

ANTI-SARS NO. 1 COMPOUNDS AGAINST SARS TO BE PRODUCED AT TKU

英文電子報

TKU signed an agreement with the University of Taiwan University (NTU) last week to produce compounds, named “NTU Anti-SARS No. 1” designed and synthesized by both universities last year. NTU specifically authorized Lee Shih-yuan, the Chair of TKU’s Department of Chemistry to proceed with its current production capacity of 10 kilos of pure (> 99%) compounds per week for commercial uses. They will be supplied to manufacturers for the production of facemasks and protective clothing. These compounds are specifically designed to adhere to the SARS virus and destroy its functionality and its infectiousness.

Lee points out that this project was initially directed by the Industrial Technology Research Institute (ITRI), a non-profit R&D organization of the Ministry of Economic Affairs with NTU to look into the possibility of technology transfer so as to massively produce these anti-SARS compounds for facemasks and protecting clothing. As such a technology of synthesizing the compounds was in fact developed in TKU, NTU requested Lee and his department to be in charge of further production. These compounds will be supplied to at least six manufactures that have been authorized with appropriate technology transfer. They will apply these compounds in the production of aqueous spray, shampoo, cream soap and related hygienic products. Furthermore, as they are water soluble so once resolved in water, they can be sprayed onto facemasks and protective clothing during manufacturing so that the final products can be worn as an effective way of destroying the virus.

The announcement of the discovery of NTU Anti-SARS No. 1 compounds nearly a year ago was a world’s first and is considered to be the most effective so far. One of the major ingredients of the compounds is “hydroxyoctanoic acid” which debilitates the SARS corona virus almost instantly, according

to several clinical trials. Such trials have shown that after spraying the virus with the compounds containing this acid, the crown-shaped external structure of the virus disintegrates and dies within 45 seconds. As these compounds are organic, they are thus harmless when swallowed. They are also even more environmental friendly than bleach when they go into sewage and rivers. Above all, Chair Lee emphasizes a very important feature of these compounds that they are highly effective even under very high moist conditions unlike the compounds used in N95 facemasks, which exhibit poor effectiveness in the same conditions.

For this project, TKU has an NT\$ 7,000,000 subsidy which has been used to purchase production facilities. In the near future, Lee indicates that his department will add an infrared spectrometer, that worth approximately NT\$ 1,000,000. This equipment can also be used for the development of nanotechnology.