

**Electrical engineering.** PODOLTSEV A.D., KUCHERIAVA I.N. Multiphysical modeling in electrical engineering. – Kyiv: Institute of Electrodynamics of NAS of Ukraine. 2015. – 305 p. – ISBN 978-966-02-7671-0



Modern approaches to modeling of the processes of various physical nature that simultaneously occur in electrotechnical device and determine its performance – multiphysical processes, are described. Two-way classification of multiphysical tasks in electrical engineering is given – in accordance with the nature of relationship between various physical processes (tightly coupled and loosely coupled) and in terms of approaches to the modeling processes (multiphysical field, multiphysical chain, and chain and field tasks).

The monograph is oriented towards the students and postgraduate students of electrotechnical specialities, and towards the experts in the field of computer modeling of the processes in electrotechnical devices and systems. It can also be useful for researchers in the field of biomedicine, studying an impact of electromagnetic fields on biological systems.