

# Hydrocyclones '96

**Editors:**  
D Claxton,  
L Svarovsky,  
and M Thew



## Table of Contents

Generic: a critical review of hydrocyclone models; computer-aided design of hydrocyclone networks; simulation of washing with hydrocyclone networks; the influence of swirl and turbulence anisotropy on CFD modelling for hydrocyclones; a phenomenological model of a hydrocyclone; a comprehensive CFD model for particle-size classification in industrial hydrocyclones; an analytical model for the prediction of solid-liquid hydrocyclone performance. Biological: the effect of viscosity on the recovery and concentration of micro-organisms using minihydrocyclones; separation of yeast with hydrocyclones; an assessment of hydrocyclones for recycling Kieselguhr used filters in the brewing industry; removal of suspended particles by hydrocyclones in apple juice processing. Theoretical: calculation of energy efficiency of a cyclone overflow tube; interdependence between hydrocyclone efficiency and material used for its construction; progress in modelling the dense medium cyclone; use of impedance tomography for control of a dewatering hydrocyclone; air core modelling for an industrial hydrocyclone; on-line measurement of hydrocyclone performance using acoustic emission. Minerals: the effect of high concentration on the performance of a hydrocyclone with fine particle feeds; design of hydrocyclones for primary classification in an alumina batch precipitation circuit; the performance of inclined hydrocyclones in mineral processing; effect of generic demulsifiers on removing water droplets from oil in a hydrocyclone; the hydrocyclone in the process of water conditioning for heat engineering; removal of swarf from machine tool cutting fluid in hydrocyclones. Oil and gas: Hydrocyclones on forties; a theoretical-experimental method for analysis of hydrocyclones for treating oily waters; drop size distributions in de-watering type hydrocyclones; a study of the effect of dissolved gas on the operation of liquid-liquid hydrocyclones; application of hydrocyclones for treating produced fluids in heavy oil recovery; theoretical analysis of oily water hydrocyclones; analysis of gas carry-under in gas-liquid cylindrical cyclones; downhole application of liquid-liquid hydrocyclones.