International Conference on Business and Technology Transfer / Technology and Society (ICBTT/TS 2021)

Date: November 25 - 26, 2021

Venue: Virtual Conference

Conference Program

November 25, 2021, Thursday
17:30-17:50 Opening Ceremony (Host: Professor Keiichi WATANUKI, Professor Frank LOBECK)
   Address from Professor Frank LOBECK, Conference Co-Chairs
   Address from Professor Toshio OTAKA, Head of Technology and Society Division, JSME
   Announcement of ICBTT/TS2021 from Professor Keiichi WATANUKI, Conference Co-Chairs

17:50-19:00 Invited Talks
Chair: Keiichi WATANUKI

   Adding Interactive 3D-models to the Digital Twin
   Prof. Dr.-Ing. Frank LOBECK, University of Duisburg-Essen, Germany

   From Cost to Benefit
   Prof. Dr. Shuichi FUKUDA, Keio University, Japan

19:00-19:20 Break

19:20-20:35 Oral presentation session (Chair: Kazunori KAEDE)

   ICBTT2021-1125-PM-01:
   Bridging the gap: Reutilizing functional structures in 3D assembly instructions
   Julian GÖRTZ, Frank LOBECK and Carsten KRAUS

   ICBTT2021-1125-PM-02:
   Optimization of industrial maintenance processes with Augmented Reality
   Lei WEI, Carsten KRAUSE, Frank LOBECK
Let Us Go the Other Way: Low Tech Makes Your Life Enjoyable
Shuichi FUKUDA

Utilizing Machines for Education
-Proposal of a New Research Field of Educational Mechanical Engineering-
Tomoaki SATO, Tatsuro KITAHARA

Development of gait analysis and training using machine learning techniques
Yusuke OSAWA, Keiichi WATANUKI, Kazunori KAEDE

November 26, 2021, Friday

17:30-18:30 Oral presentation session (Chair: Tomoaki SATO)

Dynamic analysis and demonstration of flywheel-less low temperature
differential Stirling engine using bellows instead of power piston
Yoshitaka KATO

Development of AI vehicle teaching materials for automobile development
engineers
Seiji KOMIYA, Yoshio KANO, Makoto YAMAKADO, Toshihiro WAKITA

Development of instruction support system using RFID and application to
mechanical design and drafting class
Seiji KOMIYA

Verifying effectiveness of a Stress Reduction System Using Forest Video in
VDT Work
Tetsuhiro SUZUKI, Keiichi WATANUKI, Kazunori KAEDE

18:30-18:50 Break
18:50-20:05  Oral Presentation session (Chair: Toshio OTAKA)

ICBTT2021-1126-PM-05: Proposal for Portable Fluid Mechanics Laboratory for Project-based Learning
Keiichiro TAKATO, Susumu SHIRAYAMA

Toshikazu YAMAMOTO, Koji OGIKUBO, Norino TAKEZAWA

ICBTT2021-1126-PM-07: Practice of Isolated Island Engineering by using self-propelled field machine
- For business feasibility of surface-tidal power generation systems –
Hiroyuki NAGAI, Toshihiro TSUTSUI

ICBTT2021-1126-PM-08: Gazing behavior patterns based on art education experts when viewing children's paintings using inductive logic programming
Tomofumi SAKATA, Keiichi WATANUKI, Motohiro KOZAWA

ICBTT2021-1126-PM-09: Historical examination of the possibility of Japanese comprehensive learning curriculum as technical education
Motoko TANABE