Chapter 6 Conclusion



One of the tendencies in the development of modern Natural Science and Mathematics is a spontaneous formation of specializations in sciences. The development of Materials Science is no exception.

In researches included in the monograph, the main attention is paid to the structure and interaction of the intermediate asymptotics components. Mesostructure of matter is a set of structural elements of different scale levels, for which spatial (statistical) self-similarity is characteristic—an example of multiscale structure. The experience of numerous experimental and theoretical researches on the study of mesostructure, the understanding of the physical body as a system, and structure as "a state arising as a result of the coherent behavior of a large number of particles" (G. Haken), allows us to assume that the most interesting results in the study of the condensed state of matter, and in particular, composite materials, will be obtained with consistent consideration of the interaction of structures of all scales, understanding of the aggregate of largescale structures as a whole.