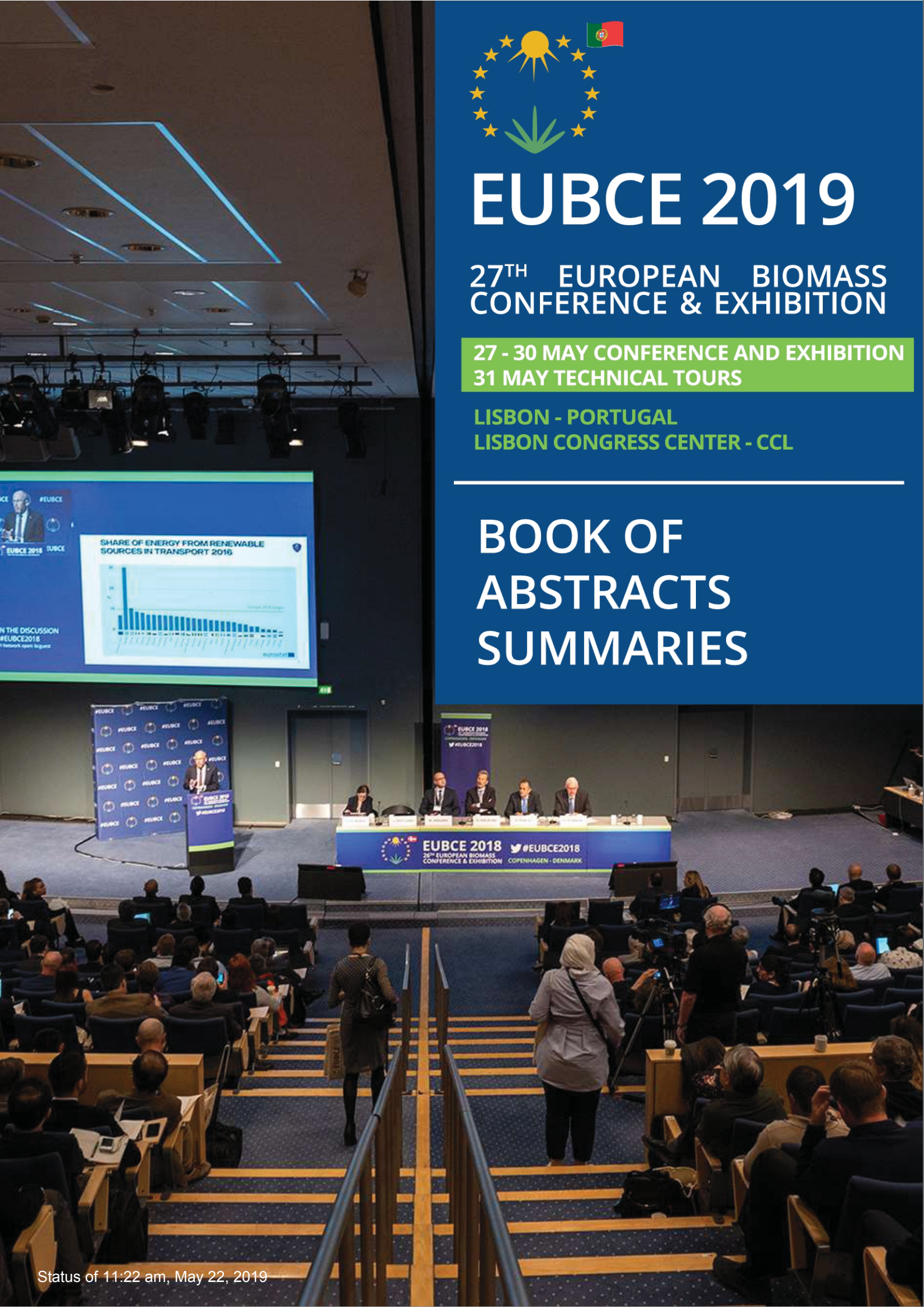

EUBCE 2019

27TH EUROPEAN BIOMASS CONFERENCE & EXHIBITION

27 - 30 MAY CONFERENCE AND EXHIBITION
31 MAY TECHNICAL TOURS

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BOOK OF ABSTRACTS SUMMARIES

Status of 11:22 am, May 22, 2019

Surface Response Methodology towards Optimal Carotenoids Production by Gordonia Alkanivorans Strain 1B

Short introductive summary:

The process of obtaining carotenoids, mainly towards sectors that may influence the human health, such as pharmaceutical and cosmetic, is strictly regulated because of the potential toxicity of the synthetically derived pigments. Thus, microbial pigments are in increasing demand since they are a promising natural and safe alternative source for various industrial applications. Gordonia alkanivorans strain 1B is a fructophilic desulfurizing bacterium, which was also shown to be a good producer of carotenoids. However, its production abilities presented a great variation, depending on the conditions it was submitted to. In previous works, both the carbon source and sulfur source, demonstrated a great influence in the total carotenoid concentration, especially when combined with the presence of a light source.
So, in this study, a surface response methodology based on the Doehlert distribution for two factors (% of glucose in a mix glucose + fructose (10 g/L total sugars), and sulfate concentration) was used aiming to get the optimal carotenoids production by G. alkanivorans strain 1B.

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

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