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Participation of Oxygen in Photodegradation of Methyl Orange in Micellar Solution.

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It has been observed that oxygen participates in the photodegradation of methyl orange in aqueous micellar solutions. The specific superoxide ion scavenger, superoxide dismutase, is not concerned in the reaction. The replacement of H<sub>2</sub>O by D<sub>2</sub>O results in a tenfold acceleration in the reaction rate. It is concluded that the singlet oxygen generated by the photosensitizer, tetraphenyl porphyrin, has an important role in the reaction.

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The Influence of Three Poly(oxyethylene)poly (oxypropylene)
Surface-active Block Copolymers on the Solubility Behavior of
Indomethacin

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The solubility of indomethacin in aqueous solutions of surface-active Pluronic F-68, F-88, and F-108 were studied. The effects of concentration and temperature on solubility were investigated. The apparent solubility of indomethacin increased with the increase of the concentrations of surfactants and with temperature. The solubilizing capacity and apparent distribution coefficient (Km) between micellar and aqueous phase were calculated. Km values increased with temperature and types of Pluronics (F-68<F-88<E-108). A transition point was observed at which concentration was gradually reduced in the order of E-68>F-88>F-108 with a rise in temperature.

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Preparations of Agglomerated Crystals of Polymorphic Mixtures and a New Complex of Indomethacin-Epirizole by the Spherical Crystallization Technique.

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Agglomerated crystals of indomethacin and epirizole were prepared by the spherical crystallization technique. The solvent used was ethanol-water-chloroform, ethyl acetate-water, or ethyl acetate-aqueous sodium chloride. From the ethanol-chloroform-water system, we obtained agglomerated crystals of a polymorphic mixture of the p form of indomethacin (original form,  $\gamma$ ) and amorphous epirizole.