CEDAT participates in the VC's monthly press briefing

The College of Engineering, Design, Art and Technology today participated in the VC's monthly press briefing. The media briefing is used as an opportunity to show case and educate the public about the research that the colleges are undertaking.

The team that represented CEDAT was led by the Deputy Principal, Dr. Mackay Okure. It included Dr. J.B Kirabira (Mechanical Engineering), Mr. Cosmas Mwikirize (iLabs Project), Mr Steffen Wassler and Ms Elizabeth Begumisa (CREEC) and Ms Betty Kyakuwa (communication office).

The Deputy Principal encouraged the media to visit CEDAT and witness the various researches that are taking place here.
The projects exhibited included the iLabs@MAK Project which has made a robot that can be used to dis-arm explosive material. The Explosive Ordinance Disposal (EOD) robot is remotely controlled on a computer to navigate through relatively flat surfaces within a 20m radius. The design and construction of the robot was motivated by the need to demonstrate local capacity in development of technology in the fight against terrorism, especially after the deadly July 9, 2010 terrorist attacks in Kampala. It is one of the projects undertaken by special crop of young people, emanating from iLab@MAK's initiative to promote science and technology innovation in secondary schools.

The second project is geared at "Rural Electrification in Uganda - Improving access to modern types of energy". The Centre for Energy and Energy Conservation (CREEC), is carrying out this research. In this project, four pilot plants with different renewable energy technologies will be implemented with technical assistance from CREEC. One of these pilot plants consists of a solar PV system for an energy kiosk. The energy kiosk powered by a solar PV system will provide services like internet services, rent of portable DVD players, stationery, phone and solar lamp charging for a small village.

The third project that was show cased is the Development of an Appropriate Technology for Production of Electric Porcelain Insulators from Ceramic Minerals in Uganda. Uganda's electricity connectivity is very low, with grid access of 9% for the whole country and 3% in rural areas (MEMD, 2007). The country has one of the lowest electricity consumption per capita in the world, estimated at 69.5kWh in 2009. This is significantly lower than Africa's average of 578kWh per capita and the world's average of 2,752kWh. Although the consumption per capita is low, Uganda has an estimated hydropower potential of over 4500MW, biomass cogeneration of 1650MW, geothermal potential of 450MW, peat power potential of 800MW, high solar, fossil fuel thermal and nuclear energy potentials. The installed power generation capacity was 595.84MW in 2009. This was planned to rise to about 802MW with the commissioning of the Bujagali hydropower plant, then under construction and the various mini hydro plants (NDP, 2010).