

# Trilateral Seminar on Chemistry and Microbiology in Civil, Resource & Environmental Engineering between Hokkaido University, University of Applied Science Karlsruhe and Forschungszentrum Karlsruhe



September 4, 2007, Hokkaido University Conference Hall

## PROGRAM

9:00-9:10      Opening Words      Prof Yoshimasa Watanabe, Hokkaido University

### *Session I      Advanced Chemical and Microbiological Approach for Water and Solid Recycling*

Chairman: Dr Hisashi Satoh

9:10-9:40      Dr Satoshi Okabe      Microbial source tracking by using host-specific  
bcateroides-prevotella genetic markers

9:40-10:10      Dr Katsuki Kimura      Membrane fouling caused by organic matter in surface waters

10:10-10:40      Dr Naoki Hiroyoshi      Chemical and microbiological approach for the removal,  
immobilization and control of hazardous metals in  
contaminated soil and solid wastes

10:40-11:00      Coffee break

### *Session II      Durability of Cement Based Composite (1)*

Chairman: Dr Yoshitaka Nara

11:00-11:30      Mr Peter Krolla-Sidenstein      Potentials of molecular biologic operation methods for the  
characterization of microbial populations on cement based materials  
in drinking water reservoirs

11:30-12:00      Dr Hisashi Satoh      *In Situ* analysis of acid production in biofilms grown on concrete in  
sewer systems

12:00-13:30      Lunch

### ***Session III Durability of Cement Based Composite (2)***

**Chairman: Dr Yoshihiko Kishimoto**

<b>13:30-14:00</b>	<b>Prof Takafumi Sugiyama</b>	<b>Diffusion of ions in hydrated cement system</b>
<b>14:00-14:30</b>	<b>Mr Matthias Schwotzer</b>	<b>Deterioration of cement-based materials in drinking water reservoirs</b>
<b>14:30-15:00</b>	<b>Prof Toyoharu Nawa</b>	<b>Improvement in durability of concrete structures due to microscale protection of concrete surface</b>
<b>15:00-15:20</b>	<b>Coffee break</b>	

### ***Session IV New Construction and Recycling Technology***

**Chairman: Dr Wang Licheng**

<b>15:20-15:50</b>	<b>Prof Andreas Gerdes</b>	<b>Construction chemistry - from molecule to the construction</b>
<b>15:50-16:20</b>	<b>Dr Yasuhiko Sato</b>	<b>Production of high quality recycled aggregates by combined chemical and mechanical treatment</b>
<b>16:20-16:50</b>	<b>Dr Satoru Kawasaki</b>	<b>Novel grout cementing due to microbial metabolism</b>
<b>16:50-17:00</b>	<b>Closing words</b>	<b>Prof Tamon Ueda</b>

**\* 20 min. for presentation and 10 min. for discussion**

**\*Pre-registration is NOT required**

**\*For further information, please contact;**

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