

AI-Mat Workshop: Catalytic CO₂ Reduction Reaction

April 19th 2024

Venue: R212, Center for Condensed Matter Sciences, National Taiwan University

| Topic | Invited Speaker | Time |
|---|---------------------------|---|
| Opening Remarks (10:00-10:05) | | |
| Session I (10:05-12:05) | | |
| Visible-light driven plastic precursors production from CO ₂ gas and biobased materials with the system of photo/biocatalytic system | Prof. Yutaka Amao | 10:05-11:05 (40 min talk and 20 min Q&A) |
| Manipulation of Spin-polarizations and Ferroelectric polarizations of materials for photocatalytic CO ₂ reduction | Prof. Chun-Wei Chen | 11:05-11:35 (20 min talk and 10 min Q&A) |
| In situ spectroscopy of Cu-based electrocatalysts for electrocatalytic CO ₂ reduction | Prof. Heng-Liang Wu | 11:35-12:05 (20 min talk and 10 min Q&A) |
| Break (12:05-14:00) | | |
| Session II (14:00-16:40) | | |
| CO ₂ transformation to valuable chemicals over CeO ₂ -based catalysts | Prof. Masazumi Tamura | 14:00-15:00 (40 min talk and 20 min Q&A) |
| Atomically thin semiconducting transition metal dichalcogenides for photocatalytic CO ₂ reduction with water | Dr. Mohammad Qorbani | 15:00-15:30 (20 min talk and 10 min Q&A) |
| Constructing B-N-P Bonds in Ultrathin Holey g-C ₃ N ₄ for Regulating the Local Chemical Environment in Photocatalytic CO ₂ Reduction to CO | Dr. Mahmoud Kamal Hussien | 15:30-16:00 (20 min talk and 10 min Q&A) |
| Theoretical studies on photocatalytic CO ₂ reduction using transition metal dichalcogenides | Dr. Ying-Ren Lai | 16:00-16:30 (20 min talk and 10 min Q&A) |
| Summary and Closing Remarks (16:30-16:40) | | |