

# ANEXO I

## Aquisições ao abrigo de DL 60/2018 de 3 de agosto

### Anúncio Convite

**Referência:** 24\_2023\_DL60\_DQ

**Entidade Adjudicante:** FCT NOVA

**Data da Publicação:** 23/10/2023

**Prazo final da proposta/ Deadline:** 3 business days after the publication date

**Assunto do contrato/ contract Subject:** Acquisition of vitrification robot semi automated for cryo-EM samples preparation

#### Características Técnicas/technical Characteristics:

##### 1. Environmental chamber:

- a. Environmental chamber able to keep grid, filter papers and sample at any temperature between 4° and 40° and at a controlled relative humidity of up to 100%.
- b. A port on each side of the chamber for sample loading onto the grid (for both right-handed and left-handed operators).

##### 2. Sample blotting:

- a. Option of blotting the grid from both sides at the same time to guarantee even force application, with a user-adjustable blot force and duration (see below).
- b. Possibility to blot the grid as many as 16 times. Moreover, the user must be able to set a custom waiting time before and after each blotting.
- c. Duration of the blotting, blotting force applied to the grid as well as the amount of time the filter paper is be applied controlled by software. Means of saving all settings in user-specific files together with temperature and humidity of the chamber.
- d. Liquid on the grid to be blotted from the side of the grid, not from the middle, preventing potential damage to the grid. Moreover, the filter paper should approach the grid with an angle (>20°), minimizing the contact between grid and filter paper.
- e. Between loading of the sample and plunging into liquid ethane, the only mechanical exposure to the grid should be from blotting. No translation or rotation that could potentially dislodge the drop should occur.

##### 3. Vitrification process:

- a. Automatic shutter control should allow very rapid injection of grid into liquid ethane.
- b. A floating anti-contamination ring to prevent ice-contamination, independent of the level of liquid nitrogen.
- c. Semi-automatic grid transfer of the liquid ethane container toward the grid-holder.
- d. A platform in the liquid nitrogen container able to hold as many as four grid boxes in order to allow preparation of up to 16 grids.

**4. Ease of use:**

- a. Touch screen for rapid setting of parameters.
- b. Control of blotting process with pedal, allowing hands-free operation.
- c. Both ethane and liquid nitrogen container should be removable to allow safe disposal and rapid cleaning.

**Critério de Escolha/ Choice criteria:** Lower price

**Preço base (sem IVA)/ Maximum Price ( without VAT) :** 59.800,00 euros

**Condições de pagamento/Payment conditions:** 30 days after invoice.

**Enviar proposta para/Send proposal to:** [vanessacabral@fct.unl.pt](mailto:vanessacabral@fct.unl.pt)