## RECENT DEVELOPMENT IN THE USE OF CURCUMIN AS A POTENTIAL DRUG

## H.H.Tonnesen and J. Karlsen

Department of Pharmaceutics Institute of Pharmacy, University of Oslo P. 0. Box 1068 Blindern 0376 Oslo, Norway.



he rhizomes of the plant *Curcuma longa* L have been used for more than 2000 years in the treatment of rheumatic symptoms. The pharmacological activity has been attributed to curcumin and the curcuminoids present in the plant material. The chemistry, stability, photochemical properties and analysis of curcumin have previously been investigated.

A broad spectrum of biological activity is ascribed to curcumin. Screening of curcumin in various test systems have been carried out, and effects on cell systems, enzymes, etc. are documented. Curcumin has recently been discussed as a potential drug or drug model in the treatment of broad spectrum of disease, e.g. cancer, HIV infections, thalassemia, and psoriasis. Curcumin seems to play an important role in red-ox and radical reactions, and the various mechanism of action under investigation.

The lecture will discuss the recent development in the use of curcumin as a potential drug or drug model with emphasis on antioxidant effects. The distance from a naturally occurring compound with some postulated pharmacological effects to a modern drug is long, and the possibilities for the use of curcumin as a drug compound will be valuated with respect to pharmacological, toxicological and chemical properties.

INTERNATIONAL SYMPOSIUM ON CURCUMIN PHARMACOCHEMISTRY (ISCP)

10