Lynda Amirouche is a teacher-researcher at Algiers University for Science and Technology USTHB. She is generally interested in both theoretical and experimental investigations in Materials Science. In particular, her main field of interest is modeling alloys microstructure's formation at different scales by using different techniques such as Molecular Dynamics and Phase-Field. She is also interested in correlations emerging between microstructures and alloy's physical and mechanical properties. After getting her first degree in Solid State Physics, from USTHB, she has prepared a magister thesis, which dealt with directional solidification of Cd-Zn eutectic alloys. The thesis, which was purely experimental, has been prepared in the Solid-Solution Laboratory of the Physics Faculty of USTHB. After defending that thesis, she switched from experimental to theoretical investigations in Materials Science. She has prepared a Doctorate èS-Science thesis in the Theoretical Physics Laboratory of the Physics Faculty of USTHB. The thesis dealt with multi-scale modeling of alloys microstructures formation and has been prepared under the supervision and with the collaboration of both Prof. Sakir Erkoç from METU University (Turkey) and Prof. Mathis Plapp from Ecole Polytechnique de Palaiseau (France). Thus, starting at the atomic scale, microstructure's formation has been studied, in collaboration with Sakir Erkoç, by Molecular Dynamics simulations using particular interatomic potentials (namely applied to Cd and Zn atoms). Furthermore, taking place at a mesoscopic scale, microstructure's formation has been studied, in collaboration with Mathis Plapp, by using the Phase Field technique (namely applied to Discontinuous Precipitation).