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**Organic micropollutants removal in sequential batch reactor followed by
nanofiltration from municipal wastewater treatment**

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Abstract: The removal of 26 organic micropollutants (OMPs) in synthetic municipal wastewater was investigated via the process of aerobic sequential batch reactor (SBR) alone and SBR followed by nanofiltration (NF). SBR-NF performed better than SBR alone, ascribed to the contribution of NF: 1) complete biomass rejection resulted in diverse microbial community and much less fluctuated performance than SBR alone, and 2) direct OMPs rejection (74-98%) increased their retention time in SBR and thus overall removal via biodegradation/transformation and accumulation in SBR. Nine OMPs showed high biological removal (over 60%), 6 OMPs showed moderate biological removal (30-70%) and 10 OMPs showed low biological removal (below 40%). Most readily and moderately biodegradable OMPs contained strong electron donating group. Most refractory OMPs contained strong electron withdrawing group

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