

A second phase of consolidation is marked by the generation of smaller crystals of microlites or a microlitic ground-mass. The development of crystallites and ground-mass at this phase is limited to trachytoid rocks.

In the case of granitoid rocks the consolidation is complete at the close of the second stage, but in the case of trachytoid rocks there follows still a third phase characterised by processes of alteration in the crystals and matrix already formed, and by the constitution of a micro-felsitic, microlitic or glassy ground-mass.

For the identification of the individual rock-varieties MM. Fouqué and Lévy regard the feldspars of primary importance; subordinate means of identification are afforded by the magnesia-iron silicates (mica, hornblende, augite, diallage, hypersthene, peridote). The work concludes with a detailed description of the rock-forming minerals. In France, the Fouqué-Lévy system has held an authoritative place in the teaching of petrography.

A second edition of his *Mikroskopische Physiographie der petrographisch wichtigen Mineralien* was produced by Rosenbusch in 1885. Rosenbusch had practically re-written this work, and made it an exhaustive compendium of all the results obtained by microscopical, crystallographical, and micro-chemical methods. The optical phenomena of crystallography were discussed with the utmost care. In the first edition Rosenbusch had advanced microscopical research by the introduction of new apparatus, in the second he was able to add many valuable mineralogical results of the improved means of research. He also gave full and precise instructions regarding the use of the microscopic methods, so that by following the directions given in this work any earnest student might become a proficient crystallographer and mineralogist.

In 1888, Michel-Lévy and Lacroix published *Les Minéraux des Roches*, a work which provides an excellent general account of all the physical and optical properties of rock-forming minerals, and, like that of Rosenbusch, gives full directions for the optical examination of thin sections, and for all micro-chemical means of identifying mineral fragments. The French authors relied in many cases on the crystallographical investigations of Descloiseaux, and also incorporated many of the methods and results of Rosenbusch.

Although Sorby had been the great pioneer of modern