## COMPLEX COPPER COMPOUNDS WITH PENTAAMINOTETRAZOLE ARE THE NEW CHALLENGE IN TREATMENT AND PREVENTION OF FREE-RADICAL CONDITIONS

## Irina Shugalei, MikhailIlyushin, VeronikaSokolova,NadejdaDubjago, IrinaBachurina, AlexanderGarabadzhiu\*

St. Petersburg State University of Technology (Technical University) 26Moskovskyave., St. Petersburg, 190013 Russia, Tel.+79643628922, e-mail: shugalei@mail.ruand gar-54@mail.ru

**Abstract.**The present article provides route of synthesis of complex copper compounds with 1.5-pentamethyltetrazole as a ligand. These compounds are considered promising antioxidants that can find application in treatment and prevention of "free radical" conditions caused by a variety of reasons, e.g. harmful environmental factors. The obtained compounds were rated by their antioxidant potential; the ability to inhibit lipid peroxidation and SOD-like activity thereof were assessed by independent experimental techniques.

**Keywords:**complex compounds with 1.5-pentamethyltetrazole as a ligand, antioxidants, lipid peroxidation, SOD-like activity.