

第188回講演会

【開催：平成27年2月6日（金）】

International Symposium on innovative environmental technology - air clarification and solid waste management-

主催：広島大学環境安全センター
共催：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：平成27年2月6日（金） 17:00～18:00

場所：広島大学「環境安全センター」会議室（不案内な方には、申込時に詳細をご案内します）

交通：山陽本線西条駅下車、バス15分、大学会館前下車-徒歩5分
山陽新幹線東広島駅下車、タクシー約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-徒歩5分

参加費：無料

プログラム：

Presentation 1； 17:00 – 17:30

"Comparative disinfection efficiency of Cu-TiO₂/glass fiber and Ag-TiO₂/glass photocatalysts to bioaerosol removal under visible light"

Byeong-Kyu Lee(ウルサン大学 (韓国) Professor)

講演内容：

Cu doped TiO₂/glass fiber and Ag doped TiO₂/glass fiber photocatalysts were prepared by sol-gel method. The prepared photocatalysts were characterized by using a scanning electron microscope (SEM) for morphology, an X-ray diffraction (XRD) for microstructure, an X-ray photoelectron spectroscopy (XPS) for elemental states and an UV-Vis absorption spectra for light adsorption ability. The Cu-TiO₂/glass fiber and Ag-TiO₂/glass fiber photocatalysts were applied to disinfect E. coli in aerosol using visible light as excited source. The E. coli disinfection efficiency of Cu-TiO₂/glass fiber and Ag-TiO₂/glass fiber were 87.67 and 94.21 %, respectively. The mechanism is also introduced at the presentation.



Presentation 2； 17:30 – 18:00

"Zero waste emissions from ASR and ESR: Separation of plastics/metals and decontamination of hazardous waste residue"

Dr. Srinivasa Reddy Mallampati(ウルサン大学 (韓国) Assistant Professor)

講演内容：

Basic information about automobile shredder residue (ASR) and E-waste shredder residue (ESR) will be lectured. Some ongoing researches in our laboratory in the field of Polyvinylchloride (PVC) and Brominated flame retardant (BFR) plastics separation methods will be introduced mainly on microwave/flame assisted treatment for the selective wetting and separation of PVC and BFR by froth flotation. Physical modification techniques with microwave/flame treatment provide potential alternative methods for selectively wetting plastic surfaces. Behavior of metals and rubber in froth flotation will also be considered. Finally, treatment methods for hazardous heavy metals and POPs in ASR shredder dust (soil/sand)/thermal residues by mechanochemical /immobilization treatment with novel nano-size calcium dispersed reagent will also be addressed.



申込先：FAX または電子メールで以下にお申し込み下さい。

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