Physics in Drying of Polymer Solutions

(Keynote Talk #2)

Masao Doi*

Center of Soft Matter Physics and Its Applications, Beihang University, China

***Email of Presenting Author: masao.doi@buaa.edu.cn**

When a droplet of polymer solution placed on a substrate is dried up, it leaves a polymer film on the substrate. This process is important in the inkjet-printing and other related technologies. Though the drying phenomena are seen in our daily life, the process involves many challenging problems in soft matter physics such as convective diffusion of polymer in the droplet, pinning of contact line, skin formation and the buckling. In this talk, I will describe experimental and theoretical results of our study for these phenomena focusing on the skin formation and its effect on the final shape of polymer film.

References:

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