

ERASMUS+ INTERNATIONAL CREDIT MOBILITY PROGRAMME: THE INTERACTION OF GLOBALIZATION GREECE - BENIN - CAMEROON



In the framework of the Erasmus+/ICM programme, a cooperation in the field of renewable energy education has been launched with universities **ESMER** and **EPAC** from **Benin, University of Douala** and **University of Buea** from **Cameroon**. One of the cooperation topics was a series of lectures to the teaching staff and students of the four universities on the handling, proper use and possibilities of the **“Remote Photovoltaic Laboratory”** (<http://alioslab.uniwa.gr>), installed on the roof of the University of West Attica (UniWA) under the supervision of **Professor Petros Axaopoulos**, Emeritus Professor of Mechanical Engineering.

The “Remote Photovoltaic Laboratory” has been developed by the renewable energy laboratory of UniWA and offers the ability to engineering students and teachers to remotely conduct experiments with real-world solar photovoltaic equipment and under real weather conditions, enabling students theory into practice. Thus, the students of the final years, started to conduct experiments, taking measurements with the Greek sun while, at the same time, they can have a live view of the photovoltaic panels through a web camera. The system also has an Open Educational Resource, which covers the whole theory of photovoltaic technology and consists of 16 chapters in five languages (ES, FR, GE, GR, UK).

<http://alioslab.uniwa.gr/mirror/OpenEducationalResources/www.labri.fr/perso/billaud/Helios2/docs/pag e-all-tiles.html>).



Thus, the system opens new ways to the engineering education of photovoltaics, by offering the students a feeling of direct experience with actual photovoltaic equipment and abundant learning materials. *“From our discussions with the professors of the four African universities and from our visits to these universities, it is easily assumed that our “Remote Photovoltaic Laboratory” has helped significantly in the theoretical and practical training both for teachers and students since it has been introduced in the curriculum of the last semester”* Professor Axaopoulos declared. It is worth mentioning that in these countries, due to the lack of electricity grid, photovoltaic installations are growing exponentially with a parallel demand for qualified graduates in the corresponding subject. Finally, the statistical counter available in our **“Remote Photovoltaic Laboratory”** (<http://www.supercounters.com/countries/1378724>) can show the participation of the countries whose universities use the “Remote Photovoltaic Laboratory”.

