

REFERENCES

- Aled, D.R., Li, X., and Zhang, H. (2014) Porous carbon spheres and monoliths: morphology control, pore size, tuning and their applications as Li-ion battery anode material. Chemical Society Review.
- Chaisuwan, T., Hatsuo, I., and Terek, A. (2011) Porous Material from Polybenzoxazine. In Hatsuo, I., and Terek, A. Handbook of Benzoxazine Resins. (pp 457-468), Amsterdam: Elsevier.
- Ghosh, N.N., Kiskan, B., and Yagci, Y. (2006) Polybenzoxazine New high performance thermosetting resins: Synthesis and Properties. Process in Polymer Science. 32(11), 1344-1391.
- Wu, D., Xu, F., Sun, B., Fu, R., He, H., and Matyjaszewski, K. (2012). Design and Preparation of Porous Polymers. Chemical Reviews. 112 (7), 3959–4015
- Ishida, H. (2011) Overview and Historical Background of Polybenzoxazine Research. In Hatsuo, I., and Terek, A. Handbook of Benzoxazine Resins. (pp 3-81), Amsterdam: Elsevier.
- Ishida, H. and Allen, D.J. (1996) Mechanical characterization of copolymers based on benzoxazine and epoxy. Polymer, 37(20), 4487-4495.
- Jin, J., Nishiyama, N., Egashira, Y., and Ueyama, K. (2009) Pore structure and pore size controls of ordered mesoporous carbons prepared from resocinol/formaldehyde/triblock polymer. Microporous and mesoporous materials, 118, 3758–3766.
- Katanyoota, P., Chaisuwan, T., Wongchaisuwat, A., and Wongkasemjit, S. (2010) Novel polybenzoxazine-based carbon aerogel electrode for supercapacitors. Materials Science and Engineering: B, 167(1), 36-42.
- Li, M. and Xue, M. (2012) Ordered mesoporous carbon nanoparticles with well-controlled morphologies from sphere to rod via a soft-template route. Journal of Colloid and Interface Science, 377, 169–175.
- Liang, C., Hong, K., Guiochon, G.A., Mays, J.W., and Dai, S. (2004) Synthesis of a Large-Scale Highly Ordered Porous Carbon Film by Self-Assembly of Block Copolymer. Angewandte Chemie International Edition 43(43), 5785-5789.

- Lorjai, P., Wongkasemjit, S., and Chaisuwan, T. (2009) Preparation of polybenzoxazine foam and its transformation to carbon foam. Materials Science and Engineering: A, 527(1–2), 77-84.
- Liu, J., Agag, T. and Ishida, H. (2011) Main-Chain Type Benzoxazine Oligomers: A New Concept for Easy Processable High Performance polybenzoxazines. In Hatsuo, I., and Terek, A. Handbook of Benzoxazine Resins. (pp 355-362), Amsterdam: Elsevier.
- Pekala, R.W. (1989) Organic aerogel from the polycondensation of resocinol with formaldehyde. Journal of Master Science, 24, 3221-3227.
- Saha, D.,Contescu, I.C., and Gallego, C.N. (2012) Bimodal mesoporous carbon synthesized from large organic precursor and amphiphilic tri-block copolymer by self-assembly. Materials Science and Technology, 155, 71-74.
- Su, Y.C., Chen, W.C., Ou, K.L., and Chang, F.C. (2005) Study of the morphologies and dielectric constants of nanoporous materials derived from benzoxazine-terminated poly(3-caprolactone)/polybenzoxazine co-polymer. Polymer, 46, 3758–3766.
- Takeichi,T., Kano, T., and Agag, T. (2005) Synthesis and thermal cure of high molecular weight polybenzoxazine precursors and the properties of the thermosets. Polymer, 46(26), 12172-12180.
- Tao, S., Zhu, Z., Meng, C., and Wang, C. (2013) Preparation and morphology control of magnetic mesoporous silica via metalorganic amphiphiles self-assembly. Microporous and mesoporous materials, 171, 94-102
- Wilgosz, K., Chen, W., Kierzek, K., Machnikowski, J., Kalenczuk, J.R., and Mijowska, E. (2012) Template method synthesis of mesoporous carbon spheres and its applications as supercapacitors. Nanoscale Research Letters, 7, 269.
- Xia, Y., Yang, Z., and Mokaya, R. (2010) Template nanoscale porous carbons. Nanoscale, 2(5), 639-659.
- Xing, Y., Fang, B., Bonakdarpour, A., Zhang, S., and Wilkinson P.D. Facile fabrication of mesoporous carbon nanofibers with unique hierarchical

