

CONTENTS

PART 1

	PAGE
TH. G. SAHAMA, Petrology of Mt. Nyiragongo: A Review	1
M. R. W. JOHNSON, Relations of Movement and Metamorphism in the Dalradians of Banffshire	29
E. L. P. MERCY, The Mullaghduff Porphyry Dyke	65
J. B. SISSONS, A re-interpretation of the Literature on Late-glacial Shorelines in Scotland with Particular reference to the Forth Area	83
G. Y. CRAIG and E. K. WALTON, Sedimentary Structures and Palaeocurrent Directions from the Silurian Rocks of Kircudbrightshire	100
J. KNOX, Strand Lines at 140 and 190 feet in the Howe of Fife	120

PART 2

A. WATTISON, Temporary Exposures in the Calciferous Sandstone Measures of East Fife	133
J. D. HUDSON, The Stratigraphy of the Great Estuarine Series (Middle Jurassic of the Inner Hebrides)	139
D. M. RAMSAY, Microfabric Studies from the Dalradian Rocks of Glen Lyon, Perthshire	166
M. J. O'HARA, Some Intrusions in the Lewisian Complex near Badcall, Sutherland	201
C. E. TILLEY and I. D. MUIR, The Hebridean Plateau Magma Type	208
DISCUSSION on Late-glacial Shorelines (by J. B. SISSONS) by J. R. Earp, E. H. Francis and W. A. Read	216
REPLY by J. B. Sissons	221

PART 3

	PAGE
P. T. WARREN, The Petrography, Sedimentation and Provenance of the Wenlock Rocks near Hawick, Roxburghshire	225
A. L. HARRIS, Structural Investigations in the Dalradian Rocks between Pitlochry and Blair Atholl	256
ST. DZULYNSKI and E. K. WALTON, Experimental Production of Sole Markings	279
E. I. WHITE, Notes on <i>Pteraspis Mitchelli</i> and its Associated Fauna	306
P. McL. D. DUFF and P. M. BRÜCK, A Jurassic Age for a Sedimentary Sequence on Ben Hiant, Ardnamurchan, Argyll	323

PART 4

R. J. PRICE, The Glaciation of a Part of Peeblesshire, Scotland	325
IAN W. D. DALZIEL, Zircons from the Granitic Gneiss of Western Ardgour, Argyll; Their Bearing on its Origin	349
P. F. FRIEND, W. B. HARLAND and J. D. HUDSON, The Old Red Sandstone and the Highland Boundary in Arran, Scotland	363
W. G. HARDIE, Explosion-Breccias near Stob Mhic Mhartuin, Glen Coe, Argyll, and their Bearing on the Origin of the nearby flinty Crush-Rock	426
RICHARD O. MUIR, Petrography and Provenance of the Millstone Grit of Central Scotland	439
W. WELSH, Sedimentary Features of the Rhum Torridonian	486
Record of Papers read and of Exhibits, Session 1961-62	493
Record of Excursions 1962	493
Record of Papers read and of Exhibits, Session 1962-63	494
Record of Excursions 1963	495
Office Bearers 1962-63	495
Index to Volume XIX	496