



Mineral Exploration: Principles and Applications

By Swapan Kumar Haldar

Download now

Read Online ➔

Mineral Exploration: Principles and Applications By Swapan Kumar Haldar

Globally, mineral exploration has grown significantly in recent years, driven by the rapid acceleration in prices for gold and diamonds since 2004 and the emergence of a middle class in both China and India?aggressively increased demand. Despite this resurgence, no single book has been published that takes an interdisciplinary approach in addressing the full scope of mineral exploration?from mining and extraction to economic evaluation, policies, sustainability, and environmental impacts. *Mineral Exploration: Principles and Applications* accomplishes this by presenting each topic with theoretical approaches first followed by specific applications that can be immediately implemented in the field.

- Presents 16 case studies that allow readers to quickly apply exploration concepts to real-life scenarios in the field
- Includes more than 200 illustrations and full-color photographs that aid the reader in retaining key procedures and applications
- Each chapter is structured so that its topic is discussed theoretically first followed by specific applications
- Combines both theory and application in a multidisciplinary reference that thoroughly addresses the full scope of mineral exploration
- Authored by an instructor with more than 30 years of experience in the field and a decade as a consultant for commercial mining companies

 [Download Mineral Exploration: Principles and Applications ...pdf](#)

 [Read Online Mineral Exploration: Principles and Applications ...pdf](#)

Mineral Exploration: Principles and Applications

By Swapan Kumar Haldar

Mineral Exploration: Principles and Applications By Swapan Kumar Haldar

Globally, mineral exploration has grown significantly in recent years, driven by the rapid acceleration in prices for gold and diamonds since 2004 and the emergence of a middle class in both China and India?aggressively increased demand. Despite this resurgence, no single book has been published that takes an interdisciplinary approach in addressing the full scope of mineral exploration?from mining and extraction to economic evaluation, policies, sustainability, and environmental impacts. *Mineral Exploration: Principles and Applications* accomplishes this by presenting each topic with theoretical approaches first followed by specific applications that can be immediately implemented in the field.

- Presents 16 case studies that allow readers to quickly apply exploration concepts to real-life scenarios in the field
- Includes more than 200 illustrations and full-color photographs that aid the reader in retaining key procedures and applications
- Each chapter is structured so that its topic is discussed theoretically first followed by specific applications
- Combines both theory and application in a multidisciplinary reference that thoroughly addresses the full scope of mineral exploration
- Authored by an instructor with more than 30 years of experience in the field and a decade as a consultant for commercial mining companies

Mineral Exploration: Principles and Applications By Swapan Kumar Haldar Bibliography

- Sales Rank: #2383974 in Books
- Published on: 2013-02-13
- Original language: English
- Number of items: 1
- Dimensions: 10.90" h x .90" w x 8.60" l, 2.70 pounds
- Binding: Hardcover
- 372 pages

 [Download Mineral Exploration: Principles and Applications ...pdf](#)

 [Read Online Mineral Exploration: Principles and Applications ...pdf](#)

Editorial Review

Review

"The book is technically skillful and a laudable effort to create a comprehensive practical survey text written by someone who knows the territory in more than an academic way. There are also many useful diagrams."--Reference and Research Book News, August 2013

About the Author

1. Academic qualification: B. Sc (Hons) 1963, and M. Sc (Geology) 1965, Calcutta University, D. Sc, 1983, Indian Institute of Technology, Kharagpur, India.

2. Professional Affiliation: Life Member of Mining Geological and Metallurgical Institute of India, Indian Geological Congress and Indian Society of Earth Sciences.

3. Work Experiences: 50 Yrs Professional and Academic Experience in oil and base-noble metal exploration and mining at various capacities at ESSO, Hindustan Copper Ltd, Hindustan Zinc Ltd, Anglo American (P) Ltd, Gold Stream Mining NL/ IMX Resource Ltd, Australia and BIL Infratech Ltd, Guest Faculty Sukhadia University Udaipur.

