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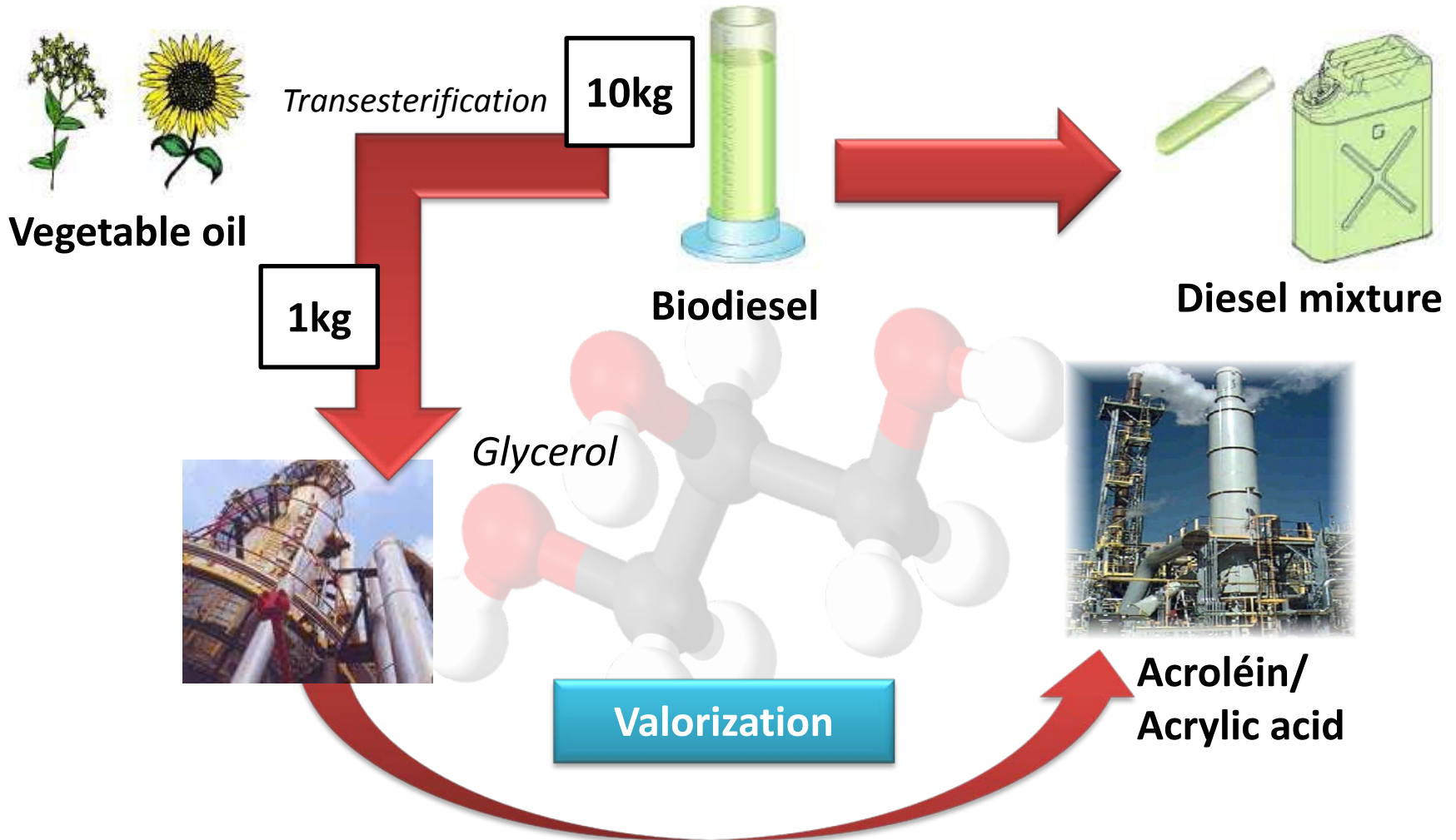
# Valorization of glycerol with acid catalysts



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# General Introduction

Biofuels are central to the discussion of global energy, due to the need to reduce global dependence on non-renewable energy sources.



# Objective



Test new catalysts prepared by a new method to obtain tungsten mixed oxide, with different percentage for the valorization of glycerol in high value products as acrolein and acrylic acid.

