**Abstract**: The Dawn spacecraft reached Vesta, the second most massive asteroid in the main belt, in July of 2011, and has since returned a wealth of remarkable scientific findings. These have included the confirmation of Vesta as the parent body of a common class of meteorites (the Howardite-Eucrite-Diogenites), evidence for a substantial iron core, an impact record consistent with recent dynamical models driven by giant planet migration, and intriguing brightness and compositional variations. Vesta's nature is transitional between an asteroid (planetesimal) and a planet, and represents one of the oldest intact planetary building blocks from the beginning of the solar system. Dawn's novel ion-propulsion system allows the spacecraft to travel further and orbit the dwarf planet Ceres in 2015.