

crystal field

The average static electric field experienced by an ion, molecule or atom in a crystal generated by all the other surrounding atoms, molecules, or ions. The concept introduced by Becquerel and developed by Bethe has been extended to refer to the field generated by the ligands (anions or neutral species) surrounding a transition metal ion in a coordination compound. With the understatement that some covalency may exist in the metal-ligand bond, it is often referred to as ligand field.

Source:

PAC, 1999, 71, 1919 (*Glossary of terms used in theoretical organic chemistry*) on page 1932