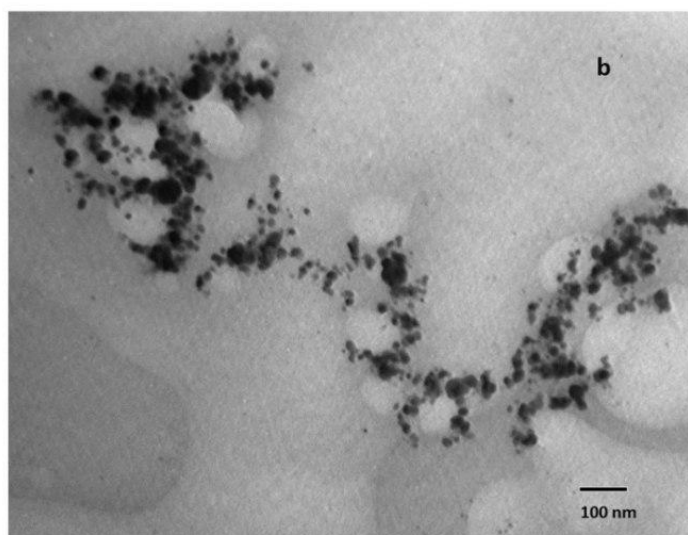
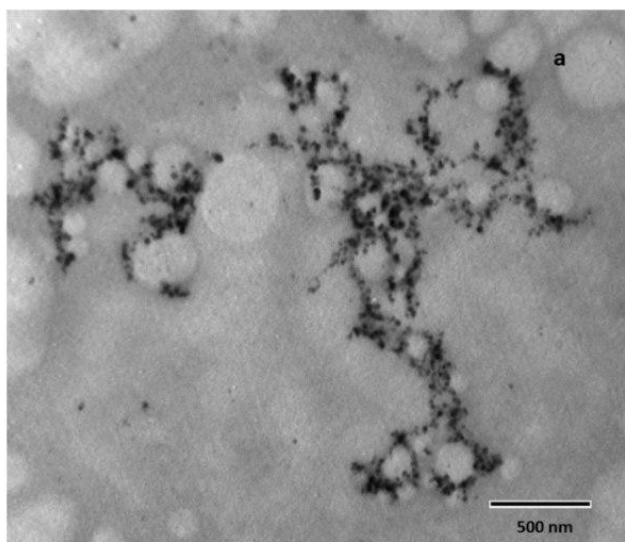
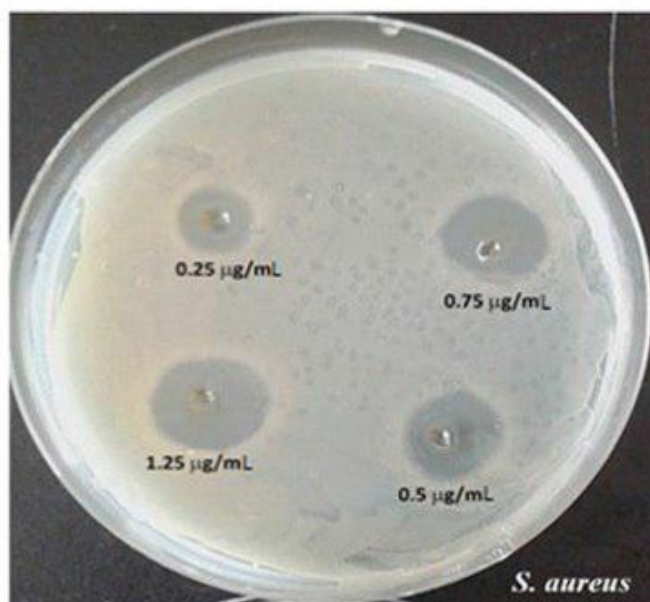
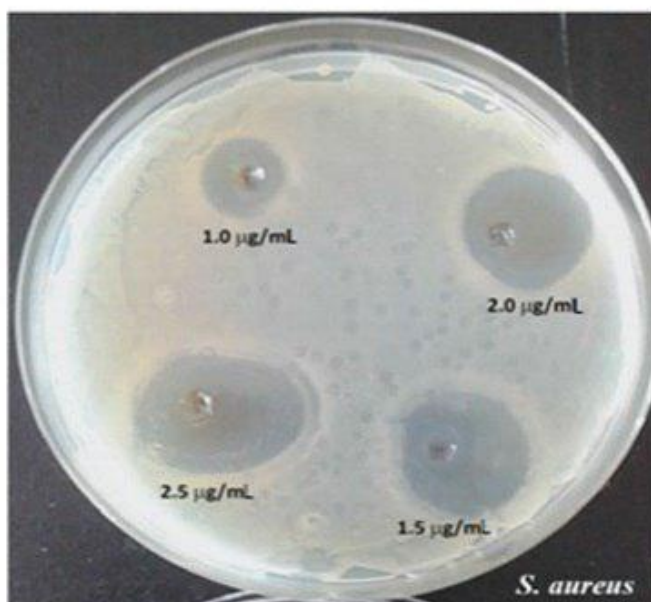
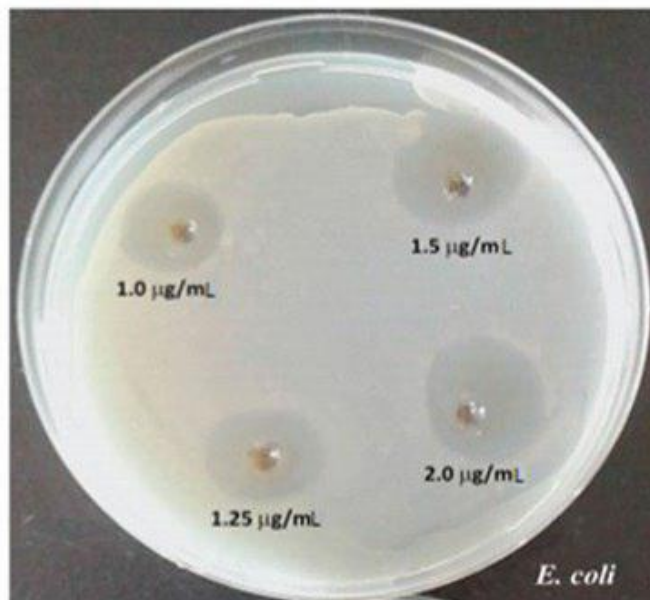
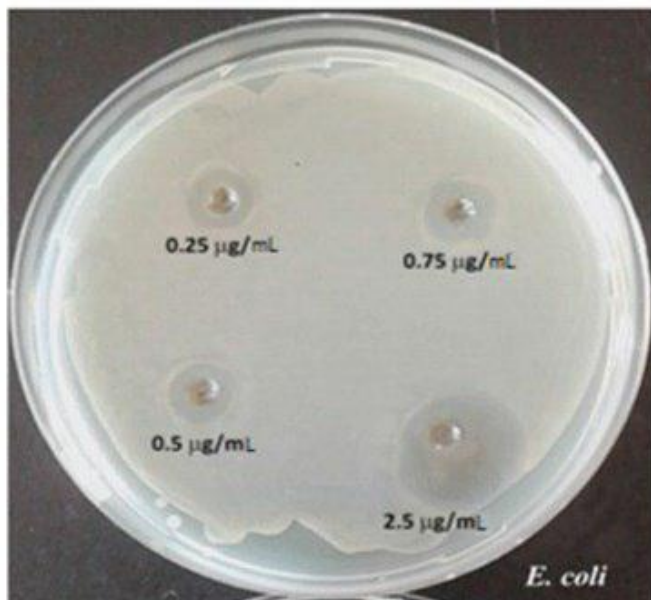


