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Sommario/riassunto	This brief presents the main aspects of the response functions theory (RFT) for molecular solutes described within the framework of the Polarizable Continuum Model (PCM). PCM is a solvation model for a Quantum Mechanical molecular system in which the solvent is represented as a continuum distribution of matter. Particular attention is devoted (i) to the description of the basic features of the PCM model, and (ii) to the problems characterizing the study of the response function theory for molecules in solution with respect to the analogous theory on isolated molecules.