第196回講演会
【開催：2017年4月6日（木）】

主催 中国地区化学工学懇話会，化学工学会膜工学分科会

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：2017年4月6日（木）16：30～18：00
場 所：広島大学工学部 117講義室
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：Wet Deposition of Inorganic Nanoporous Thin Films and Membranes

講 師：Dr. Dun-Yen Kang
Department of Chemical Engineering, National Taiwan University, Taiwan

講演内容：
Our research group is aimed at developing wet deposition technology for preparing thin films and membranes composed of inorganic nanoporous materials. These materials involve ceramic nanotubes, zeolites, and metal-organic frameworks (MOFs). This talk covers three topics of our very latest work. The first topic is about the fabrication and application of ceramic nanotubes, more precisely, aluminosilicate/aluminogermanate nanotubes. The synthesis and intrinsic mechanical properties of these nanotubes are introduced. We investigate how the dimensions and surface properties affect the wet deposition of thin films composed of these nanotubes. We discuss the application of ceramic nanotube thin films as low-*k* dielectrics. The second topic is about the direct deposition of zeolite thin films and membranes. We discuss how to prepare stabilized zeolite suspensions, and how to use these suspensions to cast zeolite thin films/membranes on various types of substrates. In addition, we introduce a unique surfactant-mediated approach for creating hierarchical structure within zeolite thin films. The third topic is about MOF thin films and membranes. We introduce a general approach to synthesize MOFs with a small crystal size. MOFs in small crystals can be used prepare cast solutions for spin coating or dip coating. Depending on the materials, MOF membranes may be fabricated directly from the wet deposition. For some cases, the wet deposition yield a good seed layer, and the MOF membranes are synthesized using secondary growth.

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
TEL 082-424-7718，FAX 082-424-5494，E-mail：ysasa@hiroshima-u.ac.jp