

第225回講演会
【開催：2024年1月29日（月）】

主催 中国地区化学工学懇話会

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：2024年1月29日（月）13:30～14:30

場所：広島大学工学部B4棟117講義室

交通：山陽本線西条駅下車、バス15分、大学会館6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：Smart Soft Materials with Multiscale Architecture and Dynamic Surface Topographies

講師：Prof. Luyi Sun

Polymer Program, Institute of Materials Science and Department of Chemical & Biomolecular Engineering, University of Connecticut

講演内容：Smart soft materials have one or more characteristics that can be significantly altered in convertible fashions by external stimuli, such as light, moisture, mechanical force, temperature, electric/magnetic fields, pH, and so on. Inspired by the fascinating visual display strategies and adaptive mechanisms in animals and plants, we have fabricated a series of smart soft material-based devices that can respond to external stimuli with instantaneous and reversible fashions in optical, electrical, mechanical, and/or shape deformation signals. These devices can be fabricated for widespread applications, including smart windows, encryption devices, thermal camouflage, wearable strain sensors, anticounterfeit tabs, 3D stretchable electronics, dynamic displays, rewritable media, human-machine interfaces, and so on. The key to successfully achieving those intriguing characteristics in these smart material systems lies in the function-orientated structural design, which integrates bioinspired design and surface engineering with multiscale architecture as the crucial elements. This talk will present a summary of our recent work on bioinspired smart soft materials. These materials are characterized by convertible topographies like dynamic cracks, folds, stimuli-responsive wrinkles, and other analogous structures. These systems demonstrate high design flexibility, excellent reversibility, and wide applicability, which can pave new routes for designing next-generation smart soft materials equipped with versatile, tunable, adaptable, and interactive stimuli-responsive properties

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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