to dryness, then taken up with 0.02 M nitric acid. The solution (15 ml or less) was placed on Duolite C 62, Duolite C 63 or Duolite C 65 column (3-5 ml), and caesium, strontium and rare earths were absorbed while anions and colloidal ions passed through. After removal of ruthenium-rhodium-106 and zirconium-niobium-95 with water, caesium was eluted with 0.02-0.04 M nitric acid, then strontium with 0.08-0.1 M nitric acid, then yttrium and rare earths with 2 M nitric acid.

## Analytical Chemistsy

Gallium content of sea water, marine organisms, sediments and other materials related to the ocean. Masayoshi Ishibashi, Tsunenobu Shigematsu, Yasuharu Nishikawa and Keizo Hiraki. Nippon Kagaku Zasshi, 82, 1141 (1961), in Japanese.— In order to discuss the distribution of gallium in the ocean, the gallium content in sea water, marine organisms and marine sediments was determined. fluorometric method by means of 8-hydroxyquinaldine was used for the determination of gallium. The detail of the method was reported in the previous report (Nippon Kagaku Zasshi, 79, 236 (1958)). The gallium concentration of water samples taken at the offshore of Shirahama, Wakayama Prefecture, and the coast of Maizuru. Kyoto Prefecture, was  $0.02 \mu g$ , and  $0.015 \mu g$  per liter, respectively, and the concentration in several marine plants and animals varied from 10-5 to 10-4% in ash samples. In general, carbonate samples such as coral sand contained less amount of gallium; the concentrations were of the order of 10<sup>-6</sup> %. The gallium content of marine sediments were of the order of 10<sup>-3</sup> % and differed little from the average content of ignous rocks.

Geochemical study on the lakes Mikata. Tsunenobu Shigematsu, Masayuki Tabushi, Yasuharu Nishikawa, Teruko Muroga and Yoshinori Matsunaga. *Bull. Inst. Chem. Res., Kyoto Univ.* **39,** 43 (1961).

Extraction behavior of metal acetylacetonates. Tsunenobu Shigamatsu and Masayuki Tabushi. Bull. Inst. Chem. Res., Kyoto Univ., 39, 35 (1961).

## **Inorganic Chemistry**

The effects of heat treatment on the strength of polycrystalline material produced from the glass of the system Li<sub>2</sub>O-MgO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>. Sumio Sakka, Masamichi Wada and Megumi Tashiro. Yogyo Kyokai Shi, 69, 35 (1961), in Japanese.—See, this Bulletin, 39, 410 (1961).

Effects of the addition of various oxides on the crystallization of lithiasilica glass. Sumio Sakka and Megumi Tashiro. Yogyo Kyokai Shi, 69, 67 (1961), in Japanese.—See, this Bulletin, 39, 408 (1961).

Studies on the devitrification of the glasses of the system Li<sub>2</sub>O - ZnO - Al<sub>2</sub>O<sub>3</sub> - SiO<sub>2</sub>. Sumio Sakka and Megumi Tashiro. *Yogyo Kyokai Shi*, 69, 109 (1961), in Japanese.—See, this Bulletin, 39, 409 (1961).