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Bio-on mission is to contribute to the protection and sustainable management of natural resources and ecosystems operating through the modern biotechnology.

Bio-on is an Intellectual Property company and supplies technologies to produce or use Polyhydroxyalkanoates-PHAs through licenses that restrict rights to a particular territory or to a specific business area. The PHAs bio-plastic produced by Bio-on is made from agriculture waste, co-products and by-products and it is 100% bio-based as certified by the BioPreferred program of the US Department of Agriculture.

The PHAs produced by Bio-on is the first Bio-plastic in the world to be 100% naturally biodegradable in water and soil (certified in 2008 by Vincotte: <http://www.businesswire.com/news/home/20111012005766/en#.U1d4hl6c-g0>) without using any chemical solvent. This outstanding product is obtained by natural fermentation of bacteria feed with sub-products of sugar production (no food) and have extraordinary properties suitable for injection and extrusion methods for application areas particularly demanding as: biomedical, packaging, design, clothing, automotive and others.

Bio-on optimized and demonstrated the industrial production of this terrific bio-plastic obtained by using sustainable raw materials in order to meet the needs of a growing global population within the sustainable limits of the planet's natural resources and ecosystems.

Bio-on grants licenses for the construction of production facilities and works with leading engineering companies to offer turnkey solutions.

Moreover, it realizes applied research projects directed to plastics users intending to replace traditional plastics with biodegradable ones, in this case Bio-on is able to characterize "ad hoc" products, even in fields of high range and engineering plastics.

Not least the research that Bio-on can offer to its customers is about the development of technologies for the production of PHA from fermentation of different carbon sources.

From March 2012 Bio-on works with Techint Engineering & Construction to build plants for the production of PHAs. The technology developed by Bio-on can now be created worldwide on an industrial scale, with plants producing 2, 10, 20 thousand tons/year. The skills, experience and global presence of Techint E&C are thus teamed with the innovation of Bio-on, sole owner of the technology for producing PHAs from agricultural by-products at a particularly advantageous cost. Manufacturers of traditional plastic around the world, as well as new market players, will be able to enter the world of PHAs bio-plastic rapidly, with clear costs and guaranteed production systems. In two stages:

- Acquisition of Bio-on license
- Plant construction by TECHINT E&C

BIO-ON won the following awards related to its sustainable innovation in the past two years:

- EUROPABIO'S MOST INNOVATIVE EUROPEAN BIOTECH SME AWARD 2014
- Shortlisted by SUSTAINIA 2014
- Premio Impresa Ambiente 2014
- Boldness in Business Awards 2013
- Premio all'Innovazione Amica dell'Ambiente 2013

Here below some of the challenges and successes of the Bio-on company over the last 30 months

- In June 2012 Bio-on and FLOS presented the first product in the world made entirely of PHAs. To test this revolutionary material Bio-on has chosen MISS SISSI, the lamp PHILIPPE STARK designed for FLOS in 1991. The creativity, experience and widespread presence of FLOS meet the innovation of Bio-on, exclusive owner of the necessary technology to produce PHAs bio plastic (<http://www.businesswire.com/news/home/20120418005556/en#.VG8Vh76n1kM>).
- The PHAs developed by Bio-on can be used to regenerate human tissue, notably to create support structures (scaffolds) for cultured bone cells; structures through which it is possible to regenerate a human bone. In our laboratory, we've shown how this material, when properly combined with ceramic or vitreous osteoinductive particles in highly porous structures, is suitable for the construction of composite scaffolds devoid of cytotoxicity (<http://www.businesswire.com/news/home/20130829005394/en/bio-on-Bioplastics-Rebuild-Human-Bones#.VG8WCr6n1kM>).
- The e-waste is nowadays a serious problem for the environment. To reduce its impact new contribution has arrived in the form of the revolutionary bioplastics designed by Bio-on: this polymer can be used as a substrate for electrical circuits. When combined with suitable nanofillers, it can act as an electricity conductor, with extraordinary, as yet unexplored potential (<http://www.businesswire.com/news/home/20131003005052/en/Electronic-Waste-Bioplastics-bio-on#.VG8WOL6n1kM>).
- Ghepi started an experiment 15 months ago which has demonstrated the excellent performance of the revolutionary bio-plastics developed by Bio-on: this biopolymer can now also be used to produce technical articles currently manufactured with polymers or metals. The use of PHA plastics in place of metal to produce a technical component allows significant weight and cost savings, simplifies production, improves performance and gives greater freedom to designers (<http://www.businesswire.com/news/home/20131204005604/en/bio-on-bio-plastic-replaces-metal#.VG8WWr6n1kM>).
- Magna International Inc. and Bio-on have signed a cooperation agreement on December 13, 2013, to start exclusive R&D activities on the use of bio plastics for the automotive industry. Magna is pairing its automotive know-how with Bio-on's chemical expertise to research how production of this natural polyester product can be elevated to an industrial, cost-effective scale (<http://www.magna.com/media/press-releases-news/news-page/2014/02/07/joint-news-release---magna-and-bio-on-enter-cooperation>).
- SEAFRONT (<http://seafont-project.eu>) is a new European project (7FP of the EC) started on 1st January 2014, its goal is to develop environmentally friendly coatings, they will be designed to improve operational efficiency, substantially reduce CO2 emissions. Bio-on is supplying partners with different grades of bio plastics in order to investigate and assess them against biofouling efficacy and hydrodynamic drag criteria, successful candidates will then be integrated with other technologies (<http://www.businesswire.com/news/home/20140529005067/en/bio-on-Bio-Polymer-Helps-Development-Generation-Fouling#.VG8Wlr6n1kO>).