

PP9 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.