4. Exploration Projects and Mines visited abroad:

His profession has often required visits and interaction with experts of zinc, lead, gold, tin, chromium, nickel and platinum mines and exploration camps of Australia-Tasmania, Canada, USA, Germany, Portugal, UK, France, Italy, The Netherlands, Switzerland, Saudi Arabia, Egypt, Bangladesh and Nepal.

5. Research Projects as Principal Investigator

(i) DST project in Geostatistical Applications, numerical processing, software development and derivation of parameters for mine planning of base metal deposits at IIT Kharagpur (1979-80) leading to PhD Degree (1983).

(ii) DST project: HR/UR/22/2002 on "Exploration modeling for base / noble metals with special reference to sediment hosted Zn-Pb-Cu-Ag deposits in the northwestern Indian Shield" at Presidency College Kolkata (2003-06).

(iii) DST Project: HR/UR/29/2007 on "Geology of Platinum-Nickel-Chromium mineralization: Resource evaluation and future potential", at Presidency College, Kolkata (2008-2010).

6. Examination conducted:

(i) Regular question papers for Mineral Exploration, Geo-statistics and Mining Geology for M. Sc Applies Geology of Sukharia University, Udaipur, Presidency University, Calcutta University, Indian School of Mines and Institution of Engineers.

(ii) Examined 4 M. Sc Thesis of Delhi and Calcutta University.

(iii) Examined including Viva of 5 PhD Thesis in Geostatistical Applications of Mineral Deposits at Indian School of Mines, Dhanbad, IIT Mumbai and Kharagpur.

7. Current Assignments:

Since 2003, Emeritus Scientist, Post Graduate Applied Geology teaching of Mineral Exploration at Presidency and Calcutta University, Kolkata, and industry related teaching at Indian school of Mines, Dhanbad.

8. Recipient: Dr. J. Coggin Brown Memorial (Gold) Medal for Geological Sciences (1993-94) by Mining Geological and Metallurgical Institute of India.

9. Authored 3 books and 40 publications:

1. Haldar, SK. Exploration Modeling of Base Metal Deposits, Elsevier Publication; 2007, p. 227.

2. Haldar, SK, Mineral Exploration - Principles and Applications, Elsevier Publication; 2013, p. 374.

3. Haldar, SK and Josip Tišljär, Introduction to Mineralogy and Petrology, Elsevier Publication; 2013, p. 356.

Dr Haldar has a unique professional blend of mineral exploration, evaluation and mineral economics with an essence of classroom teaching of postgraduate students of two celebrity Universities over the last 1 decade.

Annexure- I

1. Haldar, S. K., 2011, Platinum–Nickel-Chromium: Resource Evaluation and Future Potential Targets, IGC International Congress on New Paradigms of Exploration and Sustainable Mineral Development on Vision 2050, p. 67 - 82.

2. Haldar. S. K., 2010, Geostatistical Applications in Base Metal Deposits - A case Study, Science and Economics of Rocks - A Primer on Mineral geostatistics, ed: Sarkar, B. C., pp. 95-109.

3. Haldar, S. K., 2009, The First Fifty Year's Record and A New Beginning in Mineral Discovery in India with special Reference to Base Metals, in Shrivastava, K. L., eds., Economic Mineralization, Scientific Publisher (India), Jodhpur, pp. 442-450.

4. Haldar, S. K., 2008, Resource prediction model – Application of Zipf's Law, National Seminar, Ore Body Modeling for Genesis, Predictive Metallogeny and Resource Analysis", Udaipur, (Abstract), pp. 10-11

