



## Correlation between the Physical Characteristics of Aqueous PVA Solutions and the Average Diameter of Electrospun Nanofibers

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**SUMMARY.** Optimization of physical characteristics influencing the formation of electrospun poly(vinyl alcohol) (PVA) fibers designed for drug delivery system was performed. The viscosity and dynamic surface tension of solutions of PVA with different molecular weight were compared. The best circumstances for forming nanofibers, optimal for rapid drug release, were determined. The function between the studied physical features and the average nanofiber diameter was expressed mathematically in order to promote the design of nanofiber type drug delivery systems.

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**KEY WORDS:** Average diameter of nanofibers, Dynamic surface tension, Electrospinning of PVA, Nanofibers, Viscosity.

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