



# KISHI LAB.

## [Crack Self-healing Concrete & Quality Assessment Technology on the Surface Concrete]

Department of Human & Social Systems

[http://wdnsword.iis.u-tokyo.ac.jp/index\\_e.shtml](http://wdnsword.iis.u-tokyo.ac.jp/index_e.shtml)

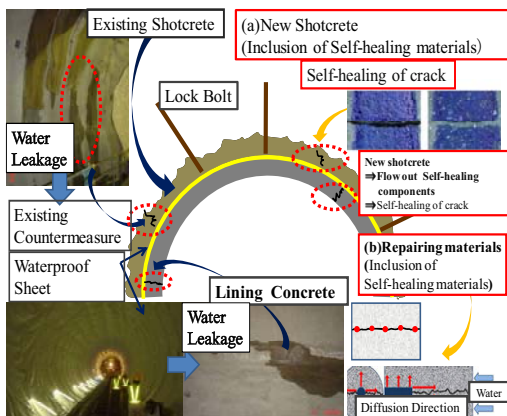
Concrete & Recycling Engineering

Dept. of Civil Eng.

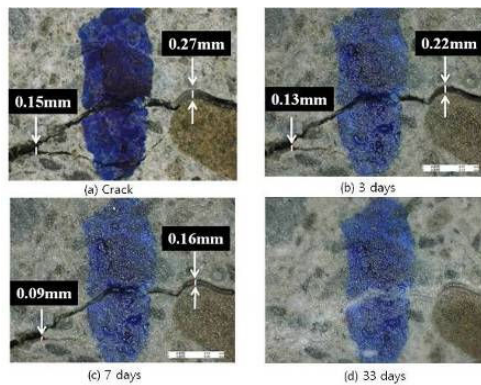
### • What is the Crack Self-healing Concrete?

This concept is one of the maintenance-free methods which, apart from saving direct costs for maintenance and repair, reduces the indirect costs – a saving generally welcomed by contractors.

- ◆ Application of self-healing technology to various civil infrastructures
- ◆ Investigation of durability and quality assessment on the surface concrete
- ◆ A study on the relationship between micro pore structure and mass transfer in cementitious material using micro/ nano technology
- ◆ Thermal stress relaxation by hybrid use between expansive additive and light weight aggregate (using Thermal Stress Testing Machine)
- ◆ A study on mechanisms of unique behaviors of expansive concrete



Application of self-healing concrete for water leakage of underground infrastructures as tunnels



Self-healing process of self-healing concrete



Concrete canoe competition (Made of self-healing concrete)



Air permeability by Torent



Water permeability test



Quality Assessment of Surface Concrete



TSTM (Thermal Stress Testing Machine)



Study on mass transfer in micro space using micro/ nano devices