

Getting to Know the Science in your Pocket



POCKET TECH



The Franklin Institute (a science museum in Philadelphia) and the MRSEC have been engaged in a longtime partnership which most recently resulted in a 5th museum show kit called Pocket Tech. At a training meeting in October 2013, this set of hands-on, interactive, visual demonstrations was awarded and distributed to representatives of 16 science museums nationwide from small, medium, and large institutions in a variety of geographical and socio-economic areas. During 2014, this kit is expected to be seen by more than 250,000 visitors. MRSEC members provided the initial inspiration and content ideas, feedback during the development process, ongoing technical oversight, and supplemental “fact sheets”. AT&T augmented the kits by providing a refurbished smart phone for each set.

Specifically, Pocket Tech features six demonstrations that explore the technology contained within personal electronic devices (such as smart phones). Real electronics and interactive models explain the most notable “software” and “hardware” functions of pocket-sized computers: the binary language of data storage and processing, basic logic gates, color display technology, screen re-orientation, touch screens, and wireless signal transmission. The activities build deeper understanding of this common technology, and provide insight into emerging areas of materials science and computational research.