

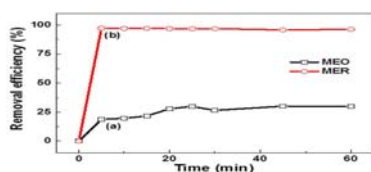
## Mediated electrochemical oxidation and reduction for enhanced removal of NO in an electro-scrubbing

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Enhanced removal of NO was identified by combining the MER (mediated electrochemical reduction) and MEO (mediated electrochemical oxidation). As shown in below figure, the combination of MEO and MER with electro-scrubbing demonstrates NO removal by 28% oxidation and 70 % by reduction at a high gas flow rate of 4 L min<sup>-1</sup> confirms enhanced removal of NO. During optimization, ORP and potentiometric titration was used to identify mediator (Ni(I) from Ni(II)(CN)<sub>4</sub><sup>2-</sup> in 9 M KOH) concentration. Also, product analysis for oxidation and reduction were investigated using online FTIR, solution FTIR, and HACH analysis to be presented and discussed.



Key words: Combined process, MEO, MER, electro-scrubbing, NO gas.