

Global tephra studies: role and importance of the international tephra research group 'Commission on Tephrochronology' in its first 60 years

1 Introduction

1.1 Tephrochronology and its functioning

1.1.1 Defining tephrochronology

1.1.2 Application of tephrochronology

1.1.3 Defining tephtras and cryptotephtras

1.1.4 Development of cryptotephra studies and the modern post-1990 era

1.2 Reviewing 'Commission on Tephrochronology'

2 Formation, development, and activities of COT

2.1 Formation of COT in 1961

2.2 Hosting of commission by INQUA or IAVCEI

2.3 Specialist tephra-centred conferences hosted by COT, and notable outputs

2.3.1 Tokyo, Japan, 1964

2.3.2 Redefining 'tephra' after 1973 INQUA Congress, Christchurch, via Westgate and Gold (1974)

2.3.3 Laugarvatn and Reykjavík, Iceland, 1980

2.3.4 Mammoth Hot Springs, USA, 1990

2.3.5 Tokyo, Japan, 1993

2.3.6 Hamilton, New Zealand, 1994

2.3.7 Brives-Charenac, France, 1998

2.3.8 Dawson City, Canada, 2005

2.3.9 Kirishima City, Japan, 2010

2.3.10 Moieciu de Sus, Romania, 2018

2.4 Other activities associated with COT

3 Officers and membership, key events and protagonists in COT's development, and post-2007 funding

3.1 Officers of COT and their roles

3.2 Membership of COT

3.3 Decline and rise of COT since the 1980s: key events and protagonists

3.3.1 COT transforms to CEV

3.3.2 Renaissance from 1987

3.3.3 Growth from 1990s: advent of modern cryptotephra studies and development of new techniques

3.4 Funding acquired by INTAV since 2007 and its expenditure

4 Aims of COT, life membership awards, and communication

4.1 Aims of COT past and present

4.1.1 Current aims of COT

4.2 Life membership awards

4.3 Communicating within COT and beyond

5 Legacies and future of COT

5.1 Current projects and future initiatives

5.1.1 Development of 'best practices' protocols and databases

5.1.2 Microbeam trace-element characterization of tephra reference material

5.1.3 VOLCORE

6 Discussion and conclusions

Acknowledgements

References

Appendices A and B