

DST supports research to inhibit maturation of COVID-19 virus

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Scientists join hands targeting to synthesize compounds to inhibit maturation & propagation of COVID-19 virus



Scientists from India, Russia, Brazil, and South Africa will work together to repurpose, validate and synthesise lead compounds against main protease and RNA replicase, the enzyme that catalyzes the replication of RNA, of SARS-CoV-2.

The approach which could inhibit both maturation and propagation of viruses during the infection in the host cells, can help produce new COVID-19 medicines with improved production methods.

While efforts have been made to selectively inhibit a single target enzyme of SARS-CoV-2, but effective potential inhibitors against both replication and maturation machinery of SARS-CoV-2 is yet to be found.

The Department of Science and Technology (DST) will be supporting this research which brings multiple expertise from the several BRICS countries (Brazil, Russia, India, China, and South Africa) to bring a solution to the COVID-19 crisis that the world is combatting at present.

As drug discovery is a complex process, the collaborative effort involving experts from bioinformatics, organic chemistry, medicinal chemistry, drug screening, and parasitologists would be of great value for the search of new efficient drugs against COVID-19.

The consolidation of efforts, knowledge, and experience of scientists and specialists from different areas will lead to the optimization of the health system and health care both in BRICS countries.