Almost 8 Million de € invested in developing the biorefinery approach of glycerol

- GRAIL, a EU consortium comprise 15 partners from 9 different countries will carry out the Project “Glycerol Biorefinery Approach Towards the Production of High Quality Products of Industrial Value”

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A European consortium of 15 partners of 9 different countries has being constituted to carry out the project GRAIL “Glycerol Biorefinery Approach Towards the Production of High Quality Products of Industrial Value” within the European Union Seventh Framework Programme (FP7/2007-2013) under the Grant Agreement 613667.

This project will be supposed a global investment of 7.8 M€ with a EU contribution of 5.9M€ started on November 2013 and will take 4 years to give solution to the problem of the high stock of glycerol produced by the consequence of the boost of the production of biodiesel.

The GRAIL project is based in a real industrial need, since glycerol is product as a by-product in the biodiesel industry in a 10% rate over all the biodiesel production, which means that 100 Tm of glycerol is produce per each 900 tm of biodiesel. As a consequence, glycerol market is saturated with product and many companies has to deal this product as a residue due to the lack of market.

It is worth point that the glycerol produced in Europe is currently over 1.2 M Tm and it is considered less than 30% of the world production. Furthermore, due to European regulations it is expected a production of glycerol will boost into several millions by the year 2020 shince there is an obligation of 10% of biofuel from transport must be consumed.

The GRAIL Project objective is the development of a biorefinery from glycerol, that is, to develop new valuable products and industrially efficient processes from glycerol. It is important to stress that after many years of investing in projects in this area there are currently partial solutions available such as the two epichlorohydrine plants in China and Singapore and the recent monopropileglycerol plant in Belgium that jointly add 300.000 Tm of glycerol processed, very distant from the current 1.2 MTm generated in Europe. Therefore there is still a lot to do to cover all the current and future production of glycerol to fulfil the 2020 objectives

Against that, GRAIL intent to give a final step to the glycerol problem launching a wide rage of products applied to different diverse field, such as biofuel, paints, plastic, food and cosmetic among others to absorb the mayor part of the global glycerol production. The great diversity of the Grail partner will facilitate this goal since the GRAIL consortium count with industrial partners of these sectors. Therefore we will expect at the end of the project a great number of industrial solutions and technological advances that will benefit the consortium, the biodiesel industry and the society in general.