

CONTENTS

Preface.....	VII
Hydrovolcanism: basic considerations and review	
M.F. Sheridan (Tempe, AZ, U.S.A.) and K.H. Wohletz (Los Alamos, NM, U.S.A.).....	1
Mechanisms of hydrovolcanic pyroclast formation: grain-size, scanning electron microscopy, and experimental studies	
K.H. Wohletz (Los Alamos, NM, U.S.A.).....	31
Ignimbrite types and ignimbrite problems	
G.P.L. Walker (Honolulu, HI, U.S.A.).....	65
Computer simulation of transport and deposition of the Campanian Y-5 ash	
W. Cornell, S. Carey, and H. Sigurdsson (Kingston, RI, U.S.A.).....	89
Explosive activity associated with the growth of volcanic domes	
C.G. Newhall (Vancouver, WA, U.S.A.) and W.G. Melson (Washington, D.C., U.S.A.).....	111
A volcanologist's review of atmospheric hazards of volcanic activity: Fuego and Mount St. Helens	
W.I. Rose, R.L. Wunderman, M.F. Hoffman, and L. Gale (Houghton, MI, U.S.A.).....	133
The past 5,000 years of volcanic activity at Mt. Pelée, Martinique, (F.W.I.): implications for assessment of volcanic hazards	
D. Westercamp (Fort de France, Martinique, F.W.I.) and H. Trainneau (Oreleans, Cedex, France).....	159
Application of computer-assisted mapping to volcanic hazard evaluation of surge eruptions: Vulcano, Lipari, and Vesuvius	
M.F. Sheridan and M.C. Malin (Tempe, AZ, U.S.A.).....	187
Geologic, volcanologic, and tectonic setting of the Vico-Cimino area, Italy	
F. Sollevanti (Milano, Italy).....	203
Structure and evolution of the Sacrofano-Baccano caldera, Sabatini volcanic complex, Rome	
D. DeRita, R. Funiciello (Roma, Italy), U. Rossi (Pisa, Italy), and A. Sposito (Italy).....	219
A general model for the behavior of the Somma-Vesuvius volcanic complex	
R. Santacroce (Pisa, Italy).....	237
The A.D. 472 "Pollena" eruption: volcanological and petrological data for this poorly-known, Plinian-type event at Vesuvius	
M. Rosi and R. Santacroce (Pisa, Italy).....	249

The Phleorean Fields: structural evolution, volcanic history, and eruptive mechanisms	
M. Rosi (Pisa, Italy), A. Sbrana, and C. Principe (Milano, Italy) ..	273
The Phleorean Fields: magma evolution within a shallow chamber	
P. Armienti, F. Barberi (Pisa, Italy), H. Bizouard, R. Clochiatti (Orsay, France), F. Innocenti (Pisa, Italy), N. Metrich (Orsay, France), M. Rosi (Pisa, Italy), and A. Sbrana (Milano, Italy)	289
Evidence for magma mixing in the surge deposits of the Monte Guardia sequence, Lipari	
R. DeRosa (Cosenza, Italy) and M.F. Sheridan (Tempe, AZ, U.S.A.) ...	313
Evolution of the Fossa cone, Vulcano	
G. Frazzetta (Catania, Italy), L. LaVolpe (Bari, Italy), and M.F. Sheridan (Tempe, AZ, U.S.A.)	329
Recent volcanic history of Pantelleria: a new interpretation	
Y. Cornette (Gif sur Yvette, France), G. Crisci (Cosenza, Italy), P.Y. Gillot (Gif sur Yvette, France), and G. Orsi (Napoli, Italy) ..	361
Origin and emplacement of a pyroclastic flow and surge unit at Laacher See, Germany	
R.V. Fisher (Santa Barbara, CA, U.S.A.), H.-U. Schmincke, and P. Van Bogaard (Ruhr, West Germany)	375
Volcanism in the eastern Aleutian arc: Late Quaternary and Holocene centers, tectonic setting and petrology	
J. Kienle and S.E. Swanson (Fairbanks, AK, U.S.A.)	393
Large-scale phreatomagmatic silicic volcanism: a case study from New Zealand	
S. Self (Arlington, TX, U.S.A.)	433
Index	471