Bioprocesses – White biotechnology – Sustainable development

# Range of jacks/supports for balloons and other



# INRA

### Description

Round-bottom flask-type vessels are commonly used for good agitation, a homogeneous heating and they must be properly maintained. The « Imagerie & Transferts » (Imaging & Transfers) team from the INRAE Research Unit « Qualité des Produits Animaux » (Quality of Animal Product)s has developed a range of jacks / supports that maintains three different formats of containers on a magnetic stirrer so ergonomic without the use of pedestals, burret clamps or clamp holders. This device allows for the security of users and the samples.



# Type of expected transfer

Option license / license on the model and know-how including possibility of collaboration.

# Advantages

- No risk of reversal/ tilting: enhanced security;
- Optimized agitation for a greater number of flasks per stirrer (x7);
- Practice and modular (storage-reuse);
  System manufacturing: less use of material by using 3D printing, and at a lower cost;
- A support for 3 different balloon volumes

#### Possible applications

For synthetic chemistry, organic chemistry, biology and more broadly for all activities of laboratory for industry, research or education. Adaptations are possible both in terms of sizes than materials used thanks to the Computer Aided Design (CAD) and plastic / composite or metal 3D printing.

# Key words

valet, jack, support, round bottom flask, 3D printing, chemistry



# **Development level**

The prototypes developed by QuaPA can be suitable up to a semi-industrial scale. The team would like collaborate to develop the device in plastics / composites or metals.

### Laboratories:

UR0370 QuaPA Qualité des Produits Animaux

Researchers: Stéphane Portanguen, Pascal Tournayre, Paul Gibert, Pierre-Sylvain Mirade

#### **Contact:**

Laure Akomia Technology transfer officer Bioéconomy and bioprocesses laure.akomia@inrae.fr 07 85 53 04 74

Date: 26-07-2021

Head Office:28, rue du Dr. Finlay - 75015 Paris - Telephone: +33 1 42 75 95 00 - Fax: +33 1 45 77 6390 A simplified joint-stock company with a capital of 1 920 000€ - RCS PARIS B 433 960 762 - SIRET: 433 960 762 00030 - APE 6630Z - TVA FR 96 433 960 762

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