

## **Study to develop utilization technology that preserves the characteristics of recycled materials**

**Abstract:** To support the application of recycled materials to public works, the environmental safety of such use has been studied, but the needed technologies and systems must now be studied. Through this study, we developed new utilization technologies for sewage sludge melt-solidified slag and improved soil using sewage sludge ash. Saturating slag with alkali has improved its water absorption and bleeding ratio. The acid resistance of mortar pieces contained slag or slag powder has been assessed, but the effects are unconfirmed. The concrete test pieces with slag as their coarse aggregate are now undergoing an exposure test. At this time, they have still not popped out. The results of safety testing of the improved soil have not clarified the effect of material age.

**Key words:** sewage sludge melt-solidified slag, aggregate, acid resistance, improved soil, safety test