This is a book no practising inorganic mechanist can afford to be without. It will be invaluable in adding that necessary sparkle to lecture courses (with many tutorial problems already set), and as a comprehensive bibliography to aid research.

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Richard A. Henderson

Gmelin Handbook of Inorganic and Organometallic Chemistry, 8th edition, Br–Bromine, supplement volume B1, Compounds with Rare Gases and Hydrogen, Vol. XVIII, Springer Verlag, Berlin, 1990, pp. 550. DM 2550. ISBN 3-540-93600-9.

It is an extraordinary fact that this volume, which dissects the literature on bromine compounds with rare gases and with hydrogen from about 1930 up to the spring of 1989 should occupy 550 pages. The rare gas compounds are van der Waals complexes or exciplexes, and the discussion of these is rather physical. Thereafter comes the meat of this volume, ranging from HBr_3 and HBr_3^- through HBr_2 and HBr to H_2Br^+. This volume also covers the behaviour of Br^- in solution. As usual, the coverage is exhaustive. The physical properties of HBr require more than 160 pages, and then the discussion of chemistry starts. Very basic reactions, such as H_2–Br_2–HBr reactions, are dealt with at length. Reactions of HBr are summarised extensively. Finally, Br^- is similarly treated.

Once again, we are indebted to the Gmelin Institute for their extraordinary tenacity and thoroughness. This should be as much part of a chemistry library as Chemical Abstracts.

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