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## Synthesis and characterization of modified (PVA) membranes

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This work dealt with synthesis and characterization of modified polyvinyl membrane cross-linked on polyester fabric by using three different aldehyde solutions namely: formaldehyde, acetaldehyde and glutaraldehyde. Scanning electron microscope and transition microscope were used to study the surface morphology of the produced membranes and to follow membrane structure changes due to changing cross-linking agents. The obtained results showed that optimum conditions of aldehyde cross-linking concentrations of the membranes are those prepared by using 10% formaldehyde with 1.5% glutaraldehyde. These conditions gave the prepared membranes excellent mechanical properties and also good results in the filtration of waste water containing high amounts of organic matter and some elements.

### Biography

F M Tera is an Emeritus Professor at the Textile Metrology Department. She has achieved many grants and medals for her work. She has published more than 120 scientific papers. She is holding a patent for invention a Light Fastness Tester that measures fastness to light of any colored materials.

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