

## Visible-Light-Induced CO<sub>2</sub> Reduction by Mixed-Valence Tin Oxide



Valence band maximum (VBM) measurement by AC-2<sup>[1]</sup>.

## [Ionization potential analysis of photocatalysts by AC series]

Prof. Miyauchi and co-workers from Tokyo Institute of Technology reported their study on Applied Energy Materials about a Tin Oxide photocatalyst material development[1].

The CO<sub>2</sub> reduction reaction is dragging many attractions nowadays when many countries are claiming the carbon neutral strategy.

Prof. Miyauchi and co-workers succeeded in developing novel photocatalytic materials using tin oxide, which showed high performance. And comparing the valence band maximum (VBM) of the samples measured by AC-2, the relationship between the VBM and the catalysis performance could be clearly found.

Therefore, AC series can be your best partner and contribute to those advanced materials development.

[1] Yang-Shin Liu, Akira Yamaguchi, Yue Yang, Hideki Abe, Shigenori Ueda, Toyokazu Tanabe, and Masahiro Miyauchi, ACS Applied Energy Materials



## **Features**



- <u>O</u> No need for vacuum, can measure in air
  → Various types of samples available without any pre-treatment.
- O Various optional functions
  → Heat sample stage, high intensity light source and micro spot irradiation, various functions can be selected to meet your demands.

## Riken Keiki Co., Ltd.

Overseas Business Department 2-7-6 Azusawa Itabashi-Ku, Tokyo 174-8744 Japan TEL : 81-3-3966-1113 FAX : 81-3-3558-9110 E-MAIL : intdept@rikenkeiki.co.jp

https://www.rikenkeiki.co.jp/english