



# Graduate Fellowship Award given to UCY student Markos Asprou

A prestigious, international award, usually given to a select number of graduate students every year, has been awarded to Markos Asprou, a PhD student at the University of Cyprus and a researcher at the KIOS Research Centre for Intelligent Systems and Networks.

"The Graduate Fellowship Award is given by the Instrumentation and Measurement Society (<http://ieee-ims.org/>) of the Institute of Electrical and Electronics Engineers (IEEE), in an extremely competitive environment, with large numbers of applications being received from student members of the IEEE around the world," said the university.

This year, the award was given to three candidates only, with the other two selected can-

didates from universities in the USA.

The award comes in the form of a \$15,000 grant for important research in the area of Instrumentation and Measurement. "This is a significant recognition of the quality and level of research being undertaken by Markos Asprou at the KIOS Research Centre for Intelligent Systems and Networks and the University of Cyprus," the announcement continued.

In his research proposal, Asprou focused on the optimisation of electric power systems and the improvement of their performance through better monitoring systems.

More specifically the award will support research to develop a concrete and robust methodology to identify and estimate the erroneous transmission line

parameters that are stored in the database of the control centres of electric utilities.

The errors in the line parameters may be due to obsolete databases, inaccurate data, or changes in the properties of the lines after repairs.

This is an important research area with the potential to improve the effectiveness and efficiency of power distribution systems, avoiding unnecessary failures, as well as potentially reducing electricity costs for consumers.

It is expected that the identification and estimation of the erroneous line parameters will have a major impact on the accuracy of several of the applications operating within power systems control centres, such as state estimation, voltage stability assessment, power flow

analysis, economic dispatch, and transient stability analysis.

With the improvement of the aforementioned applications the reliability of the power systems will be enhanced and the propagation of severe faults will be further reduced. The impact of the proposed method is also expected to appear through reduced costs for the electric utilities.

Asprou obtained his BSc Degree at the University of Cyprus.

His work is supervised by Professor Elias Kyriakides, assistant professor at the Department of Electrical and Computer Engineering of the University of Cyprus and Associate Director of the KIOS Research Centre for Intelligent Systems and Networks.

