

BLUE4GLUE- Reinforcing capacity towards industrially relevant research on bio-inspired materials and delivery mechanisms

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The proposed project offers 10 researchers the possibility to move sector and country in order to provide, absorb and implement new knowledge in a professional industrial-academic environment in the field of blue biotechnology and particularly in the area of new bio-inspired adhesives and release materials for adhesives. The respective research teams will be enforced by two newly recruited experienced researchers offering complementary expertise to the consortium.

The proposed development of biomimetic glue products (an adhesive that employs man-made materials to mimic the efficient attachment mechanisms of marine organisms) will revolutionise the field of adhesive and surface technology. Although the competence in the EU seems to be high in terms of marine expertise, the available new knowledge needs to be transferred to the industry and implemented for the development of marketable products. The objective of Blue4Glue is to transfer and build up new knowledge in three research topics, in which bioadhesion plays a central role in each of them:

- Development of bio-inspired systems for the modification of surfaces to achieve dirt release effects
 - Development of polyolefin based adhesive release films
 - Development of a concept of under water bio-adhesion for bio-inspired synthetic material
- Procter & Gamble wishes to set up a transfer of knowledge with two academic partners: the University of Naples (UNINA) and the Fraunhofer Institute for Manufacturing Technology and Applied Materials (FRAUNHOFER).

Both partners will help P&G understand the mechanical, chemical and physical characteristics of adhesion and implement bio-inspired materials in future consumer products. The academic partners wish to understand the challenges in the fast moving world of consumer products to increase the industrial relevance of their research programs and to develop capacity to transfer basic scientific knowledge into relevant industrial applications.

Coordinator

PROCTER & GAMBLE ITALIA SPA (Italy)

Other participants

UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II

PROCTER & GAMBLE EUROCOR N.V. (BELGIUM)

PROCTER AND GAMBLE INTERNATIONAL OPERATIONS S.A. (SWITZERLAND)

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