5. Haldar, S. K., 2008, Investment, Risk and Sensitivity Analyses in Exploration Regime, Executive Development Program, ISM University, Dhanbad.
6. Haldar, S. K., 2008, Base and noble metals in northwestern Indian Shield : Essence of stratigraphy and tectonics in mineral search, International conference on tectonics of the Indian Subcontinent (TOIS), Indian Association for Gondwana Research Conference Series 5, Institute of Technology, Mumbai, (Abstract Volume, pp 90-91).
7. Haldar, S. K., 2007, Exploration Optimisation Using Geostatistics - A Case Study of Sequential Evaluation, Indian School of Mines University, Dhanbad, pp 88-94.
8. Haldar, S. K., 2007, Orebody Modelling : Geostatistical assessment of Mine sub-block and grade forecast system – A case study, Indian School of Mines University, Dhanbad, pp.80-87,
9. Haldar, S. K., 2006, Concepts of deposit – orebody modelling with case study of Zn-Pb-Ag deposits, Rajasthan, (Abstract), National Seminar on “Evaluation of Mineral Resources of India”, 8th National Convention of Association of Economic Geologists, at Visakapatnam in March '06, pp. 2.
10. Haldar, S. K., 2005c, Exploration Modeling for Base and Noble Metals with special reference to Sediment hosted lead-zinc-copper gold Deposits in the Northwestern Indian Shield, DST Project HR/UR/2002,176p.
11. Haldar, S. K., 2005b, Exploration Modeling for sediment hosted Lead-Zinc Deposits in the Northwestern Indian shield – A logical dynamic approach, National seminar on “Mineral exploration, mining and mineral beneficiation : A road map to VISION 2020”, Mining Engineers’ Association of India, Tamilnadu Chapter, pp. 66–84.
12. Haldar, S. K., 2005a, Exploration Modeling of Proterozoic sediment hosted Zn-Pb-Ag mineralisation – logical dynamic approach with case study of Rampura Agucha deposit, Rajasthan, Journal of Economic Geology and Georesource Management, v. 2, no. 1 & 2, pp. 47-70.
13. Haldar, S. K., 2004, Grade and Tonnage Relationships in Sediment-hosted Lead-Zinc Suphide Deposits of Rajasthan, India, in Deb, M., and Goodfellow, W. D., eds., Sediment hosted Lead-Zinc Sulphide Deposits : attributes and models of some major deposits in India, Australia and Canada: Narosa Publishing House, N. Delhi, pp. 264–272.
14. Haldar, S.K., 2001, Grade Tonnage Model for Lead-Zinc Deposits of Rajasthan, India, International Workshop on Deposit Modeling Program by UNESCO-IUGS, New Delhi, December 2001, pp.153-160.
15. Haldar, S.K., & Dev,M., 2001, Geology and Mineralisation of Rajpura-Dariba-Lead-Zinc Belt, Rajasthan, International Workshop on Deposit Modeling Program by UNESCO-IUGS, New Delhi, December 2001, pp.177-188.
16. Choudhary, K.S, & Haldar, S.K., 2001, Sindesar Khurd- A New Mine in Rajpura Dariba Belt, HINDZINC TECH, January 2001, pp.3-11.
17. Haldar, S.K., 1999, Environmental Implications of Mineral Exploitations, Proceedings National Conference on Dimensions of Environmental Stress in India, M.S. University, VADODARA, pp. 227-228.
18. Haldar, S.K., 1998, Deposit Modelling – An Overview, IVth Refresher Course on Concepts in the Formation of Mineral Deposits and Prospect Targeting, GSI, 14 – 27th July '98, 7p.

