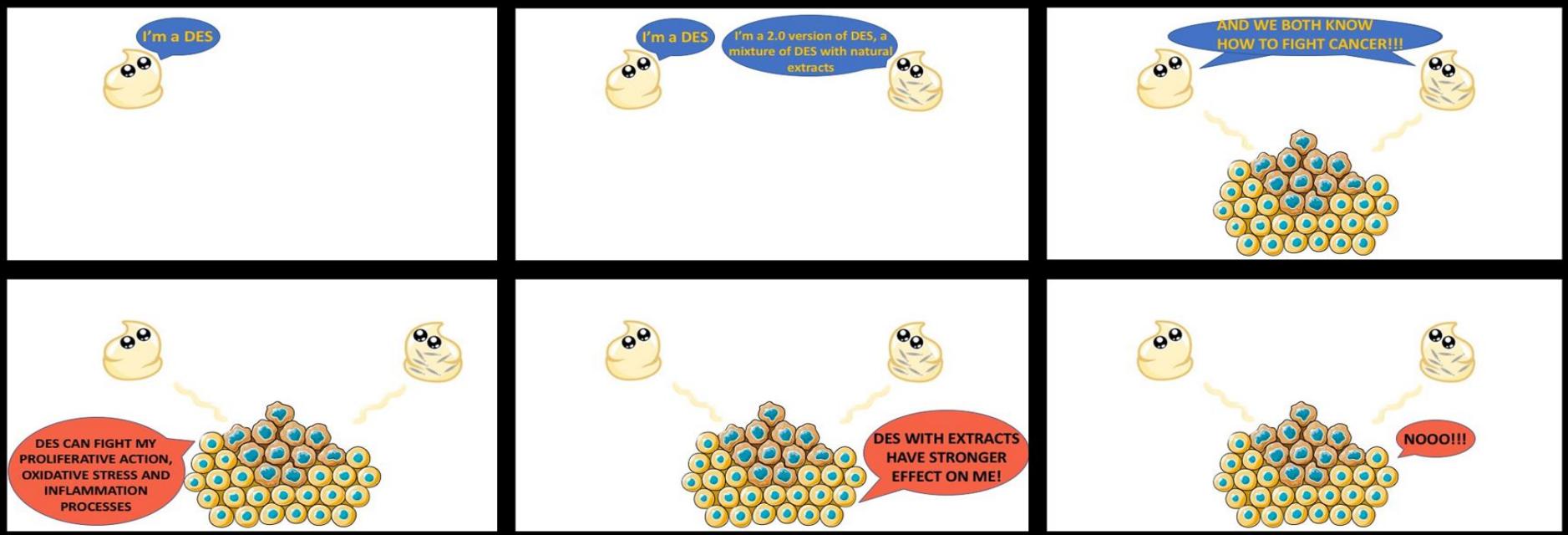




Ongoing work



In colorectal cancer (CRC), there is a huge ineffectiveness of conventional anticancer therapies, specifically in the case of advanced or metastatic phases, but the application of Therapeutic Deep Eutectic Solvents (THEDES) as delivery systems enhance conventional drugs' efficiency (solubility and permeability). In our work, those systems were developed, allying anticancer and anti-inflammatory properties of terpenes with non-steroidal anti-inflammatory drugs (NSAIDs). Several terpenes were explored in combination with different NSAIDs, and THEDES were evaluated in terms of cytotoxicity, anti-inflammatory activity, and anticancer potential. Our previous studies using related systems already revealed antiproliferative effect highly different from the isolated compounds and the physical mixture.



Des.solve group organized the 1st International Meeting on Deep Eutectic Systems, that occurred in Lisbon, from 24th to 27th June 2019. This was the 1st meeting of scientists, students and industry partners to discuss current developments and innovations based on the extraordinary properties of deep eutectic systems. (<https://eventos.fct.unl.pt/desmeeting2019>)



Participation in conferences

- 17th European Meeting on Supercritical Fluids (EMSF 2019), Ciudad Real, Spain
- PPEPPD 2019 (International Conference on Properties and Phase Equilibria for Product and Process Design), Vancouver, Canada
- ISGC 2019 (International Symposium of Green Chemistry), La Rochelle, France
- 1st International Meeting on Deep Eutectic Systems, Lisboa, Portugal (June 2019)
- IC2AR 2019 (3rd International Caparica Conference in Antibiotic Resistance 2019), Caparica, Portugal (June 2019)

Publications

- Patent application, "Wound healing enhancers, methods of obtaining and uses thereof", February 2019
- Patent application, "Terpene based therapeutic deep eutectic system, method of obtaining and uses thereof", March 2019

Dissemination

Television channel S+, Horizonte Radio, Antena 1 Radio, Press releases: Jornal de Notícias (20/04/2019), O Despertar (18/04/2019), Correio dos Açores (13/04/2019), Correio de Lagos (12/04/2019), O Minho (16/04/2019), Índice (15/04/2019), Mais Algarve (15/04/2019), News Farma (15/04/2019), Atlas da Saúde (12/04/2019), Notícias de Viseu Online (12/04/2019), Sapó Lifestyle (12/04/2019), Tv Europa (12/04/2019)

Engineers for one day

Des.solve was in the event "Engenheiras por 1 dia", demonstrating how to prepare a DES to students from the High School. The aim was to motivate the girls to choose an Engineering course for their future, contradicting the low presence of girls in engineering and overcoming gender asymmetry in these courses.

