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SEQUENTIAL INJECTION ANALYSIS METHODOLOGIES APPLIED TO MONITORING WATER QUALITY FROM A CONSTRUCTED WETLAND AND A POND

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Water quality, considering its different origins, raises as an important issue in terms of public health and environmental concern. When addressing wastewater quality for further treatment or discharge, the means of evaluate and analyze its composition are required to be expeditious, reliable and most of time enable a real time determination. Flow analysis techniques, namely sequential injection analysis (SIA), fulfill those requirements, being thus a highly effective monitoring tool.

In the present study a SIA system was used for the multiparametric determination of NO_x, NH_x and PO_4^{3-} (with the same manifold) in water samples coming from the inlet and outlet of a constructed wetland for domestic wastewater treatment, and from a pond where the water was forward after the previous handling. This way the performance and state of the systems concerning those compounds was evaluated, allowing to have real time and reliable data.

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