

HW # 8

Physics 406

(due 05/02)

Reading

(i) Omar (O) Chapter 10 pp 495 - 523.


(ii) Handout 8: "Magnesium Diboride: One Year On," P.C. Canfield and S.L. Bud'ko, Physics World 2002); please find this reading on the course website (<http://www.physics.rutgers.edu/ugrad/406/physics406.html>).

Problems:

1, 2. Omar Ch. 10, Q. 2 & 6

3. Omar Ch. 10, Pr. 6

4. Omar Ch. 10, Q. 5

5.  Based on your reading of Handout 8, please describe the discovery and the properties of the intermetallic superconductor MgB_2 . Please use a minimum of four sentences in your response.