

Chapter 11 (G.E. Harlow) gives a brief account of prospection and mining of diamonds including exploitation of marine deposits. Aspects of diamond cutting and polishing for jewellery as well as for certain specialty products such as dies for drawing wire and microtone blades used in medical biopsy are described. Chapter 12 (J.E. Shingley and T. Moses) provides a guide to identification of natural, synthetic and treated diamonds; various colour and clarity enhancement techniques; and 4-c's for evaluation of diamonds. The last Chapter Ch. 13 (A.T. Collins) synthesises information on application of diamonds in different scientific and commercial fields such as supercomputers, electronic devices and H P anvil cells. Chemical vapour deposits (CVD), the latest evolutionary process in diamond synthesis is described briefly.

Overall, the book provides voluminous up-to-date information on diamonds. It forms a very useful reference book for a beginner who wishes to know all about diamonds. The reader can pursue his study taking the aid of references provided at the end of each chapter. Along with chapters 1 to 4 and 11 to 13 that furnish technical information. Chapters 5 to 10 deal with glamorous aspects making the coverage "complete". Notwithstanding, this well organised meticulously printed book with excellent colour plates and figures, a few unforeseen errors have crept in. 'Type I diamonds' appear to have been wrongly printed as 'Type II diamonds' in line 9, p.21; the captions of colour plates in p.109 and p.111 have been interchanged; 'Dresden green' illustrated in p.112 depicts a beautiful green hue, the same stone in p.41 fails to show that colour. This reasonably priced book is recommended not only for university and technical libraries but also for all those who love diamonds and those dealing in diamonds.

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REMOTE SENSING AND PHOTOGRAMMETRY: Principles and Applications

by M.L. Jhanwar and T.S. Chauhan (1998), Vigyan Prakashan, Nagarion Ka Bas, Jodhpur
 - 342 002, Vol. I & II, 425p. Rs. 490/- each.

Remote Sensing is a comparatively recent science with tremendous development potential. Concomitant with the advancement in space technology the field of remote sensing also grew in stature and content. India with its indigenous IRS satellite pay loads is in the forefront in this technology. Hence, it is but timely that the authors have come out with text books on this subject catering to the needs of the academic community. It may be remembered that many universities are offering post-graduate courses in Remote Sensing.

While complimenting the authors for their valuable effort in bringing out a text book to serve the needs of the post-graduate students, the books have a number of shortcomings which should invariably be overcome in future editions.

The title of the book should have been "Photogrammetry and Remote Sensing" rather than "Remote Sensing and Photogrammetry" as Photogrammetry is dealt with first. Since the second volume deals only with "Remote Sensing Applications" it would have been more appropriate to have the same title.

While discussing Photogrammetry in Volume-I under mathematical considerations for stereoscopic vision, various definitions like Epipolar axis, Epipoles etc. could have been explained with line drawings, as also "stereoscopic parallax" which is an essential feature of aerial photographs. These are essential as the book addresses the student community. Similarly the formula given for

SE=B/Z Z/E is not clear (p.211). Advantages and limitations of AP versus RS ought to have been discussed.

Systems for Remote Sensing has been treated as a separate chapter. It could as well have formed part of the main chapter on "Remote Sensing". A short description of various computer languages are given on pages 145 to 148. The list can be endless. A comparative table given on page 148 would have been adequate.

Computer languages like BASIC and FORTRAN have been described. These are not necessary. Present day Digital Image Processing Application Software sits on WINDOWS and UNIX. It would have been desirable instead to describe the statistical parameters used in DIPS especially those used in radiometric enhancements and sampling.

The topic "Pattern Recognition" has been described under Photogrammetry and repeated under Digital Image Processing. Remote Sensing in the thermal region has not been adequately covered. No subject index is given. For a text book it is necessary.

Many factual errors have been committed like (1) All objects at temperatures 'below' absolute zero (-273°C) radiate energy (p.61 line 14). It should be 'above', (2) wave length as 560m for 560 nm (p.19 line 647), (3) small-scale aerial photographs are good, to study small area (p.11 line 25). It should be 'large scale', (4) CPU should be Central Processing Unit not Control Processing Unit (p.140 line 35), (5) Spatial frequency is given as special frequency (p.189 line 25). These are some of them. In a text book such mistakes cannot be permitted.

Many references are not listed. Some are Hunting (1982), p.28; Hunt and Ashley (1979); Collins et al. (1981), p.45; Hund (1980), p.209; Gogney (1967), p.408; Spurr (1960), p.409; Lyons et al. (1972), p.412 etc. Typographical errors are innumerable. There is hardly a page free from errors.

The entire chapter on Archaeology could have been avoided. More illustrations ought to have been given in a book of this kind. Figures on p.116 and p.406 would have been better omitted.

With considerable pruning, additions and crisp editing the book could turn out to be useful to the student community.

Hyderabad

M.MINNAIR

ANNOUNCEMENT

SHORT COURSE ON ACTIVE TECTONICS AND PALEOSEISMOLOGY: 14-19 September, 1998. Place: Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore. Course Coordinators: C.P. Rajendran, CESS, Trivandrum and K.S. Valdiya, JNC, Bangalore. This course will present the major trends and techniques in paleoseismology and active tectonics. It is open to post-graduate students, researchers and teachers with background in geology/geophysics. Applications will be reviewed by a selection committee and will be accepted no later than June 20, 1998. Travel grant and living expenses will be provided to selected candidates. Applications containing full CV with recommendations from the supervisor may be sent to either of the following addresses: C.P. Rajendran, Scientist, Centre for Earth Science Studies, Akkulam, Trivandrum - 695031. Fax: 0471-442280; Phone: 0471-442451 Extn.326, email: geo@giasmdol.wsnl.met.in; G.D. Gupta, Joint Advisor, ESS, Department of Science and Technology, Technology Bhavan, New Mehrauli Road, New Delhi - 110016.