JOSÉ FERNANDO F. MENDES University of Aveiro

Message from the Vice-Rector for Research and Doctoral School



Over the last 40 years, the University of Aveiro (UA) has grown steadily not only in terms of number of students and faculty, but also of the quality of research and teaching, being currently considered one of the most dynamic and innovative universities in Portugal. Internationally, the UA has also been acknowledged as a young dynamic and prestigious university, collaborating actively with highly reputed institutions all over the world. Evidencing this position, the results obtained in several world rankings, a proof of its prestige and scientific excellence. In 2012, the UA was considered the sixty-sixth best university of the world, with less than 50 years, by the Times Higher Education ranking.

As Vice-Rector for Research and Doctoral School, it is with great honor that I am introducing the third edition of the research@ua magazine, a picture of the research at UA, with some of the most relevant research outcomes achieved in 2012, reflecting but a small portion of the successful history of our institution, where research has, definitely, been playing a key role in its development and affirmation.

With this restyled edition of research@ua, it is our goal to present some of the most important scientific highlights of 2012, focusing on the achievements of young researchers, especially PhD students and post-docs, from different research fields, and thus reinforcing the idea of multidisciplinary research developed at UA. Considered as essential to an impactful strategy, research dissemination initiatives adopted in 2012 have been also integrated in this issue. *The Researcher of the Month* initiative has proven to be a good dissemination means for researchers' interests and future expectations. The media impact of the research developed at UA is a tool to evaluate its importance and the interaction with society via *Academia de Verão* and *Research Day* are sections dedicated to highlighting the importance of communicating science.

It is my personal conviction that this magazine reflects not only the commitment of the scientific community in the development of high impact and relevant research, but also a successful institutional strategy that enables societal exploitation of research results with the aim of sustainably improving life quality. The UA has to be proud of its contribution to science, in general, and to the country and region, in particular, based on a close collaboration with regional agents. During 2012, efforts have been devoted to the construction of a more coherent and clear strategy for doctoral education, in order to strengthen the relation between teaching and research and, thus, to attract the best students to enroll in PhD at our institution.

Despite the funding constraints for research all across Europe, with special emphasis in Portugal, the UA has been able to successfully move forward. It is important to emphasize, to this respect, the rising participation of UA researchers in EU-funded projects and in international networks, nowadays an important funding source to research, as well as the increasing number of publications in high impact journals, which brings about fruitful collaborations with international institutions.

However, it must be taken into account that challenges are becoming more and more complex and that this may be the moment to rethink approaches and to look for new opportunities. It was, certainly, based on this assumption that the Aveiro Institute of Nanotechnology (AIN) was created in 2012. AIN is a virtual institute that joins the efforts of three excellent research centers at UA working in the field of nanotechnology, with the objective of jointly facing the international competition with better results than they would have with the simple sum of the parts.

In a special year like this, when we are commemorating the 40th anniversary of the UA, this edition of the research@ua celebrates 40 years of great progress and excellent scientific results. I hope you will find this reading exciting and that it may induce future collaborations with UA!