

## Contents

|  |     |
|--|-----|
| Acknowledgements   | vii |
| SENSARMA, S., STOREY, B. C. & MALVIYA, V. P. Gondwana Large Igneous Provinces (LIPs): distribution, diversity and significance   | 1   |
| SVENSEN, H. H., TORSVIK, T. H., CALLEGARO, S., AUGLAND, L., HEIMDAL, T. H., JERRAM, D. A., PLANKE, S. & PEREIRA, E. Gondwana Large Igneous Provinces: plate reconstructions, volcanic basins and sill volumes  | 17  |
| ELLIOT, D. H. & FLEMING, T. H. The Ferrar Large Igneous Province: field and geochemical constraints on supra-crustal (high-level) emplacement of the magmatic system   | 41  |
| SHELLNUTT, J. G. The Panjal Traps  | 59  |
| VIJAYA KUMAR, K., LAXMAN, M. B. & NAGARAJU, K. Mantle source heterogeneity in continental mafic Large Igneous Provinces: insights from the Panjal, Rajmahal and Deccan basalts, India  | 87  |
| PANDEY, R., CHALAPATHI RAO, N. V., PANDIT, D., SAHOO, S. & DHOTE, P. Imprints of modal metasomatism in the post-Deccan subcontinental lithospheric mantle: petrological evidence from an ultramafic xenolith in an Eocene lamprophyre, NW India  | 117 |
| CHANDRA, J., PAUL, D., VILADKAR, S. G. & SENSARMA, S. Origin of the Amba Dongar carbonatite complex, India and its possible linkage with the Deccan Large Igneous Province   | 137 |
| SADIQ, M., UMRAO, R. K., SHARMA, B. B., CHAKRABORTI, S., BHATTACHARYYA, S. & KUNDU, A. Mineralogy, geochemistry and geochronology of mafic magmatic enclaves and their significance in evolution of Nongpoh granitoids, Meghalaya, NE India  | 171 |
| MORTIMER, N., GANS, P. B., MEFFRE, S., MARTIN, C. E., SETON, M., WILLIAMS, S., TURNBULL, R. E., QUILTY, P. G., MICKLETHWAITE, S., TIMM, C., SUTHERLAND, R., BACHE, F., COLLOT, J., MAURIZOT, P., ROUILLARD, P. & ROLLET, N. Regional volcanism of northern Zealandia: post-Gondwana break-up magmatism on an extended, submerged continent | 199 |
| MITRA, K., MITRA, S., GUPTA, S., BHATTACHARYA, S., CHAUHAN, P. & JAIN, N. Modelling basalt weathering at elevated CO <sub>2</sub> concentrations: implications for terminal to post-magmatic rifting in the Deccan Traps, Kachchh, India   | 227 |
| SAMOM, J. D., AHMAD, T. & CHOUDHARY, A. K. Geochemical and Sm–Nd isotopic constraints on the petrogenesis and tectonic setting of the Proterozoic mafic magmatism of the Gwalior Basin, central India: the influence of Large Igneous Provinces on Proterozoic crustal evolution   | 243 |
| Index  | 269 |