KISHI LAB.

[Property of material concrete and durability of concrete structure]

Institute of Industrial Science
Department of Human & Social Systems
Concrete & Recycling Engineering
http://wdnsword.iis.u-tokyo.ac.jp/index_e.shtml

Kishi laboratory undertake research on (1) cement-based material resolving its physical property, performance assessment, development and practical application of new material and (2) quality inspection / maintenance of concrete structure.

- A study on new evaluation method of salt penetration that can be considered stagnation and continuation of advection and diffusion
- A study on new durability design frame that is based on evaluation of liquid water penetration as alternative to neutralization
- Study on Regularity of flow and flow curve based on velocity profiles in coaxial cylinders
- A study on mechanism of water flow reduction due to air bubble generation in crack
- Development of simplified evaluation method of concrete surface quality
- Development of self-healing technology of concrete crack

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**Figure Legends**

- **Water flow rate**
- **Water pass test**
- **Pore structure change**
- **Weight change**
- **Influence of air bubble**
- **Penetration depth**
- **Shear stress vs. velocity curve**
- **Self-healing process of self-healing concrete**
- **Observe flow**
- **Combining**
- **Repeated dry wet cyclic vs. Pore structure & Water penetration**