

ACKNOWLEDGEMENTS

The author owes his profound gratefulness to Professor W.D. West, for kindly suggesting the problem, for his patient and inspiring guidance throughout the work, and for having corrected the manuscript with meticulous care.

The author feels indebted to Dr. G.P.L. Walker, Imperial College of Science and Technology, London, whose guidance in the field has made him conversant with the compound flows and Amygdale Minerals; and many fruitful discussions on the problem of the structure of the Deccan Traps has proved to be of immense value.

He is also indebted to the General Manager, Chief Chemist and his associates, Bhilai Steel Project, Bhilai, for granting permission to carryout chemical analyses of the rocks and for the help and co-operation received during the analyses work.

He is thankful to the Ministry of Scientific Research and Cultural Affairs, Government of India, for the award of Research Training Scholarship in the initial stages, and to the University Grants Commission for the award of Junior Research Fellowship and Senior Research Fellowship which has enabled him to complete this research problem.

The help and encouragement of all the staff members and the Research Scholars/Fellows of the Department of Applied Geology and Centre of Advanced Study in Geology of the University of Saugar, and Dr. S. Subba Rao of Vikram University, are gratefully acknowledged.

Lastly, the author wishes to thank his wife Madhu Mishra for her encouragement throughout the work and his intimate friends, Sudhir Parganaha, Narayan Guru, Basant Diwan, Shesh Narayan Tiwari for extending help in one form or the other; and Shri A.N.Ringe, for neatly typing out the thesis.

(K.K.MISHRA)