5<sup>th</sup> International Conference and Expo on

## **Cosmetology, Trichology & Aesthetic Practices**

April 25-27, 2016 Dubai, UAE

## Wound healing and antimicrobial activities of cosmeceuticals containing natural products and their nananoparticles: A translational approach

Alberto C P Dias<sup>1</sup> and Joaquim Morgado<sup>2</sup> <sup>1</sup>University of Minho, Portugal <sup>2</sup>4LAB4YOU GmbH, Austria

Extracts, infusions, or other types of preparations from medicinal plants have been used for the treatment of various diseases, in what is commonly designated as "folk medicine". In recent years, science has prove that some plant extracts, fractions or specific compounds may have an important role as drug sources with relevant properties. Over the last years the incorporation of natural products, particularly plant based products, in cosmeceuticals has also increased. In this work, particular emphasis will be given to antimicrobial and wound healing properties of specific plants/compounds incorporated in some cosmeceuticals. New approaches, including nanotechnology, will be addressed. Based on specific plant extracts and oils it was possible to develop some particular cosmeceuticals used clinicaly. These formulations were applied into adult volunteers (more then 150) with skin disorders, namely skin burns, recalcitrant wounds, and psoriasis. The synergy of the properties of the plant extracts and oils, in specific treatment situations, resulted in very positive results. In all cases, after repeated applications, notorious improvements or complete treatment were observed, without side effects. The action of the formulations revealed to be associated to a high degree of skin hydration, cellular skin regeneration, and antimicrobial activity. The results demonstrated, at least, a similar effectiveness when comparing to the conventional treatments.

## Biography

Alberto Dias has a degree in Applied Biology from University of Lisbon in 1989 and MSc in Biotechnology (IST, 1993), PhD (UMinho, 2001). He is a coordinator of CITAB-UM research centre at the University of Minho. His research includes the study of plant metabolites and their bioactivities, focusing on antioxidant, anti-inflammatory and neuroprotective properties. More recently, he developed products incorporating biofunctional extracts and compounds in several matrices (nanoparticles, cosmetics and nutraceuticals). He was coordinator of several national and international projects. He participated in the organization or was Chair of several national and international meetings and is author of more than 70 SCI papers and several book chapters.

acpdias@bio.uminho.pt

Notes: