Analysis of the Residue of a Globigerina Ooze.

By Dr. Klement.

Station 338; 1990 fathoms, South Atlantic.

A large quantity of Globigerina ooze was treated with dilute hydrochloric acid, taking care not to exceed a feeble acid reaction; after elimination of the carbonates, the sulphates and the phosphates, the residue was analysed and gave the following results:—

I. 0.8360 grm. of substance dried at 110° C., fused with carbonates of soda and potash, gave 0.4219 grm. of silica, 0.1506 grm. of alumina, 0.1066 grm. of ferric oxide, 0.0220 grm. of manganese binoxide (MnO₂), 0.0148 grm. of lime, and 0.0567 grm. of magnesium pyrophosphate.

II. 1·1293 grms. of substance dried at 110° C., gave 0·1235 grm. of loss on ignition, treated with hydrofluoric and sulphuric acids gave 0·0123 grm. of potash and 0·0135 grm. of soda.

Silica (SiO ₂), .								50.47
Alumina (Al ₂ O ₈), .								18.01
Ferric oxide (Fe ₂ O ₈),	440							12.75
Lime (CaO), .				•	18 .	- 1		1.71
Magnesia (MgO),					•	•	•	2.44
Potash (K _o O), .		•						1.11
Soda (Na ₂ O), .								1.05
Loss on ignition, .	1.00	•		•.	•	•		10.93
								101.47
								101 11

Analysis of Radiolarian Ooze.

By Dr. Sipöcz.

Station 266; 2750 fathoms, Mid Pacific.

I. 0.6580 grm. of substance dried at 110° C., gave 0.1087 grm. loss on ignition, treated with hydrofluoric and sulphuric acids gave 0.3478 grm. of silica, 0.0011 grm. of cupric oxide, 0.0391 grm. of ferric oxide, 0.0529 grm. of alumina, 0.0263 grm. of phosphoric acid, 0.0115 grm. of manganous oxide (MnO), 0.0435 grm. of lime, 0.0318 grm. of magnesia, and traces of cobalt, potash, and soda.

Silica (SiO ₂), .							4	52.85
Copper oxide (CuO),	•			-		*		0.16
Ferric oxide (Fe ₂ O ₃),	1020		2007 11				*	5.94
Alumina (Al ₂ O ₃), .	37/2 1948					٠.		8.22
Manganous oxide (MnO),								1.74
Lime (CaO), .			12	2				6.61
Magnesia (MgO), .	5.55 0.67		18		- 4			4.84
Loss on ignition,	•	•	-95					16.52
Cobalt oxide, potash, sode		•						traces
Cobair oxide, potasii, codi	-,	•	10 - 00	1.7	1951			
								100.07

100.87