Research and development of cosmetic and medicinal peloids using geomaterials and biomaterials

Investigação e desenvolvimento de peloides cosméticos e medicinais, utilizando geomateriais e biomateriais

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Abstract

Over the past five years a group of researchers from the Center for Research in Pharmaceutical Technology, Faculty of Pharmacy, University of Porto and GeoBioTec Research Unit, FCT, University of Aveiro made an inventory of the traditional application of "natural peloids" in autonomous regions of Madeira and Azores and developed formulations of "designed peloids.

In the SPA of Crown, Caldeiras da Ribeira Grande, São Miguel Island, Azores, we highlight the application of hot sludge and biofilms in the treatment of various dermatological and osteoarticular diseases, since the founding of the Spa in 1811.

In the Beija pudles and in the outdoor swimming pool of Terra Nostra Garden Hotel & Spa, structures located in Furnas Valley on the island of São Miguel, Azores, reddish brown biofilms are removed from the walls of the tanks / pools and applied directly to the skin with a view to the treatment of diseases such as dermatitis and fungal infections.

On the island of Porto Santo, Madeira Archipelago (Atlantic Ocean), there is a long tradition in the manufacture and application of peloids in ambulatory, which consists of mixtures of illitic-smectite clay, or with mineral water of the ancient house of the waters of Porto Santo, Fontinha, or with water matured for several weeks or months into "sinks" of natural stone (sandstone and trachyte).

In previous research several mixtures have been developed, comprising illitic-smectite clays, mineral water, sea water, components of traditional medicinal plants and infusions.
Is currently underway the preparation of a research project aimed at studying, from the therapeutic point of view, the action of traditional and designed peloids in the autonomous regions of Madeira and Azores, in a group of patients affected by various kinds of diseases.

**Key words:** Natural peloids, Cosmetic peloids, Geomaterials, Biomaterials

**Palabras clave:** Peloides Naturales, Peloides cosméticos, Geomateriales, Biomateriales