

Préparation des membranes à base des matériaux polymères et inorganiques

Abstract

The study of this thesis focuses on preparation of composite membranes by two different materials: polymer and inorganic, using the phase inversion method. Two types of membrane are synthesized; the first based on a single PVDF polymer material and an inorganic material SiO₂, and second based on PVDF and two inorganic materials SiO₂ and ZnO. This study is done with the aim of studying the effect of the addition of different materials on the morphological structure of PVDF and the hydrophobicity of the synthesized membranes, using a microscope and the contact angle method, as well as the spectroscopic methods DRX and FTIR for the study of the reactivity between the different materials.

Key words: membranes, composite, materials polymer, materials inorganic, FTIR, DRX.