Sidgwick, Nevil Vincent 1873 - 1952

DEGREE: PhD DATE: 1901 PLACE: Tübingen
TEACHER/RESEARCH ADVISOR: Pechmann

introduced concept of inert pair; helped establish existence of hydrogen-bonding based on relative solubilities and volatilities of ortho vs. meta and para disubstituted benzenes; studied solution chemistry of cupric carboxylates and rates of hydration of carboxylic anhydrides; invented method to distinguish isomers from polymorphs; first to apply electric dipole moments to the study of molecular structure and bonding; formalized VSEPR theory and popularized concepts of the dative bond and van der Waals radii; wrote comprehensive textbooks on organonitrogen chemistry and the chemistry of the elements.

FOOTNOTE: Sidgwick worked as an assistant to Harcourt while an undergraduate at Oxford. Although Sidgwick later obtained his degree under von Pechmann, Sidgwick's own research owed more to Harcourt's interests in physical chemistry.