responsiveness; Funding: Thailand Research Fund (TRF)
- : Production of humidifier and anti-anthraxose paper for “Nam dok mai” mango shelf life extension; Funding: TRF and NRCT

Publications

1. Sutthasupa, S.; Terada, K.; Sanda, F.; Masuda, T. "Ring-Opening Metathesis Polymerization of Amino Acid-Functionalize Norbornene Derivatives" *J. Polym. Sci., Part A: Polym. Chem.* **2006**, *44*, 5337–5343.
2. Sutthasupa, S.; Terada, K.; Sanda, F.; Masuda, T. "Ring-opening metathesis polymerization of amino acid-functionalized norbornene diester monomers" *Polymer* **2007**, *48*, 3026–3032.
3. Sutthasupa, S.; Sanda, F.; Masuda, T. Ring-Opening Metathesis Polymerization of Amino Acid-Functionalized Norbornene Diamide Monomers: Polymerization Behavior and Chiral Recognition Ability of the Polymers. *Macromol. Chem. Phys* **2008**, *209*, 930-937.

4. Sutthasupa, S.; Sanda, F.; Masuda, T. "Copolymerization of Amino Acid Functionalized Norbornene Monomers. Synthesis of Amphiphilic Block Copolymers Forming Reverse Micelles" *Macromolecules* **2008**, *41*, 305-311.
5. Sutthasupa, S.; Sanda, F.; Masuda, T. ROMP of Norbornene Monomers carrying Non-protected Amino Groups with Ruthenium Catalyst. *Macromolecules* **2009**, *42*, 1519–1525.
6. Sutthasupa, S.; Shiotsuki, M.; Masuda, T.; Sanda, F. Alternating Ring-Opening Metathesis Copolymerization of Amino Acid-Derived Norbornene Monomers Carrying Non-Protected Carboxy and Amino Groups Based on Acid–Base Interaction. *J. Am. Chem. Soc.* **2009**, *131*, 10546–10551.
7. Sutthasupa, S.; Shiotsuki, M.; Matsuoka, H.; Masuda, T.; Sanda, F. "Ring-Opening Metathesis Block Copolymerization of Amino Acid Functionalized Norbornene Monomers. Effects of solvent and pH on Micelle Formation" *Macromolecules* **2010**, *43*, 1815–1822.
8. Sutthasupa, S.; Shiotsuki, M.; Matsuoka, H.; Sanda, F. "Recent advances in ring-opening metathesis polymerization, and application to synthesis of functional materials" *Polymer Journal* **2010**, *42*, 905-915.
9. Sutthasupa, S*. Sanda, F.; Faungnawakij, K.; Meepowpan, P. "Synthesis and Copolymerization of Oligo(Lactic Acid) Derived Norbornene Macromonomers With Amino Acid Derived Norbornene Monomer: Formation of the 3D Macroporous Scaffold" *J. Polym. Sci., Part A: Polym. Chem.* **2015**, *53*, 1660–1670.
10. Jurmkwan Sangsuwan,* Titimon Pongsapakworawat, Peeraya Bangmo, Sutthira Sutthasupa. "Effect of chitosan beads incorporated with lavender or red thyme essential oils in inhibiting *Botrytis cinerea* and their application in strawberry packaging system" *LWT. Food. Sci. Tech.* **2016**, *74*, 14-20.
11. Sutthasupa, S.* Sanda, F.; "Synthesis of diblock copolymers of indomethacin/aspartic acid conjugated norbornenes and characterization of their self assembled nanostructures as drug carriers" *Eur. Polym. J.* **2016**, *85*, 211-224.
12. Sutthasupa, S.* Sanda, F.; "Macroporous scaffolds: Molecular brushes based on oligo(lactic acid)–amino acid–indomethacin conjugated poly(norbornene)s" *Eur. Polym. J.* **2018**, *98*, 162–171.
13. Sutthasupa, S.*; Faungnawakij, K.; Wagener, K. B.; Sanda, F. "Thermo-responsive micelles prepared from brush-like block copolymers of proline- and oligo(lactide)-functionalized norbornenes" *Polymer*. **2019**, *177*, 178–188.
14. Sangsuwan, J. Sutthasupa, S. * "Effect of chitosan and alginate beads incorporated with lavender, clove essential oils, and vanillin against *Botrytis cinerea* and their application in fresh table grapes packaging system" *Packag Technol Sci.* **2019**, *32*:595–605.

International Conferences (since 2011)

1. Sutthasupa, S. "Ring opening metathesis polymerization of amino acid functionalized norbornene monomers, and properties of the formed polymers" The Korea KU – Thailand CMU International Symposium: Future Frontiers in

Biotechnology, Food and Environmental Sciences, Korea University, Korea. July 1-2, 2013.

2. Sutthasupa, S. “Ring opening metathesis copolymerization of amino acid and oligo(lactic acid) functionalized norbornene monomers” Polymer synthesis symposium 2014, Kyoto, Japan. April 26, 2014.

3. Sutthasupa, S. Meepowpan, P., Faungnawakij, K. Ring opening metathesis copolymerization of amino acid and oligo(lactic acid) functionalized norbornene monomers. IUPAC World Polymer Congress (MACRO 2014), Chiang Mai, Thailand. July 2014.

Awards and scholarship

2014 The distinguished award of the PhD dissertation “Ring-Opening Metathesis Polymerization of Amino Acid Functionalized Norbornene Monomers, and Properties of the Formed Polymers” National Research Council of Thailand (NRCT), Bangkok, Thailand.

2017 ASEA UNINET 1 month staff exchange program, Graz University of Technology (TU Graz), Graz, Austria.

Other activity

June 2017 A visiting scholar, Department of Chemistry and Materials Engineering, Kansai University, Osaka, Japan.