Many people are working on developing small electronic sensors which are spread through an environment and collect data. A prime example is a tire pressure sensor, where the entire unit (energy storage and gathering, sensor and wireless link) lives inside the tire stem. A power converter (most likely a switched-capacitor based converter) will be used to convert energy between the three energy units: source, storage and sink. These converters will also need regulation and a clock, both of which have to run at low power levels and support an ultra-low power sleep state. The clock must operate the switched-capacitor converter at all times, and should periodically wake up the sensor circuitry for measurements. Control will be necessary to regulate the output voltage and to collect the maximum power from the energy scavenger. My project will entail investigating the methods of power conversion, control and clocking, and developing a preliminary IC design of such a converter.