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Position Control of Particles embedded in Microbeads and Fibers Produced by Electrohydrodynamics.[1] UNYONG JEONG, EUN MIN JO, SUNGWON LEE, KYU TAE KIM, Department of Material Science and Engineering, Yonsei University, Seoul, Korea — Electrohydrodynamics is a good approach to produce uniform-sized colloids and fibers in a continuous process. The dimension can be controlled from tens of nanometers to a few micrometers. The structure of the colloids and nanofibers from electrohydrodynamics has been diversified according to the uses. Especially, core-shell structure and hybridization with functional nanomaterials are fascinating due to their possible uses in drug-delivery systems, multifunctional scaffolds, organic/inorganic hybrids with new functions, and highly sensitive gas- or bio-sensors. This talk will present the structural variations by tuning the position of small particles in the colloids and fibers produced from electrohydrodynamics and demonstrate their possible applications.

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