19. Haldar, S.K., 1996, Computer –Based Geostatistical Assessment for Exploration Data for Optimisation, Estimation of Mine Sub-Block and Grade Forecast System at Rampura Agucha Mine, India, International Course on “Modern Technologies for Mineral Resources Assessment and Management”, I.G.C., U.O.R., Roorkee, December '95-January'96, 8p.
20. Haldar, S.K., 1995, Computer Based Technical Computing in Geology and Mine Planning – Hardware and Software Scenario in National and International Area, VIIIth National Convention of Mining Engineers, Ins. of Eng., 24-26th Nov.'95, pp.1-3.
21. Lahiri, D., Haldar, S.K., 1993, Technical Computing in Geology, Mining and Beneficiation at Hindustan Zinc Limited -An overview, Indian Conference on Computer Applications in Mineral Industry, ICCAMI-93, P.147-154.
22. Krishnamurty, G.R., Upmanyu, K.G., Haldar, S.K., 1992, Computer & Communication in Hindustan Zinc Limited- An overview, HINDZINC TECH, v. 4, no. 2, 20p.
23. Haldar, S.K., Paliwal, H.V., Bhatnagar, S.N., 1992, Computerised Geostatistical assessment of Exploration Data for Sample Optimisation and Estimation of Mine Subblock - A case study of Rampura-Agucha Lead-Zinc Deposit, India; in Sarkar, S. C., eds., Metallogeny Related to Tectonics of the Proterozoic Mobile Belts, Oxford & IBH Publishing Company Pvt. Ltd., pp. 339-360.
24. Haldar, Swapan K., Chaudhry Manoj, 1991, Computer Aided Orebody Modelling - An Integrated Approach for Mine Planning at Hindustan Zinc Limited, 1992, Computer society of India, National Conference, CAMPI-92, pp. B28-B35.
25. Haldar, S.K., 1991, Orebody modelling of Rampura-Agucha mine- A key note address, Regional Workshop on Mineral Deposit Modelling, ISM, Dhanbad, December 1991.
26. Bhatnagar, S.N., Mathur, S.B., Haldar, S.K., 1990, Exploration Practices at HZL, HINDZINC TECH, v. 2, no. 2, pp. 4-23.
27. Haldar, S.K., Bhatnagar, S.N., Paliwal, H.V., 1990, Application of geostatistics to exploration data for sample optimisation, mine sub-block estimation and grade forecast system at Rampura-Agucha lead-zinc mine, India, XXII APCOM-90, 11 P., Berlin, West Germany.
28. Bhatnagar, S.N., Haldar, S.K., Chaudhry, M., 1989, Computer based ore reserve system - mine sub-block geostatistics related to large tonnage mechanised lead-zinc mines of Hindustan Zinc Limited, International Conference on Base Metals Technology, February 1989, Jamshedpur, India, pp. 21-34.
29. Viswanath, U., Jani, S.R., Haldar, S.K., 1988, Exploration and exploitation problems of the cross folded lead deposit of Bandalamottu, Guntur district (AP), ILZIC Silver Jubilee Conference, New Delhi, pp. 341-348.
30. Bhatnagar, S.N., Haldar, S.K., 1988, Planning for base metal exploration - A case history of Rampura-Agucha Lead-Zinc Deposit, Diamond Jubilee National Symposium on Development of India's mineral and fuel resources: Geological and Environment Aspects, ISM Dhanbad.
31. Bhatnagar, S.N., Haldar, S.K., 1987, Sequential evaluation model of phased exploration data leading to sample optimisation - A case study of Rampura-Agucha Zinc-Lead Deposit, India, CIM Bulletin, v. 80, no. 906, pp. 56-60.

32. Paliwal, H.V., Bhatnagar, S.N., & Haldar, S.K., 1986, Lead-Zinc Resources Prediction in India-An application of Zipf's Law; *Mathematical Geology*, v.18, no.6, pp. 539-549
33. Bhatnagar, S.N., Khamesra, G.S., & Haldar, S.K., 1984, Lead-Zinc resources and development in India; *Symposium on Significant Discoveries of Geology for Mineral Industries*, Min. Geo. and Meta. Inst. of India, Calcutta, pp. II 42-59.
34. Haldar, S.K., Rao, N.V.R.S., 1983, Sequential evaluation of exploration data by statistical and geostatistical modelling leading to optimisation; *Proceedings of Workshop on Geo-modelling*, IIT, Bombay, pp. 222-231.
35. Haldar, S. K., 1982, A Study of the Balaria Base Metals Deposit, Zawar Group of Mines, Rajasthan, Using Numerical Procedures with Special Reference to Derivation of Parameters for Mine Planning, Unpublished PhD Thesis, IIT, Kharagpur, 641p.
36. Haldar, S.K., Roy, R.N., and Sen, R., 1981, Distinctive features in the geological set-up of the Indian base metal deposits; *Frieb Orsch. - H.C. 364*, Herg, Recter Der Bergakedemie Freiberg Leipzig: Veb Deutscher Verlag Fur Grundstoff Industrie 1981, Topical report of Iagod, v. X-1980, pp.25- 31.
37. Kala, P.P., & Haldar, S.K., 1981, Computer based ore reserve system at Zawar Mines, International Seminar on Lead, Zinc and Cadmium, Nov. 1981, Indian Lead Zinc Information Centre, New Delhi, pp. A17-A24.H
38. Haldar, S.K., 1980, Selection of cut-off during mine planning and its relation to techno- economic modeling; *Indian Jour. of Earth Science*, v. 7, no. 1, pp. 76-81.
39. Haldar, S.K., 1967, Geology of the chromite deposits occurring in the area around Sukarangi, Cuttack District, Orissa, *Geol., Mining and Metallurgical Society of India*, v.39, no.1, pp.59-61.
40. Haldar, S. K., 1965, Geology of the Area around Sukarangi, Cuttack District, Orissa, with Special Reference to its Economic Resources, Unpublished M. Sc Thesis, Calcutta University, 94p.

