

EXPERIMENTS IN FLOW OF FLUIDS IN UNSTEADY STATE

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ABSTRACT

The authors are professors of Chemical Engineering in the Faculty of Chemistry at the Universidad Nacional Autónoma de México (UNAM) and work in the so called Laboratory of Unit Operations. In this laboratory the students of the Chemical Engineering take practical courses in which they apply what they have learn in the theoretical courses. The experimental teaching is very important in the significant learning of the students of engineering. It foments the interactivity and the participation of the students, propitiating that they acquire knowledge, dexterities, habits and attitudes. In this work an experiment of flow of fluids is presented by means of which the students could acquire the significant learning when facing a classic experiment. Among the practical exercises with apparatus and equipments, the authors are interested in the field of unsteady state in fluid flow. This kind of flow is present, for example in the discharge of tanks. In this article we present some experiments that the students perform and which can be controlled automatically and related to the theoretical models.

KEYWORDS: Experimentation, Unsteady State, Flow of Fluids, Control