

Abstract Submitted
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Production of Polymer Core-Shell Colloids with High Uniformity via Coaxial Electropray YOON KYUN HWANG, UNYONG JEONG, Department of Materials Science and Engineering, Yonsei University, Seoul — Although nanofibers fabricated by electrospinning have been attracting wide interest, the production of colloids by electro spraying has not much studied so far. We have developed a simple method for the production of core-shell colloids with high uniformity by means of the coaxial electro spray. Contrary to usual coaxial setup, the inner nozzle was set to touch the inside wall of the outer nozzle for reproducible production. A polymer solution for the core was introduced through the outer nozzle and another solution for the shell was provided through the inner nozzle. The structure of the colloids was dependent on the polymer concentration, relative feed ratio between the polymer solutions. Especially, core-shell structured colloids are our primary interest due to their promising uses in drug-delivery systems, cosmetics, and food industries. This talk will present the production of core-shell colloids consisting of two polymer components.

Yoon Kyun Hwang
Department of Materials Science and Engineering, Yonsei University, Seoul

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