

### **Method of Alkali Contents Measurement by Acid Dissolution**

Koji TSURUTA      Motoki UEHARA      Kiyoshi MIZUNO

We have developed a new method of measuring the total alkali content of concrete by subtracting the alkali dissolution amounts of aggregate from those of concrete treated with formic acid. The accuracy of this method is superior to that of the existing techniques. For instance, when the aggregates used actually are available, the new method can be used to estimate the total alkali amount within an error margin of  $\pm 0.1 \text{ kg/m}^3$ . On the other hand, when the aggregates are unavailable, this method can be used to estimate the amount of concrete within an error margin of  $\pm 0.4 \text{ kg/m}^3$  by presuming the alkali dissolution amount of aggregates from rock species.