



Shanghai Cooperation Organization- 1st Young Scientists Conclave (SCO-YSC 2020)
A virtual event organised in India at CSIR-IICT, Hyderabad
Theme: Shaping SCO-STI Partnership: Young Scientists Perspectives

SCO-Young Scientist Profile

First Name: Semyon

Last Name: Sivtsev

Designation

& affiliation: Russia, Republic of Sakha (Yakutia), Yakutsk, Institute of Oil and Gas Problems of the Siberian Branch of the RAS

Phone Number: +79154487588

E-mail: sivtsevsemen@mail.ru



Details of research work carried out in S&T (limit to 200 words)

Areas of interest: Chemical and biological sciences, ecology and oil pollution of lands.

Semyon Sivtsev is researching methods of remediation and monitoring of oil-contaminated soils. He has experience in biological remediation of oil-contaminated lands at the facilities of the oil and gas complex of the Republic of Sakha (Yakutia). He is developing a new biosorbent based on native microorganisms and a method for monitoring soil conditions through enzymatic activity.

Associated SCO-YSC Theme: Environmental protection and natural resource management

Statement of Innovation (Brief information on new innovative ideas including startup / entrepreneurs- limit to 150 words)

The product of the project, a biological product, is a natural sorbent-carrier immobilized by microbial oil-destructive strains.

In the process of manufacturing a biological product, secondary raw materials are used, which is cost-effective (cheaper) and positively affects the low cost of the project product.

The scientific novelty of the proposed solution lies in the fact that the obtained oil biosorbent will have the ability to self-decompose and combine several functions at the same time, namely: its use as an oil sorbent, oil destructor and fertilizer. Also isolated microorganisms will have a wider temperature range of biological activity.

Major awards/ Achievements (Upto 3 awards)

-

Shanghai Cooperation Organization- 1st Young Scientists Conclave (SCO-YSC 2020)
A virtual event organised in India at CSIR-IICT, Hyderabad
Theme: Shaping SCO-STI Partnership: Young Scientists Perspectives

Possible collaboration with SCO countries *(limit to 100 words)*

We can exchange information and ideas. We can also test the effectiveness of our biological products in your country for research purposes.

Key words *(relevant to research work conducted as well as proposed innovation, 5-6 words)*

Oil biosorbent, oil, remediation, oil pollution, microorganisms