S2.5.2 ENRICHING SO2 AND NO IN FLUE GAS USING MEMBRANES

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In this talk the speaker will present a review of traditional flue gas treatment technologies, membrane based flue gas separation technologies, and potential membrane materials used for SO2 and NO pre-enrichment in flue gas. The motivation is that large amount of absorbents and low reaction speed can be attributed to low concentrations of SO2 and NO in flue gas. It is proposed here to enrich SO2 and NO by membranes to reduce consumption and regeneration costs of the absorbents. It is expected that the low costs of polymer membrane materials make the technology a strong candidate for enrichment of SO2 and NO in flue gas. The process has already been applied in methane/carbon dioxide separation for natural gases. However, much less work focused on flue gas separation, especially NO.