Users Review

From reader reviews:

Nathan Jackson:

As people who live in typically the modest era should be up-date about what going on or data even knowledge to make these keep up with the era that is always change and make progress. Some of you maybe will probably update themselves by looking at books. It is a good choice for yourself but the problems coming to anyone is you don't know what one you should start with. This Mineral Exploration: Principles and Applications is our recommendation to make you keep up with the world. Why, since this book serves what you want and wish in this era.

Charles Smith:

Reading a book to get new life style in this yr; every people loves to go through a book. When you go through a book you can get a large amount of benefit. When you read publications, you can improve your knowledge, because book has a lot of information on it. The information that you will get depend on what

sorts of book that you have read. If you need to get information about your study, you can read education books, but if you want to entertain yourself you can read a fiction books, such as novel, comics, along with soon. The Mineral Exploration: Principles and Applications will give you a new experience in examining a book.

Lynne Young:

This Mineral Exploration: Principles and Applications is brand new way for you who has fascination to look for some information mainly because it relief your hunger associated with. Getting deeper you into it getting knowledge more you know or you who still having small amount of digest in reading this Mineral Exploration: Principles and Applications can be the light food for you personally because the information inside this kind of book is easy to get simply by anyone. These books build itself in the form that is reachable by anyone, yep I mean in the e-book contact form. People who think that in book form make them feel sleepy even dizzy this publication is the answer. So there isn't any in reading a book especially this one. You can find actually looking for. It should be here for you. So , don't miss the item! Just read this e-book type for your better life and knowledge.

Robert Barker:

A lot of people said that they feel bored stiff when they reading a book. They are directly felt this when they get a half portions of the book. You can choose often the book Mineral Exploration: Principles and Applications to make your own reading is interesting. Your current skill of reading proficiency is developing when you including reading. Try to choose basic book to make you enjoy to see it and mingle the impression about book and reading especially. It is to be first opinion for you to like to start a book and read it. Beside that the publication Mineral Exploration: Principles and Applications can to be your new friend when you're experience alone and confuse with the information must you're doing of these time.

Download and Read Online Mineral Exploration: Principles and Applications By Swapan Kumar Haldar #SW64NOHGF1X

Read Mineral Exploration: Principles and Applications By Swapan Kumar Haldar for online ebook

Mineral Exploration: Principles and Applications By Swapan Kumar Haldar Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Mineral Exploration: Principles and Applications By Swapan Kumar Haldar books to read online.

Online Mineral Exploration: Principles and Applications By Swapan Kumar Haldar ebook PDF download

Mineral Exploration: Principles and Applications By Swapan Kumar Haldar Doc

Mineral Exploration: Principles and Applications By Swapan Kumar Haldar Mobipocket

Mineral Exploration: Principles and Applications By Swapan Kumar Haldar EPub

SW64NOHGF1X: Mineral Exploration: Principles and Applications By Swapan Kumar Haldar