PHYS 212L Lab4 Problems from Chap 21 Due on WP 2/14

P25. How many electrons would have to be removed from a coin to leave it with a charge of +2.4 x 10-6 C?

P33. Calculate the number of coulombs of positive charge in 320 cm3 of (neutral) water. (*Hint:* A hydrogen atom contains one proton; an oxygen atom contains eight protons.)

P36. Electrons and positrons are produced by the nuclear transformations of protons and neutrons known as beta decay. **(a)** If a proton transforms into a neutron, is an electron or a positron produced? **(b)** If a neutron transforms into a proton, is an electron or a positron produced?

P45. How many coulombs of positive charge are in 1.27 mol of neutral molecular-hydrogen gas (H2)?

P59. What is the total charge in coulombs of 72.7 kg of electrons?