



**■ Prof.**  
 AYANO Toshiki  
**■ Assoc. Prof.**  
 FUJII Takashi



## Practical Application of Precast Concrete Member with Super-High Durability Concrete

### Objectives

In order to extend the lifespan of damaged bridge girders and to shorten the period of traffic regulation during renewal construction, precast concrete member with high durability is developed with blast furnace slag sand.

- PC (Prestressed Concrete) PCa member  
⇒ Strong to traffic load under water supply condition
- RC (Reinforced Concrete) PCa member  
⇒ High resistance to freeze and thaw with out AE agent



### ① BFS for High Durable Concrete



- Establishment of Quality Standard of BFS
- supplying system of BFS in the Domestic

### ② PC PCa Products

The characteristics of products are as follows;

- High resistance against freezing and thawing attack and fatigue in water
- The loss of restress is small by small shrinkage and creep of concrete



### ③ RC PCa Products

The characteristics of products are as follows;

- High resistance to freezing and thawing attack without AE Agent
- High resistance to chloride attack

