

In this issue

Subrata Mondal

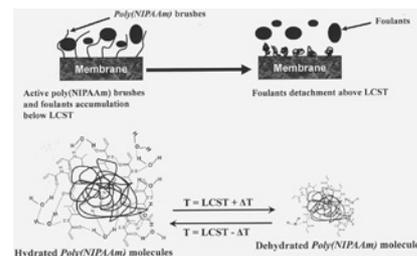
Polymeric membranes for produced water treatment: an overview of fouling behavior and its control

DOI 10.1515/revce-2015-0027

Rev Chem Eng 2016; 32(6): 611–628

Review: A membrane surface grafted with temperature-responsive polymer, viz. poly(N-isopropylacrylamide) [poly(NIPAAm)], can control fouling by changing the hydrophilicity/hydrophobicity of the surface depending on the solution temperature.

Keywords: fouling; polymeric membrane; produced water; responsive polymer brushes; surface modification; surface morphology.



Hazwani Suhaimi and Diganta Bhusan Das

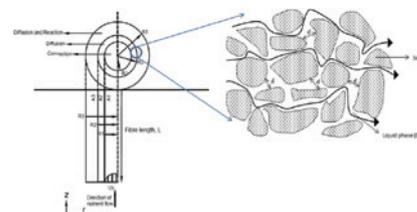
Glucose diffusion in tissue engineering membranes and scaffolds

DOI 10.1515/revce-2015-0021

Rev Chem Eng 2016; 32(6): 629–650

Review: The paper reviews four interconnected issues, namely, (i) the glucose diffusion in tissue engineering scaffold and membranes, (ii) porosity and tortuosity of these materials, (iii) the relationship between microstructure of the material and diffusion, and (iv) estimation of glucose diffusivities in liquids, which determine the effective diffusivities in the membranes or scaffolds.

Keywords: diffusion; glucose; membrane; scaffold; tissue engineering.



Pranav D. Pathak, Sachin A.

Valorization of banana peel: a biorefinery approach

DOI 10.1515/revce-2015-0063

Rev Chem Eng 2016; 32(6): 651–666

Review: Banana peel (BP) has a wide variety of applications; developing a biorefinery approach to adequately utilize BP will help realize its economic benefits.

Keywords: banana peel; bioactive compounds; biorefinery; material balance; valorization.