Mikrob biopolimerlariga kumush nanozarralarini “tikish” orqali antiseptik vosita ishlab chiqishning yangi texnologiyasi

O'zR FA Genetika va o'simliklar eksperimental biologiyasi instituti laboratoriya mudiri Baxtiyor Rasulov boshchiligidagi bir guruh olimlar xitoylik hamkasblari (Xitoy Xalq Respublikasi fizika-kimyo instituti) bilan hamkorlikda bakteritsid xususiyatga ega AgCl nanozarralarini *Azotobacter chroococcum* XU1 va *Bradyrhizobium japonicum* 36 bakteriya shtammlari ekzopolisaxaridlariga (biopolimerlariga) kiritish orqali nanobiomateriallar olinib, ularning odamda turli kasalliklarni qo'zg'atuvchi patogen mikroorganizmlar *E.coli*, *S.aureus*, *C.albicans*'larga tez ta'sir etishi isbotlandi. Ushbu ishlanmadan tibbiyotda (antiseptik vosita) va qishloq xo'jaligida ekinlarning fitopatogen zamburug'lariga qarshi kurashda foydalanish mumkin.





Bakteriya polisaxaridlariga Ag-, AgCl va Ag/AgCl-nanozarralarini kiritish orqali yangi nanobiomateriallar olish borasida har ikki institut hamkorligida 2012-2018-yillar davomida qator ilmiy loyihalar bajarildi. Bakteriya polisaxaridlari nanotexnologiyada matritsa sifatida qo'llaniladigan boshqa vositalarga qaraganda inson tanasiga zararli ta'sir ko'rsatmasligi sababli tarkibida nanozarralar saqlagan nanobiomateriallar olishda keng qo'llanilmoqda. Ushbu loyihalar doirasida ham tadqiqotchilar aynan bakteriya biopolimerlaridan foydalanishdi.

Bunday turdagi nanobiomateriallarning yana bir muhim xususiyati ularning viruslarga qarshi tez va samarali ta'sir eta olishidir. Hozirda nanozarralarning viruslarga qarshi qo'llashni tadqiq etish uchun loyiha muhokama qilinmoqda.