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Development of new bio-sourced Low Molecular Weight Gelators (LMWGs)

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PURPOSE OF THE ABSTRACT

Low molecular weight gelators (LMWGs) are organic compounds that are able to turn liquids into gels when they self-assemble into a fibrous network of anisotropic. Indeed, this type of molecule can be used in numerous applications, such as cosmetic, lubricant, or tissues engineering. During the 1990's, several compounds were known to induce supramolecular gels like urea, amides, sugars, fatty acids, and many others. This study has the aim of developing new bio-sourced low molecular weight gelators, using the most natural products or bio-sourced blocks possible while trying to respect the green chemistry principles.

FIGURES

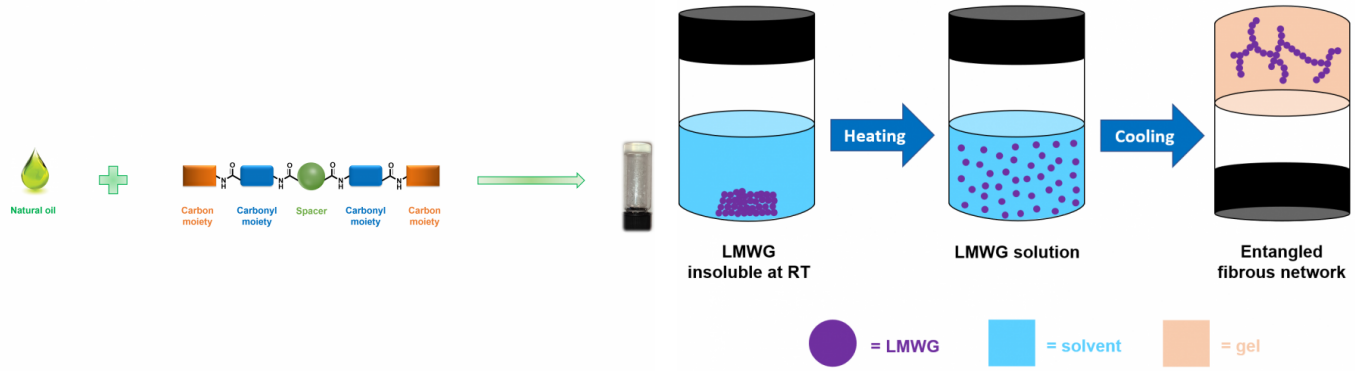

FIGURE 1
New bio-sourced organogel
General representation of the thesis work

FIGURE 2
Low Molecular Weight Gelators (LMWGs)
Procedure to form a supramolecular gel

KEYWORDS
gels | bio-sourced | supramolecular chemistry

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