On the Statistics of Ultrasonically Produced Water Droplets

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We have developed a robust and efficient ultrasound liquid sprayer working at forty kilohertz. In the course of realizing the project of finding new ways in tobacco aromatization processes we met the problem of (approximate) analytical expressions of probability density functions for droplet sizes in various aerosols. This paper reports at what results we have arrived in that realm. Corresponding graphics of propability functions are presented.

Key words: Ultrasound Atomizer; Water Aerosol; Probability Function.