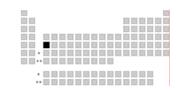
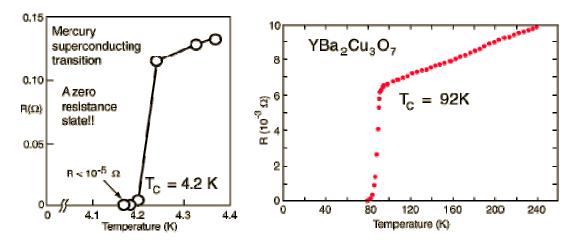
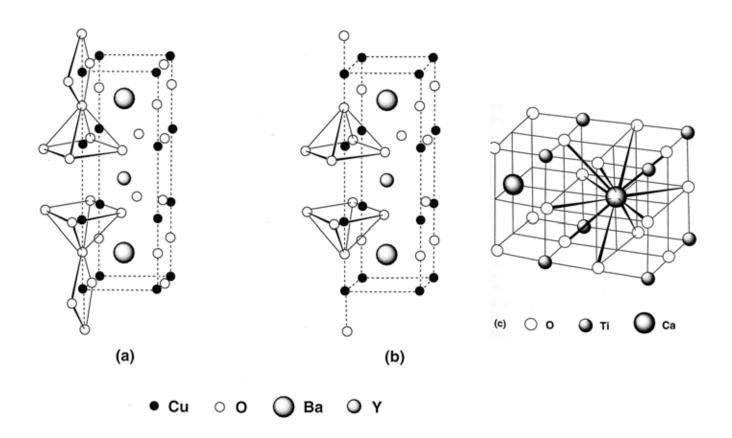
## **Special Topic A: Superconductivity**





**Figure A1**. Resistance as a function of temperature for mercury (left) and for a ceramic superconductor (right).



**Figure A2**. The structures of (a) the superconductor YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub>, (b) the semiconductor phase YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6</sub>. Both of these are based on the (c) perovskite (CaTiO<sub>3</sub>) structure.