[TS12F7]

Nanomaterials and Emerging Technologies for CCU (NET-CCU) 3

Date & Time	July 10(Fri.), 2026 / 14:00–15:30
Place	Room 209A
Session Chair(s)	Prof. Kyoungsuk Jin (Korea University)

TS12F7_O_1 14:00–14:15

Unexpected Presence of Alkali Metal Cation Impurities Stabilizing Cu+ in Oxide-Derived Cu for CO_2 Electrolysis

Haesol Kim[1], Seunghoon Lee[1], Jihoon Son[2], Hansol Choi[1], Junsic Cho[1], Baptiste Gault[3,4], Won-Hyoung Lee[5], Benedikt Paul Klein[6], Cheolho Jeon[6], Joonhee Moon[6], Da Hye Won[7,8], Dae-Hyun Nam[5], Gyeongwon Kang[9], Hyeyoung Shin[2], Se-Ho Kim[3,5], and Chang Hyuck Choi[1]

([1]Pohang University of Science and Technology, [2]Chungnam National University, [3]Max Planck Institute for Sustainable Materials, [4]University of Rouen Normandy, [5]Korea University, [6]Korea Basic Science Institute, [7]Korea Institute of Science and Technology, [8]UST-KIST School, 9Kangwon National University)

TS12F7_O_2 ***YSA Applied** 14:15–14:30

Correlating Phase Evolution and Optical Properties of Tin-Based Metal Organic Framework Towards Reduction of CO_2 Using Visible Light

Shovan Samanta and Surendra Babu Anantharaman

(Indian Institute of Technology Madras)

TS12F7_O_3 ***YSA Applied** 14:30–14:45

Side Chain Engineering of Anion-Exchange Ionomers for Selective CO_2 Electroreduction to CO

Jihyun Park, Younghyun Chae, Da Hye Won, and Jai Hyun Koh

(Korea Institute of Science and Technology)

TS12F7_O_4 ***YSA Applied** 14:45–15:00

Influence of Cationic Charge Density in Ionomers on Interfacial Water and Reaction Intermediates during Electrochemical CO_2 Conversion

Young In Song[1,2], Jung Kyu Kim[2], and Jai Hyun Koh[1]

([1]Korea Institute of Science and Technology, [2]Sungkyunkwan University)

TS12F7_O_5 ***YSA Applied** 15:00–15:15

Mechanically Reinforced Solid Electrolyte Interphase by In Situ Polymerization for Li-Mediated Ammonia Synthesis

Yeongbae Jeon and Yun Jeong Hwang

(Seoul National University)

TS12F7_O_6 ***YSA Applied** 15:15–15:30

Chloride-Induced Suppression of Phase Transition in NiFe LDH and Stabilization via p-Block Metal Doping

Hyun Ji An and Yun Jeong Hwang

(Seoul National University)