The Seebeck Effect is named for East Prussian scientist Thomas Johann Seebeck (1770–1831). The metals in Seebeck's experiments were reacting to the temperatures, creating a current loop in the circuit and a magnetic field. In 1821, Seebeck discovered that a circuit made of two dissimilar metals conducts electricity if the two places where the metals connect are held at different temperatures. Seebeck placed .a compass near the circuit he built and noticed that the needle deflected