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### 8-Anilino-1-naphthalenesulfonate (ANS) as a probe for Poly(vinyl alcohol)(PVA) swelling

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**Abstract** : Poly (vinyl alcohol) (PVA) is a hydrophilic polymer developed for biomedical applications. Swelling properties of PVA gels is very important for its drug delivery applications. There are many ways to study the swelling behaviour. Here we are proposing a fluorescent study by using 8-anilino-1-naphthalenesulfonate (ANS) as an extrinsic fluorescent probe. When ANS incorporated PVA films are allowed to swell in water, there is a loss of fluorescence intensity at 453 nm and there is a new peak at 500 nm. Thus, ANS is proposed as a fluorescent probe for the sensing of hydration of PVA.

**Keywords** : Fluorescence Spectroscopy, film, Poly (vinyl alcohol), ANS, Life time, Steady state fluorescence anisotropy.

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