Reverse Osmosis: Membrane Technology, Water Chemistry And Industrial Applications

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Reverse Osmosis Product Technology. Reverse osmosis uses a semi-permeable membrane to remove minerals and dissolved solids from water. RO can normally be considered economically attractive on water chemistries with 250ppm ≤ TDS ≤ 2000ppm. Between 150 - 250ppm TDS, local economical considerations and water chemistry will determine whether RO is a viable option. Normally on waters with TDS < 150ppm, ion exchange without RO is feasible for TDS reduction. A single pass reverse osmosis system typically removes 97% of the total dissolved solids (TDS) and 95% of naturally occurring organics. The wa... 17th International Conference on Industrial Chemistry and Water Treatment May 21-22, 2018 New York, USA. Recommended Global Chemistry Conferences. USA & Americas. Osmosis is a natural phenomenon in which a solvent (usually water) passes through a semipermeable barrier from the side with lower solute concentration to the higher solute concentration side. To reverse the flow of water (solvent), a pressure difference greater than the osmotic pressure difference is applied as a result, separation of water from the solution occurs as pure water flows from the high concentration side to the low concentration side. Related Conference of Membrane Technology-Nano Filtration and Reverse Osmosis. chemistry meetings 2019. orthopaedics annual 2019.