



# Student Poster Prize Resolution

## **Prize description**

The 15th International Meeting on Thermodiffusion Organizing Committee has assessed all the posters submitted to the Poster Prize awarded by the Fundació URV according to the criteria established in the rules and has resolved to award the poster prizes to the following students:

€ 300\* for the winner of poster and € 300\* for the winner of oral communication competitions.

Poster prize, € 300\*: STEFANO CASTELLINI, <u>10</u>.

#### Remarks:

The novelty of this work lies in the interpretation of the diffusion process in a water-glycerol mixture with a strong concentration gradient with the help of a new empirical model.

The scientific quality of the results is at a high level. Experiments were carried out on an existing setup and shadowgraph technique was used to study the non-equilibrium fluctuations. To interpret the results, a new empirical model was proposed, the effectiveness of which was confirmed by numerical simulation.

The poster provided full information about the problem at hand in a way that participants could follow and understand the matter.







Oral communication prize, € 300\*: ANTTON SANJUAN, <u>10</u>.

### Remarks:

The novelty and originality of this work lies in the fact that it evidences the possibility of stabilizing the flow in a mixture with a negative Soret effect placed in a Cartesian TGC configuration by limiting the geometry.

The scientific quality of the results is at a high level. First, the numerical approach is validated by the mixture with positive Soret effect and then is used for prediction of the results in a mixture with a negative Soret effect. Next, the numerical predictions about possible stabilization of the flow in a mixture with negative Soret effect by confinement are confirmed by laboratory experiments.

During the presentation, Antton conveyed the main ideas in a way that people in the room could hear, understand, and absorb.

\*the prize is subject to Income tax and the Organizer will withhold the applicable amount.

## **Intellectual property rights**

Posters and oral communications submitted to the competition, whether they are awarded or not, are the property of the presenters. Authors and participants in the competition retain intellectual property rights over their work.

