



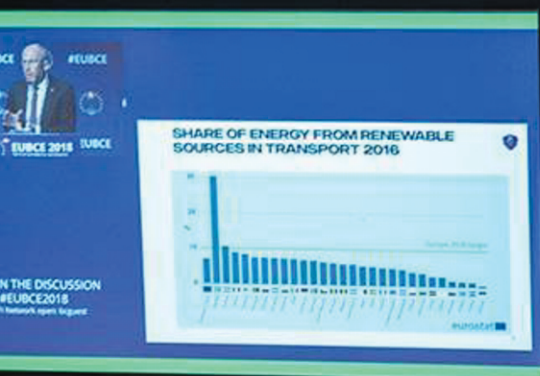
EUBCE 2019

27TH EUROPEAN BIOMASS
CONFERENCE & EXHIBITION

27 - 30 MAY CONFERENCE AND EXHIBITION
31 MAY TECHNICAL TOURS

LISBON - PORTUGAL
LISBON CONGRESS CENTER - CCL

BOOK OF ABSTRACTS SUMMARIES



Fermentation of Xylose-Rich Substrates by the Haloarchaeon *Halorhabdus Utahensis* towards High Value-Added Bioproducts

Short introductory summary:

Research that focuses on the use of high value-added bioproducts for industrial applications is essential for the implementation of sustainable approaches forecasting a bio-based economy. The effective use of biomass feedstocks, particularly lignocellulosic materials, in large-scale applications will evolve from innovative research aimed at the development and implementation of biorefineries established for specific feedstocks. In this context, an important step is the concept of fractionating biomass into its core constituents (cellulose, hemicellulose and lignin) for further enhanced valorization. Contrary to the valorization of cellulose fraction, which has been extensively studied, there is a gap in the valorization of the hemicellulose fraction (xylose- rich substrate) towards bioproducts. In this context, the present work aims to explore the ability of the haloarchaeon *Halorhabdus utahensis* (DSM-12940) to ferment xylose (or xylose-rich substrates) to high added-value bioproducts, such as pigments, exopolysaccharides (EPS) and polyhydroxyalkanoates (PHAs).

Presenter: **Tiago SILVA, Laboratório Nacional de Energia e Geologia, Unidade de Bioenergia, Lisboa, PORTUGAL**

Presenter's biography:

Biology licentiate with a master's degree in microbiology, from the Faculty of Sciences of the University of Lisbon. Currently a 3rd year Biology PhD student in the National Laboratory of Energy and Geology (LNEG), in the Bioenergy Unit and the Faculty of Sciences of the University of Lisbon.

Biographies and Short introductory summaries are supplied directly by presenters and are published here unedited

Co-authors:

L. Alves, LNEG – Laboratório Nacional de Energia e Geologia IP, Lisbon, PORTUGAL
S. M. Paixão, LNEG – Laboratório Nacional de Energia e Geologia IP, Lisbon, PORTUGAL
T. P. Silva, LNEG – Laboratório Nacional de Energia e Geologia IP, Lisbon, PORTUGAL
G. Squillaci, IRET-CNR – Research Institute on Terrestrial Ecosystems - National Research Council, Naples, ITALY
I. Serino, University of Campania “Luigi Vanvitelli”, Dep. Experimental Medicine, Naples, ITALY
A. Morana, IRET-CNR – Research Institute on Terrestrial Ecosystems - National Research Council, Naples, ITALY

Session reference: 3DV.4.33

Subtopic: 3.7 Production and application of biobased chemicals

Topic: 3. BIOMASS CONVERSION TECHNOLOGIES FOR LIQUID AND GASEOUS FUELS, CHEMICALS AND MATERIALS