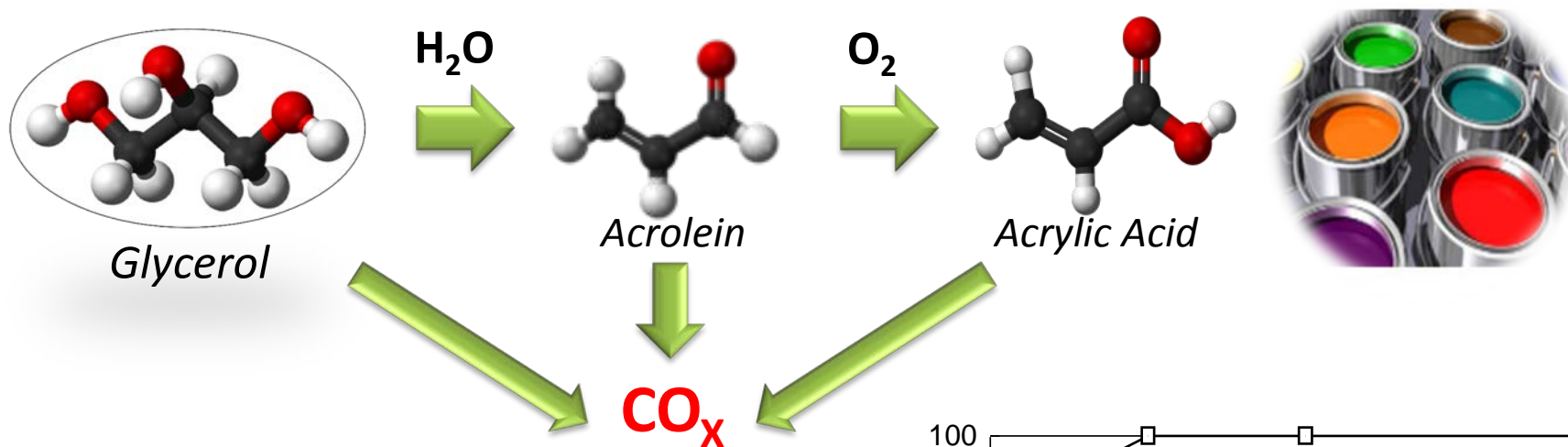
# Steps investigation

**Synthesis** of mesoporous oxide materials catalysts prepared by non hydrolytique sol-gel method with different content of tungsten: 10, 25, 50 and 100 wt% of W.



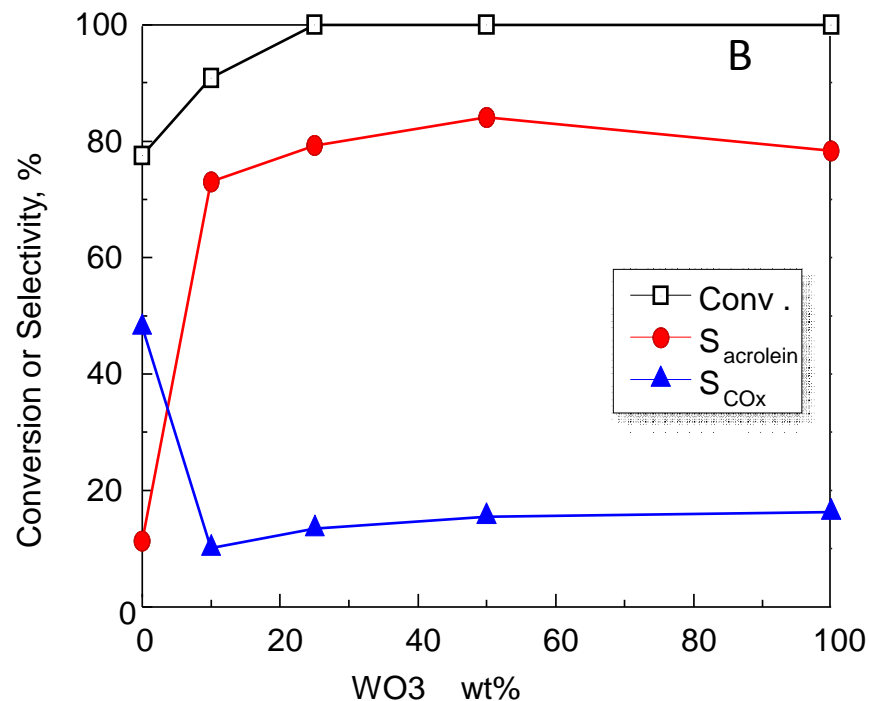
To study the **textural and structural characteristics** of catalysts: XRD, RAMAN, BET surface area and SEM/TEM.

# Reaction: Oxydehydration of glycerol



## Conclusion:

tungsten-based catalysts are very attractive catalysts in the conversion of glycerol to acrolein, with a selectivity which oscillates between 75 and 85%.



**THANK YOU FOR YOUR  
ATTENTION**

