## T. P. Didenko, P. O. Selyshchev

## DYNAMICS OF CREEP RATE CHANGE OF DISLOCATIONS DENSITY AND POINT DEFECTS IN THE MATERIALS UNDER IRRADIATION WITH ACCOUNT OF GENERATION OF VACANCIES BY GLIDING DISLOCATIONS

In the frame of glide dislocation model limited by their climb the changes in the concentration of point defects and dislocations in materials under irradiation is studied. We have noted, when the dislocation slip vacancies are generated. It is shown that there might be several stable modes (from one to three depending on exposure conditions), their stability is investigated, and we have constructed state diagram and corresponding phase portraits.

Keywords: dislocations, creep, irradiation, point defects, vacancies.