- nanoarchitecture for electrochemical hydrogen storage. (2014) International Journal of Hydrogen Energy, 39, 7859–7867.
- Fu, C., Zhao, G., Zhang, H., and Li, S. (2013) Evaluation and characterization of reduced graphene oxide nanosheets as anode materials for lithium-ion batteries. International Journal Electrochemical Science, 8, 6269 – 6280.
- Nam, G., Choi, S., Byun, H., Rhym, Y., And Shim, E., S. (2013) Preparation of macroporous carbon foams using a polyurethane foam template replica method without curing step. Macromolecular Research, 21(9), 958-964.
- Thubsuang, U., Chaisuwan, T., Wongkasemjit, S., and Ishida, H. (2014) Self-formation of 3D interconnected macroporous carbon xerogels derived from polybenzoxazine by selective solvent during the sol–gel process. Journal of Masterial Science, 49, 4946–4961.
- Jung, S. and Kim, J. (2014) Production of biochars by intermediate pyrolysis and activated carbons from oak by three activation methods using CO₂. Journal of Analytical and Applied Pyrolysis, 107, 116–122.
- Denga, S., Weia, H., Chena, T., Wanga, B., Huanga, J., and Gang, Y. (2014) CO₂ adsorption on pine nut shell-derived activated carbons and the effective micropores at different temperatures. Chemical Engineering Journal, 253, 46–54.
- Wang, X., Wang, X., Liu, L., Bai, L., An, H., Zheng, L., and Yi, L. (2011) Preparation and characterization of carbon aerogel microspheres by an inverse emulsion polymerization. Journal of Non-Crystalline Solids, 357, 793–797.
- Hildebrand, H.J. and Scott, L.R. (1949) The Solubility of Non-electrolytes, 3rd ed. New York: Dover.
- Gregg, J.S. and Sing, W.S.K. (1982) Adsorption. Surface Area and Porosity, 2nd ed. , London: Academic Press.
- Sakka, S. (2013). Sol–Gel Process and Applications. In Somiya, S. Handbook of Advance Ceramics. (pp 883-910) Tokyo: Elsevier.

- Balacha, J., Tamborinia, L., Sapagb, K., Acevedoa, F.D. and Barbero A.C. (2012) Facile preparation of hierarchical porous carbons with tailored pore size obtained using a cationic polyelectrolyte as a soft template. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 415, 343-348
- Hauchhum, L. and MahantaInt, P. (2014) Carbon dioxide adsorption on zeolites and activated carbon by pressure swing adsorption in a fixed bed. International Journal of Energy and Environmental Engineering, 5, 349-356

CURRICULUM VITAE

Name: Ms. Pornpichaya Thawepornpuriphong

Date of Birth: October 1, 1990

Nationality: Thai

University Education:

2009–2012 Bachelor Degree of Chemistry, Faculty of Science,
Chulalongkorn University, Bangkok, Thailand

Proceedings:

1. Thawepornpuriphong, T.; Ksapabutr, B.; Wongkasemjit, S.; and Chaisuwan T. (2015, April 21) Morphological Design of Polybenzoxazine by Soft Templating Method. Poster presentation at the 6th National Research Symposium on Petrochemical and Materials Technology and the 21st PPC Symposium on Petroleum, Petrochemical and Polymer, Bangkok, Thailand

Presentations:

1. Thawepornpuriphong, T.; Ksapabutr, B.; Wongkasemjit, S.; and Chaisuwan T. (2014, November 22-25) Study of morphologically-designed polybenzoxazine as electrode material for supercapacitor by using soft-templating method. Poster presentation at The 2014 Energy Materials Nanotechnology (EMN) Fall Meeting, Orlando, FL, USA.

2. Thawepornpuriphong, T.; Ksapabutr, B.; Wongkasemjit, S.; and Chaisuwan T. (2015, April 21) Morphological Design of Polybenzoxazine by Soft Templating Method. Poster presentation at The 6th National Research Symposium on Petrochemical and Materials Technology and the 21st PPC Symposium on Petroleum, Petrochemical and Polymer, Bangkok, Thailand.