



DAMOC Project Enhances NM-AIST laboratory through High-tech Lab Equipment in Smart Grid

The Nelson Mandela African Institution of Science and Technology (NM-AIST) has received high-tech laboratory equipment amounting to Euro 47,300. This is a support from Erasmus+ Programme of the European Union under the project called “Development of a Harmonized Modular Curriculum for the Smart Grid (DAMOC)”. The equipment is timely for students in Sustainable Energy specialty for carrying out their laboratory tests in various research activities on high standards.

The equipment includes; Opal Real Time Simulator (OP4510 HIL Real), Smart Watt Hour Meters, Medium PV System, Arduino & Raspberry PI Packages and two powerful Laptops for modeling and simulations. The newly established Smart Off-Grid Systems IAB (SOMA) based at the school of Materials Energy Water and Environmental Sciences (MEWES) is hosting the equipment. Students and other researchers will be able to run several practicals related to smart grid modeling and real time simulations which could not be run at the NM-AIST before.



OPAL Real Time Simulator



Medium PV System

DAMOC project aims at fostering capacity building in the field of Smart Grids by catalyzing a harmonized modular curriculum, purchase of equipment and staff/student exchange. The expected outcomes are: new and interdisciplinary Master courses implemented at partner institutions in Africa. The partner institutions include: the NM-AIST and University of Dar es Salaam from Tanzania, Cape Peninsula University of Technology, University of Pretoria and Stellenbosch University from South Africa. European partners include Technical University of Dresden – German (Project Coordinator), Karlstad University – Sweden and Università degli Studi Guglielmo Marconi – Italy.

The beneficiaries of DAMOC project expect to gain up to date knowledge and skills in smart grid and enhance networks in the field that will impact both Southerners and the Westerners in that matter. We are grateful to our sponsor Erasmus+ of the European Union for supporting NM-AIST and partner institutions in this vibrant field of Africa’s untapped opportunity. This is going to feed the current knowledge based economy and industrialization move of African Countries by powering Africa as stipulated in the Africa’s Agenda 2065.

