

Tuesday, 23 October, 2001

9:00- Registration desk opens

9:45- 9:55 Opening Session **MAIN ROOM**

10:00-12:30 **Session 1 "Self-compactability of fresh concrete"**
chaired by *Yin-Wen Chan & Makoto Hibino* **MAIN ROOM**

- Investigation on shear flow of self-compacting concrete *by Zhuguo Li*
- Simulation of self-compacting concrete -laboratory experiments and numerical modelling of slump flow and L-box tests *by Örjan Petersson*
- Assessment of thixotropic behavior of self compacting microconcrete *by Bruno Pellerin*
- Thixotropy of self-compacting concrete *by Peter Billberg*
- Development of the settlement column segregation test for fresh self- compacting concrete *by Mark J. Rooney*
- Deformability and compressive strength models for self-compacting concrete *by Somnuk Tangtermsirikul*
- Rheological study on the workability of fibre-reinforced mortar *by Steffen Grünewald*
- Maximum content of steel fibres in self-compacting concrete *by Steffen Grünewald*

10:00-12:30 **Session 2 "Early age & Durability"** **ROOM 201**
chaired by *Keun-Joo Byun & Tetsuya Ishida*

- Early-age creep and shrinkage in self-compacting concrete incorporating GGBFS *by Ha-Won Song*
- Volume changes as driving forces to self-induced cracking of Norwegian SCC *by Tor Arne Hammer*
- Autogenous shrinkage of hardened cement binder in self compacting concrete structure *by Jiří Litoš*
- Effect of stability of self-consolidating concrete on the distribution of steel corrosion characteristics along experimental wall elements *by Kamal H. Khayat*
- Transport properties and durability of self-compacting concrete *by Peter J. M. Bartos*
- Mechanical and durability aspects of SCC for road structures *by Eva Rodum*
- Proposition of durability test method on concrete attacked by acid rain and test results of super quality concrete *by Hiroshi Ueda*

- Evaluation of mechanical properties and durability of super quality concrete

by **Osamu Makishima**

- Self-repairing function for cracks of SCC with expansive agent by **Akira Hosoda**

12:30-14:00 Lunch

14:00-15:00 Invited Lecture chaired by *Toshiharu Kishi* **MAIN ROOM**

"Service life evaluation and durability design system for self compacting concrete"

by **Koichi Maekawa**

15:00-15:40 Keynote Lecture chaired by *Toshiharu Kishi* **MAIN ROOM**

"Utilization of new concrete technology in construction projects -future prospects of self-compacting high performance concrete" by **Kazumasa Ozawa**

15:40-16:00 Committee Report chaired by *Toshiharu Kishi* **MAIN ROOM**

"A guide for manufacturing and construction of self-compacting concrete -learning from real troubles" by **Yoshimitsu Nakajima**

16:15-18:45 Session 3 "Applications" **MAIN ROOM**

chaired by *Somnuk Tangtermsirikul & Masahiro Ouchi*

- Construction of rigid foundation of underground diaphragm walls with highly congested reinforcing bar arrangement by using self-compacting concrete by **Hirokazu Inoue**

- Application of self-compacting concrete to steel segments of multi-micro shield tunneling method by **Takefumi Shindoh**

- Self-compacting concrete used for underground diaphragm walls of the world's largest 200,000 kl inground tanks at Incheon LNG terminal in Korea by **Takeshi Ohtomo**

- Self-compacting concrete in underground and mining applications by **Joseph A. Daczko**

- SCC in a rock repository for radioactive waste by **Kåre Johansen**

- Development and applications of self-compacting concrete in New Zealand by **Michael Khrapko**

- SCC for the rehabilitation of a tunnel in Zurich/Switzerland by **Frank Jacobs**

- Ecological performance of self compacting concrete by **Frank Jacobs**

- Self-compacting concrete - the way to cost effective production of buildings by **Marianne Grauers**

- Development of a quality control system for self-compacting concrete by using information technology by ***Daihachi Okai***

16:15-18:45 Session 4 "Construction & Concrete products"

chaired by Victor C. Li & Takehiko Midorikawa **ROOM 201**

- The quality control method of self-compacting concrete using testing apparatus for self-compactability evaluation by ***Masanori Kubo***
- Effect of placement and compaction on properties of placing joint by ***Tekehiro Sawamoto***
- Forecasting pumping parameters by ***Gilbert Noworyta***
- Study of self-compacting concrete pressure on formwork by ***Yannick Vanhove***
- Compatibility between conventional and self-compacting concrete by ***David W.S. Ho***
- Use of SCC to achieve improved concrete surfaces by ***Eivind Heimdal***
- Casting with SCC, execution techniques and curing properties by ***Eivind Heimdal***
- SCC as applied in the Dutch precast concrete industry by ***Wim Bennenk***
- Self-compacting concrete for precast concrete products in Germany by ***Bernhard Hauke***

