

## **MANAGING ORGANIC POLYMERS IN THE MECHANICAL DEWATERING OF SLUDGES**

**E. N. PAPAVALOPOULOS and P.G. MARKANTONATOS**

'P.Markantonatos – E.Papavasiloopoulos *partnership*'  
HYDRAULIC AND ENVIRONMENTAL CONSULTING ENGINEERS  
15 Pontoherakleias St., Athens, 115 27, Greece

### **ABSTRACT**

In the context of sludge management, effective dewatering appears to be very important in order to minimize the volume of sludge that is to be further treated (e.g. thermal drying or incineration) and/or disposed of (e.g. transportation, landfilling). Sludges arising from water and wastewater treatment works are 'difficult' to dewater and require separate treatment termed *conditioning*, which normally involves the addition of organic polymers. The process of conditioning can represent up to 40-50% of capital and running costs of most sludge management schemes, thus it is important to monitor the use of conditioning reagents carefully and efficiently in order to exploit their potential in water release and sludge volume reduction during mechanical dewatering.