

The Synthesis of the Silver Nano in the Medicinal Plant Baikal Skullcap and Their Antioxidant Activity

Hajiyeva, Maryam (School: Lyceum Named after Academician Zarifa Aliyeva)

Alshanova, Nigar (School: School 175)

The actuality of the research: Very different plants and the extracts taken from their roots are used in the synthesis of the silver nanoparticles (AgNP). The Baikal-skullcap (*Scutellaria baicalensis* Georgi) used as the medicinal plant have a great importance among these plants. There are the flavonoids-antioxidants in a great number used as a medicine since the ancient times in the content of the plant Baikal-skullcup. These antioxidants may participate both as a reductant and stabilizator in the synthesis of the silver nanoparticles. So, the Baikal-skullcip places an important role in the synthesis of the organic forms of Ag nanoparticles. From other side, they have begun to use the nanoparticles as medicine carriers in the practice. The measure of these nanomedicines is at least 5-10 nm and the very clean, non-toxic nanoparticles are used in order to increase the effectiveness of the medicines combined them. As the silver nanoparticles meet this demand often, so their research is begun to be researched widely. Whilst Ag nanoparticles are synthesized in the content of the extract of the medicines, there is great probability of joining of the antioxidant in the content of the extract on their surface. The joining of the specific antioxidants over the surface of Ag nanoparticles create an opportunity to use this Ag nanoparticles as nanomedicine in the future. The reactor and plant used in researches: Silver salt, AgNO₃, Baikal-skullcup – *Scutellaria baicalensis*.

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