

第218回講演会
【開催:2022年8月31日(木)】

主催 中国地区化学工学懇話会, 化学工学会分離プロセス部会膜工学分科会

下記の要領で講演会を開催します。多数の方のご参加を頂きますようお願い致します。

記

日時: 2022年8月31日(水) 11:30~12:30

場所: 広島大学工学部A4棟大学院生講義室 A4-112

交通: 山陽本線西条駅下車、バス15分、大学会館前下車

山陽新幹線東広島駅下車、タクシー10分

広島バスセンターから直行バス約1時間、大学会館前下車

講演: Pre-combustion CO₂ Capture with Membrane Separation

講師: Dr. Lie Meng

Research Institute of Innovative Technology for the Earth (RITE), Japan

講演内容:

To realize a carbon-neutral, decarbonized society, efforts should be made to the capture of CO₂ from sources such as the electricity production burning fossil fuels. Compared with traditional coal-fired power plants, the Integrated Gasification Combined Cycle (IGCC) offers improved thermodynamic efficiency and allows for capturing concentrated and pressurized CO₂ before combustion. Membrane separation technology has the potential to be applied to carbon capture process in power plants as it is less energy-intensive and environmentally friendly, and it has been commercially used for gas purification. This talk covers some recent advances in pre-combustion CO₂ capture using CO₂-selective membranes (including ceramic-carbonate dual-phase membranes and facilitated transport membranes) and hydrogen-selective membranes (e.g., zeolite membranes). The unique properties of ultra-selective and highly permeable membranes could offer a CO₂ capture ratio >95% and CO₂ purity >95%, which increases the competitiveness of membrane separation technology in pre-combustion carbon capture.

参加費: 無料

申込先: FAX または電子メールでお申し込み下さい。

中国地区化学工学懇話会

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