FINAL CONFERENCE

Monday, June 29, 2015

(Hosted at EBC-VI)

FP7-project:

New BIOtechnologiCaL approaches for biodegrading and promoting the environmEntal biotrAnsformation of syNthetic polymeric materials (BIOCLEAN)
(Grant agreement no: 312100)

Chair: **Fabio Fava (Coordinator BIOCLEAN)**

BIOCLEAN is an FP7 project aiming at developing innovative, eco-efficient pilot-scale and/or field validated biotechnological solutions for degrading and valorizing (i.e., transformation towards useful chemicals) plastic wastes accumulating in terrestrial (landfills, composting facilities) and aquatic environments. Novel, robust naturally-occurring plastic-degrading microbes have been obtained from plastic wastes collected from different terrestrial and marine habitats and then exploited in hybrid physical/chemical-biotechnological processes for the biodegradation and/or the valorization of polyethylene (PE), polypropylene (PP), polyvinyl chloride (PVC) and/or polystyrene (PS) based plastics. The same active microbes are also used for bio-augmentation/biostimulation strategies addressed to enhance the biodegradation of plastic waste persisting in composting and waste treating facilities as well as in marine environments. The processes and strategies developed will be assessed and preliminary exploited in the formulation of measures for mitigating plastic pollution in the Aegean Sea as a case study. The major results collected in the frame of BICLEAN will be presented in the frame of the present EBC-VI session.