

## Contents

### Characteristics of LIPs and their plumbing systems

- Srivastava, R. K., Ernst, R. E., Buchan, K. L. and de Kock, M.** An overview of the plumbing systems of large igneous provinces and their significance 1
- Klausen, M. B.** Highly magmatic break-up LIP centres: revisiting the East Greenland volcanic rifted margin 17

### Precambrian LIPs and their plumbing systems

- Cundari, R., Hollings, P., Smyk, M. and Carl, C.** The geochemical evolution of the Logan Igneous Suite, Ontario, Canada: new insights from the Logan Basin and implications for the genesis of the Mesoproterozoic Midcontinent Rift System 43
- Davis, W. R., Collins, M. A., Rooney, T. O., Brown, E. L., Stein, C. A., Stein, S. and Moucha, R. P., Egorova, S. V., Babarina, I. I., Larionova, Y. O., Sukhanova, M. A., Kervinen, A. V. and Maksimov, O. A.** Relicts of Paleoproterozoic LIPs in the Belomorian Province, eastern Fennoscandian Shield: barcode reconstruction for a deeply eroded collisional orogen 67
- Stepanova, A. V., Stepanov, V. S., Larionov, A. N., Salnikova, E. B., Samsonov, A. V., Azimov, P., Egorova, S. V., Babarina, I. I., Larionova, Y. O., Sukhanova, M. A., Kervinen, A. V. and Maksimov, O. A.** Relicts of Paleoproterozoic LIPs in the Belomorian Province, eastern Fennoscandian Shield: barcode reconstruction for a deeply eroded collisional orogen 101
- Peng, P., Xu, H., Wang, C., Su, X., Sun, F. and Wang, X.** Spatiotemporal evolution of large igneous provinces and their related rifts in the North China craton: role in craton breakup and destruction 129
- Pandit, M. K., Pivarunas, A. and Meert, J. G.** Geochemical and palaeomagnetic characteristics of the Vestfold Hills mafic dykes in the Prydz Bay region: implications of a Paleoproterozoic connection between East Antarctica and Proto-India 149
- Srivastava, R. K., Ernst, R. E., Söderlund, U., Samal, A. K., Pandey, O. P. and Gautam, G. C.** Existence of the Dharwar–Bastar–Singhbhum (DHABASI) megacraton since 3.35 Ga: constraints from the Precambrian large igneous province record 173

- Ahmad, T., Yousuf, I. and Chauhan, H.** Petrogenesis and tectonic settings of Proterozoic mafic magmatism from the northern Indian Shield and the Himalaya: possible role for interaction of mantle plume with the subcontinental lithospheric mantle 197

### Phanerozoic LIPs and their plumbing systems

- Pham, T. T., Shellnutt, J. G., Tran, T.-A., Denyszyn, S. W. and Iizuka, Y.** Petrogenesis of silicic rocks from the Phan Si Pan–Tu Le region of the Emeishan large igneous province, northwestern Vietnam 227
- Morake, M. A., O’Kennedy, J. N. F., Knoper, M. W., de Kock, M., Kramers, J. D., Grantham, G. H., Belyanin, G. and Elburg, M. A.** The age and palaeomagnetism of Jurassic dykes, western Dronning Maud Land: implications for Gondwana breakup 255
- Oliveira, A. L., Hollanda, M. H. B. M., Siqueira, R. and Macêdo Filho, A. A.** Using a ‘speedy’ unspiked K–Ar methodology to investigate age patterns in giant mafic dyke swarms 285

|   |     |
|---|-----|
| <b>Singh, A. K., Oinam, G., Chung, S.-L., Bikramaditya, R. K., Lee, H.-Y. and Joshi, M.</b>   | 301 |
| Magmatism in the Siang window of the Eastern Himalayan Syntaxis, NE India: a vestige of Kerguelen mantle plume activity   |     |
| <b>Cucciniello, C., Morra, V., Melluso, L. and Jourdan, F.</b>  | 325 |
| Constraints on duration, age and migration of the feeder systems of the Madagascan Flood Basalt Province from high-precision $^{40}\text{Ar}/^{39}\text{Ar}$ chronology |     |
| <b>Kale, V. S., Dole, G., Patil Pillai, S., Chatterjee, P. and Bodas, M.</b>  | 341 |
| Morphological types in the Deccan Volcanic Province, India: implications for emplacement dynamics of continental flood basalts  |     |
| <b>Sonu, Kumar, A., Satyanarayanan, M., Pathak, V., Vedanti, N. and Shrivastava, J. P.</b>  | 397 |
| Chemical stratigraphy of subsurface lava flows from the Koyna (KBH1) core and correlation with the southwestern stratigraphy of the Deccan Traps                        |     |
| <b>Steiner, R. A., Rooney, T. O., Girard, G., Rogers, N., Ebinger, C. J., Peterson, L. and Phillips, R. K.</b>  | 435 |
| Initial Cenozoic magmatic activity in East Africa: new geochemical constraints on magma distribution within the Eocene continental flood basalt province                |     |
| <b>LIPs and their economic potential</b>  |     |
| <b>Pirajno, F.</b>  | 467 |
| Mineral systems and their putative link with mantle plumes  |     |
| <b>Reis, N. J., Teixeira, W., D'Agrella-Filho, M. S., Bettencourt, J. S., Ernst, R. E. and Goulart, L. E. A.</b>  | 493 |
| Large igneous provinces of the Amazonian Craton and their metallogenic potential in Proterozoic times   |     |
| <b>Shellnutt, J. G., Pang, K.-N., Qi, L. and Bhat, G. M.</b>  | 531 |
| Platinum-group element geochemistry of the Panjal Traps: constraints on mantle melting and implications for mineral exploration   |     |
| <b>Dey, A. and Mondal, S. K.</b>  | 553 |
| Origin of Fe–Ni–Cu (Co) sulfide and Fe–Ti oxide minerals in the c. 1.77 Ga dolerite dyke, Singhbhum Craton (eastern India)  |     |
| <b>Choudhary, S., Sen, K. and Kumar, S.</b>   | 575 |
| Pyroxenite-hosted chalcopyrites from Sung Valley, Meghalaya, NE India: implications for the formation of both high- and low-temperature sulfides in plume-derived magma |     |
| <b>Index</b>  | 593 |