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Sommario/riassunto	Polaritonic chemistry is an emergent interdisciplinary field in which the strong interaction of organic molecules with confined electromagnetic

field modes is exploited in order to manipulate the chemical structure and reactions of the system. In the regime of strong light-matter coupling the interaction with the electromagnetic vacuum obliges us to redefine the concept of a molecule and consider the hybrid system as a whole. This thesis builds on the foundations of chemistry and quantum electrodynamics in order to provide a theoretical framework to describe these organic light-matter hybrids. By fully embracing the structural complexity of molecules, this theory allows us to employ long-established quantum chemistry methods to understand polaritonic chemistry. This leads to predictions of substantial structural changes in organic molecules and the possibility of significantly influencing chemical reactions both in the excited and ground states of the system.