Columbia University in the City of New York New York, N.Y.10027

Department of Chemistry

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Chemistry C2407x, 1999

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Homework Assignment 4

Chemical Bonding

Required reading, no lecture: Oxtoby, pp 581-92 (Section 16.1). This material covers molecular bonding in diatomic molecules, a subject usually well studied in high school courses.

Do problems 16.1, 16.3, 16.5, 16.7, 16.13. I will assume that you are adept at these kinds of problems. This should serve as a review of the subject for you.

Lectures cover Oxtoby pages 592-595 (Section 16.2); 80-83 (Section 3.6); 632-638 (Section 17.1); 614-616 (Section 16.8)

Do Oxtoby Chapters 16, 3 and 17 Problems: 16.15, 16.17, 16.19, 16.25; 3.41, 3.42, 3.43; 17.1, 17.3, 17.15, and 17.37

Suggested Completion date: 12/9/98

There is a small possibility that I will get to lecture on Transition Metal Bonding, Oxtoby pages 659-680 (Sections 18.1-18.4). If I do, I will assign a few representative problems for that material after the third exam.