

## Non-Destructive Testing for Concrete Structure Associate Professor Takeshi, Watanabe

Tokushima University 800 80 8 Ll 150  $L_2$ 100 Upper L3 150m 100 L5 5.5 S1 S2 S3 S4 S5 S6 S7 | S8 **S**9 S10 Steel plate 5.5 Upper 80 Lower Specimen A Fig.1 Specimen of steel-concrete composite



## Content:

Maintenance of concrete structure is important for civil engineering. Non-destructive test is powerful tool to identify defect and damage of structure. In addition, there are increasing hybrid structure and repaired structure. Non-destructive test is expected to evaluate condition of the structures.

Recently, recycle concrete and self-healing concrete are studied. For clarifying quality of these concrete, we try to use nondestructive method.

Our laboratory results are shown as follow,

- PC grout condition
- Detection of defect in steel-concrete composite by
  Impact test
- Check rebar corrosion condition by UT
- Evaluation of self-healing effect of fly-ash concrete by UT

Keywords:<Concrete, NDT, By-product, Durability > E-mail: <t\_watanabe@tokushima-u.ac.jp> Tel. <+81-88-656-7320> Fax: <+81-88-656-7351>

