

## Engineering, Built Environment and Information Technology



# CORONAVIRUS

## COVID-19

## UP Chemical Engineering joins the COVID-19 fray with hand sanitizers for paediatricians at SBAH

The University of Pretoria (UP) Department of Chemical Engineering in the Faculty of Engineering, Built Environment and Information Technology (EBIT) has entered the fight against COVID-19. Hand sanitizer was supplied to the doctors of the Department of Paediatrics and Child Health at Steve Biko Academic Hospital (SBAH).



↑ Prof Izelle Smuts and Jaco-Louis Venter

With the current COVID-19 pandemic, medical care infrastructure worldwide is under immense strain. Medical supplies and equipment are in short supply and doctors are forced to make difficult decisions.

While the situation in South Africa is not yet as dire as in some other countries, medical staff are preparing for all eventualities. With limited supplies this is, however, proving quite challenging. One of the major concerns is the availability of hand sanitizer and the uncertainty on how much will be required.

The initiator of this project, Jaco-Louis Venter, a fourth-year chemical engineering student, became aware of the doctors' concern. He approached the staff of the Department of Chemical Engineering to assist and with generous donations from lecturing staff's research supplies of ethanol and glycerol, the departmental

facilities were used to produce hand sanitizer following the World Health Organisation's (WHO) recommended hand rub formulation. With the assistance of Gerrie Claassen, the laboratory manager, and Franco Pretorius, a master's student at the Department and multiple contributions from the staff of the Department, they were able to produce enough hand sanitizer before the national lockdown to supply the doctors of the Department of Paediatrics and Child Health at SBAH with a bottle each.

**"We appreciate the overwhelming positive response to our situation tremendously. These supplies will be of great help in the coming days,"**

said Prof Izelle Smuts, a paediatric neurologist at SBAH. The team is

currently working to acquire more supplies to continue production. The aim is to continue production for as long as possible during the pandemic.

This is an excellent example showing how, in difficult times such as these, the best of mankind is revealed and how identification of a need can be addressed by creating a team-based solution enabling those with the capacity to help where they find need.

"It is so easy to get caught up in your studies, that you forget why you chose to prepare for a specific career in the first place. I chose chemical engineering as it creates so many opportunities to contribute to our society. I am very grateful for this opportunity to do something that might actually make a real difference," Jaco-Louis said.

Should anyone like to contribute to the effort, please contact the Department at [chemeng@up.ac.za](mailto:chemeng@up.ac.za).