



## Agri-biomass utilization in fighting COVID-19

*Center of Innovative and Applied Bioprocessing (DBT-CIAB)  
Knowledge City, Sector-81 Mohali, Punjab-140306*



At DBT-CIAB the research activities mainly consist of valorizing agricultural biomass. Given the current scenario, channelizing these activities towards antiviral efficacy indeed is a challenging task. However, faculties at CIAB have taken up this challenge to address this pandemic via converting agri-products into therapeutics.

In this regard, the following research activities have been initiated which apply multiple research expertise including chemistry, chemical engineering, biotechnology, molecular biology, and nanotechnology available at DBT-CIAB.

**Research activity 1 - Polypyrrollic photosensitizers and their nanoformulations for antiviral photodynamic therapy**

**Research activity 2 - Natural garlic essential oil as a ACE 2 protein inhibitor for preventing SARS-CoV-2 invasion**

Products of the proposed research outcome are expected to be biocompatible, low cost and scalable. Most importantly, the research objectives proposed have deliverables planned to be completed in less than a year timeframe. The potential antiviral molecules which are identified in this work will be tested for their ability to act against SARS-Cov-2 in collaboration with Regional Centre for Biotechnology, Faridabad.

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