

9<sup>th</sup> World Congress on

# Green Chemistry and Technology

September 17-19, 2018 | Amsterdam, Netherlands

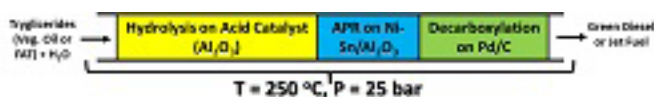
## Fatty acids, olefins and green diesel from catalytic edible oils hydrolysis



**Ricardo Reis Soares**

Federal University of Uberlandia,  
Brazil

Studies using heterogeneous catalysts for the hydrolysis reaction of edible oils still are in early stage. Recently, it was found that the aqueous solution of glycerol, formed after the hydrolysis, may suffer the reaction of aqueous phase reform (APR) producing  $H_2$  and  $CO_2$ . The  $H_2$  can be used in the hydrogenation of unsaturated free fatty acids formed, allowing to obtain a specific fatty acid of higher added value. The present work demonstrates that you can tune in the final product by choosing the appropriate sequential catalyst system as shown in the figure below.



### Biography

Ricardo Reis Soares has completed his PhD from Federal University of Rio de Janeiro, Brazil, in 1997 and Post-doctoral studies from Oklahoma University and University of Wisconsin, USA. He is a Coordinator of the Biofuels Graduate Program at Federal University of Uberlandia, Brazil. He has published more than 25 papers in reputed journals, and has been working with several Brazilian industries, such as PETROBRAS and CBMM.

rrsoares@ufu.br

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