

## PRESS RELEASE

Bio-On S.p.A.

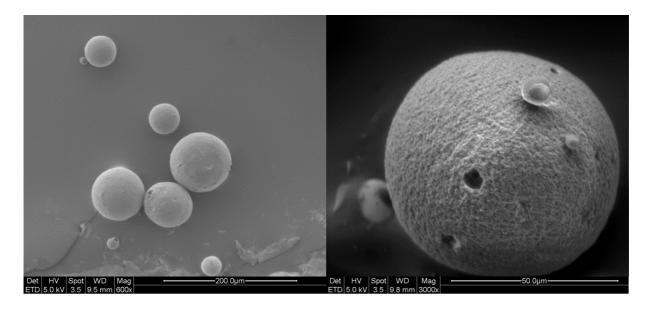
# Hollow Capsules for the administration of active substances in humans and in agriculture from Bio-on bioplastic

Bologna, 21 May 2015 – With the bioplastic developed by Bio-on, it is now possible to create capsules for controlled drug administration inside the human body or for gradual release of active substances in agriculture. The exceptional properties of MINERV PHA bioplastic, completely "biobased" and 100% naturally biodegradable, enable the creation of micro and nano particles, both full and hollow, in which the trapped active substance is released gradually, even after months, exploiting the biodegradability of bioplastic. In this way, it is possible to administer directly in the human body numerous types of drugs such as anaesthetics, anti-inflammatories, antitumor, hormones, steroids and vaccines. Cosmetic or agricultural use is equally broad.

"Biodegradability, biocompatibility, environmental sustainability and excellent physical and mechanical properties combine in synergy in polyhydroxyalkanoates (PHAs), making these plastics suitable also for extremely advanced applications, such as for example drug delivery," explains **Professor Paola Fabbri of DICAM at the University of Bologna**, who has been researching the potential application of PHAs for years. "We are evaluating various techniques for the production of nano and micro particles with extremely controlled morphology, which enable good control of drug release kinetics".

"It is an innovation that paves the way for an array of applications for human health and for the new green chemical industry applied to the environment," says **Marco Astorri, chairman of Bio-On S.p.A.**, "because the controlled, localised release of drugs (such as antitumor drugs) and the use of antiparasitic drugs or fertilisers in specific quantities and periods will enable great optimisations and a boost to performances in various applications. We are proud," continues Astorri, "to develop in Italy devices that can change the future of active substance administration around the world. The resources collected from being listed on the AIM Milan stock exchange," he concludes, "will enable further expansion into the development of new and innovative applications in the bio medical field".

#### IMAGES TAKEN UNDER A MICROSCOPE



### BIO-ON S.p.A.

Bio-On S.p.A., an Italian Intellectual Property Company (IPC), operates in the bioplastic sector conducting applied research and development of modern bio-fermentation technologies in the field of eco-sustainable and completely naturally biodegradable materials. In particular, Bio-On develops industrial applications through the creation of product characterisations, components and plastic items. Since February 2015, Bio-On S.p.A. has also been operating in the development of natural and sustainable chemicals for the future. Bio-On has developed an exclusive process for the production of a family of polymers called PHAs (polyhydroxyalkanoates) from agricultural waste (including molasses and sugar cane and sugar beet syrups). The bioplastic produced in this way is able to replace the main families of traditional plastics (PE, PP, PC, etc.) in terms of performance, thermomechanical properties and versatility. The Issuer's PHA is a bioplastic that can be classified as 100% natural and completely biodegradable: this has been certified in Europe by Vincotte and in the US by USDA (United States Department of Agriculture). The Issuer's strategy envisages the marketing of licenses for PHAs production and related ancillary services, the development of R&D (also through new collaborations with universities, research centres and industrial partners), as well as the realisation of industrial plants designed by Bio-On. The alphanumeric codes for ordinary shares "ON" IT0005056236, for ordinary shares "ON" with bonus share IT0005056228 and for warrants "WARRANT Bio-On 2014-2017" IT0005056210. The minimum unit of trading envisaged by the Italian Stock Exchange is 250 shares. Company Nomad is EnVent S.p.A.. Banca Finnat Euramerica S.p.A. acts as company specialist.

For further information:

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Nomad

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