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and biophysics, Structural Glasses and Supercooled Liquids: Theory, Experiment, and Applications presents a modern, complete survey of glassy phenomena in many systems based on firmly established characteristics of the underlying molecular motions as deduced by first principle theoretical calculations, or with direct/single-molecule experimental techniques. A well-rounded view of a variety of disordered systems where cooperative phenomena, which are epitomized by supercooled liquids, take place is provided. These systems include structural glasses and supercooled liquids, polymers, complex liquids, protein conformational dynamics, and strongly interacting electron systems with quenched/self-generated disorder. Detailed calculations and reasoned arguments closely corresponding with experimental data are included, making the book accessible to an educated non-expert reader. "--