

Title of Symposium

Symposium on Progressive Design of Ecological Interface

Brief Description of Symposium

The property of interface is one of the most critical factors to control not only the strength but also the expected life span of structures regardless of their size. Recently, there have been many researches about the creation of statically strong interface between various dissimilar materials for aiming the construction of advanced and multifunctional structures, where metastable phase would be occasionally employed and the life term of the interface may not be discussed. On the other hand, because of limitation of resources in the earth, the large structures such as buildings, bridges and power generators are expected to be used longer time than the expected life span by using a method of repair, while the small structures such as electric devices are easily replaced by new one and are disassembled under the concept of recycle. So, the desirable character of interface is varied according to the size of structures and the expected life term, and such interface can be denoted as "Ecological Interface". This symposium will provide an open forum for researchers from around the world to discuss recent advances in designing, processing, microstructural characterization, modeling, repairing, and life prediction of "Ecological Interface".

Proposed Session Topics

- Innovations in processing methods for Ecological Interface
- Structure and properties of Ecological Interface
- Modeling of Ecological Interface
- Ecological Interface for environmental applications
- Ecological Interface for energy applications
- Ecological Interface for biological applications
- Ecological Interface for electrical applications
- Ecological Interface for civil engineering

Symposium Organizers:

- Hisashi SERIZAWA, JWRI, Osaka Univ., Japan
- Toshiya SHIBAYANAGI, JWRI, Osaka Univ., Japan

Tentative List of Speakers

- Prof. Mashiro TUKAMOTO, JWRI, Osaka Univ., Japan
- Prof. Yutaka S. SATO, Tohoku Univ, Japan
- Prof. Hiroshi KAWAKAMI, Mie Univ., Japan
- Dr. Mitsuyoshi NAKATANI, Hitachi Zosen Corp., Japan