

105d Anti-Fouling Membranes for Water Treatment

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Fouling of the membranes used in water treatment has been a serious problem. To overcome this problem, a variety of modifications of membrane surface and formulations may be used. The major methods of membrane surface modification are increasing hydrophilicity, imparting surface charges, reducing roughness of membrane surface, and formulation of biomimetic surfaces. In addition, the formulation of the top layer of a membrane may be modified chemically to impart the anti-fouling characteristics to the membrane.

The effectiveness of these methods will be described together with our research results. The future directions of research in this area will be discussed.