18:50-20:00 Welcome Reception 1st Floor

Wednesday, 24 October, 2001

9:00 **Registration desk opens**

9:30-12:00 **Sessions 5 "Chemical admixture" **MAIN ROOM****

chaired by Ake Skarendahl & Toshiharu Kishi

- Improvement of the compatibility between cement and superplasticizer by optimizing the chemical structure of the polycarboxylate-type superplasticizer *by Kazuo Yamada*
- The mechanism of time dependence for fluidity of high belite cement mortar containing polycarboxylate-based superplasticizer *by Akira Ohno*
- Development of a liquid type admixture for self-compacting concrete *by Hotaka Yamamuro*
- Blends of polycarboxylate-type superplasticizers in use for concrete admixtures *by Ulf Velten*
- New generation of a superplasticizer with synergetic effect *by Dubravka Bjegovic*
- The adsorption isotherms of sulfonated naphthalene formaldehyde (SNF) on Portland cement hydration products and its effect on the hydration kinetics of clinker minerals at high dosages *by J.B. Kazirukanyo*
- Distinction between particle-dispersion and particle-repulsion effects of superplasticizers on the viscosity of fresh mortar *by Takumi Sugamata*
- A study on the basic properties of a self-compacting concrete containing the γ -polyglutamic acid-type segregation inhibitor *by Manabu Kanematsu*
- Evaluation of S-657 biopolymer as a new viscosity-modifying admixture for self-compacting concrete *by Alain Phyfferoen*

9:30-12:00 **Session 6 "Structural & Mechanical behaviors and Mixing"**

*chaired by Joost C. Walraven & Xuehui An **ROOM 201***

- Constitutive rheological design for development of self-compacting engineered cementitious composites *by Victor C. Li*
- Improved durability of self-compacting concrete by addition of fibers *by Martin F. Bäuml*
- Study on bond characteristics of steel bar of reinforced concrete structure using super quality concrete *by Haruhito Yamamoto*
- The effects of the modified composition of SCC on shear and bond behavior *by Angelika Schiessl*

- Self-compacting concrete -time development of material properties and bond behaviour
by **Dirk Weiße**
- Flexural response and performance of reinforced beams cast with self- compacting concrete by **Mohamed Sonebi**
- Effect of surface moisture of sand on fluidity of fresh mortar by **Makoto Hibino**
- Influence of mixing efficiency on the properties of flowable cement pastes
by **Kazunori Takada**

12:00-13:30 Lunch

13:30-14:00 Keynote Lecture chaired by *Kazumasa Ozawa* **MAIN ROOM**
"Current condition of SCC in Japan" by **Masahiro Ouchi**

14:00-16:30 Invited Lectures chaired by *Kazumasa Ozawa* **MAIN ROOM**

14:00-14:45 "Market acceptance of self-compacting concrete, the Swedish experience"
by **Åke Skarendahl**

14:45-15:30 "State of the art on self compacting concrete in the Netherlands"
by **Joost C. Walraven**

15:50-16:35 "The applications of SCC in Taiwan"
by **Jenn-Chuan Chern**

16:40-18:20 Concrete Laboratory Tour **GATHER AT ENTRANCE HALL**
Demonstration of SCC & Introduction of research activities

18:30-20:00 Symposium Party **DINING ROOM BF**

Thursday, 25 October, 2001

9:00- Registration desk opens

9:30-12:00 Session 7 "Characterization of material & Mix-proportioning 1"
chaired by Peter J.M. Bartos & Takafumi Noguchi **MAIN ROOM**

- Application of "The Water Layer Model" to self-compacting mortar with different size distribution of fine aggregate *by Takehiko Midorikawa*
- Particle-matrix model based design of self-compacting concrete with lignosulfonate water reducer *by Kåre Reknes*
- Characterisation of fillers for SCC *by Bård Pedersen*
- The particle matrix model applied on SCC *by Sverre Smeplass*
- Limestone powder as filler in self-compacting concrete -frost resistance and compressive strength *by Örjan Petersson*
- Influence of filler characteristics on SCC rheology and early hydration *by Peter Billberg*
- Optimization of self-compacting concrete mixes *by Iris Marquardt*
- Low grade SCC with secondary natural sand rich in fines *by Kåre Johansen*
- Practical experience with the application of self-compacting concrete in Germany *by Thomas Eck*

9:30-12:00 Session 8 "Characterization of material & Mix-proportioning 2"
chaired by Kamal H. Khayat & Kazunori Takada **ROOM 201**

- Consideration on filling characteristics of SCC based on fluidity of cement paste component *by Satoshi Sasaki*
- Optimization of cost-effective self-consolidating concrete *by Aicha Ghezal*
- A low cost self-compacting concrete *by A. Bettencourt Ribeiro*
- Examinations for the production of self-compacting concrete using lignite fly ashes *by Frank Dehn*
- Applications of ready-made binders for self-compacting concrete (SCC) *by Frank Dehn*
- A new concept for improved rheological stability to allow reduction in cement content of self compacting concrete *by Jens Engstrand*
- Experimental optimization of high-strength self-compacting concrete *by Paulo C. C. Gomes*
- Sand-rich self-compacting concrete *by Angelika Schiessl*

- Development of high volume coarse aggregate self-compacting concrete

by **Joseph A. Daczko**

- Development of self-compacting lightweight aggregate concrete by **Harald S. Müller**

12:10-12:20 **Closing Session** **MAIN ROOM**

12:30- **Lunch**