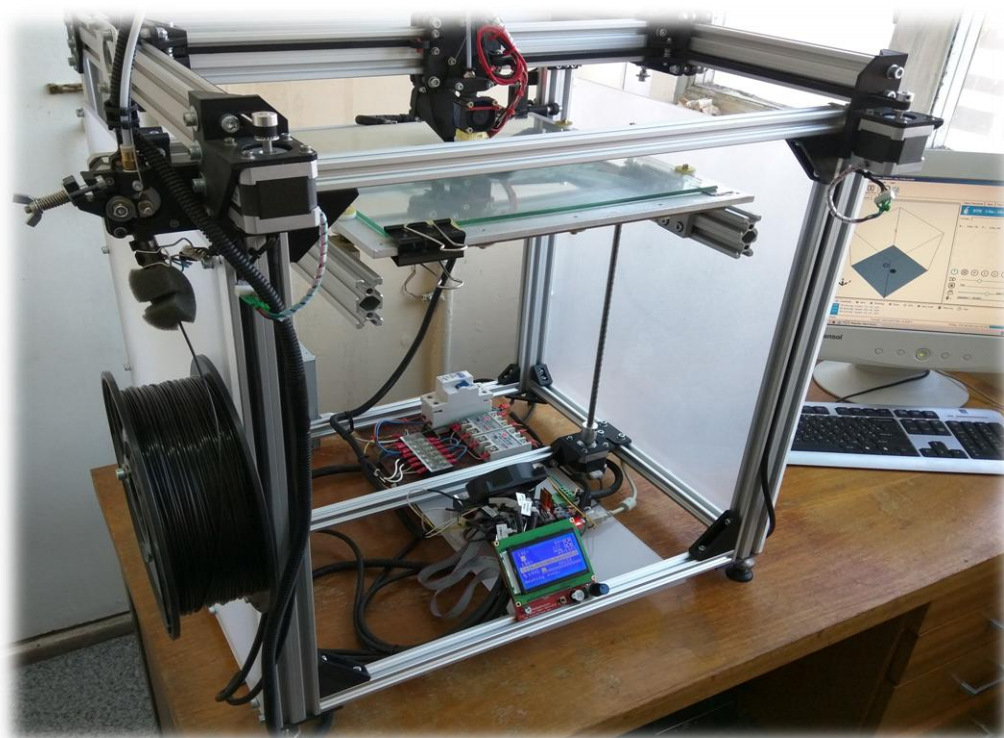




# CONTROLUNION



## Introduction of 3D FDM printing technology

16.11.2017 SC Agmintest Laboratory, Ukraine



Name of company and country

**Team of SC Agmintest Laboratory, Ukraine**

The title of idea

**Introduction of 3D FDM printing technology (Fused Deposition Modeling) in a chemical laboratory**

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## The subject, scope and description of the innovative project

- It is proposed to use 3D printing technologies for the production of equipment and auxiliary devices for a chemical laboratory.
- Since a commercially available printer, that would satisfy the needs of the working volume, speed and print quality, quite expensive, it was decided to build it own. For the implementation, the D-Bot printer project was selected (<https://www.thingiverse.com/thing:1001065>).
- To do this, the necessary components were purchased from which the 3d printer was assembled, adjusted and tuned.

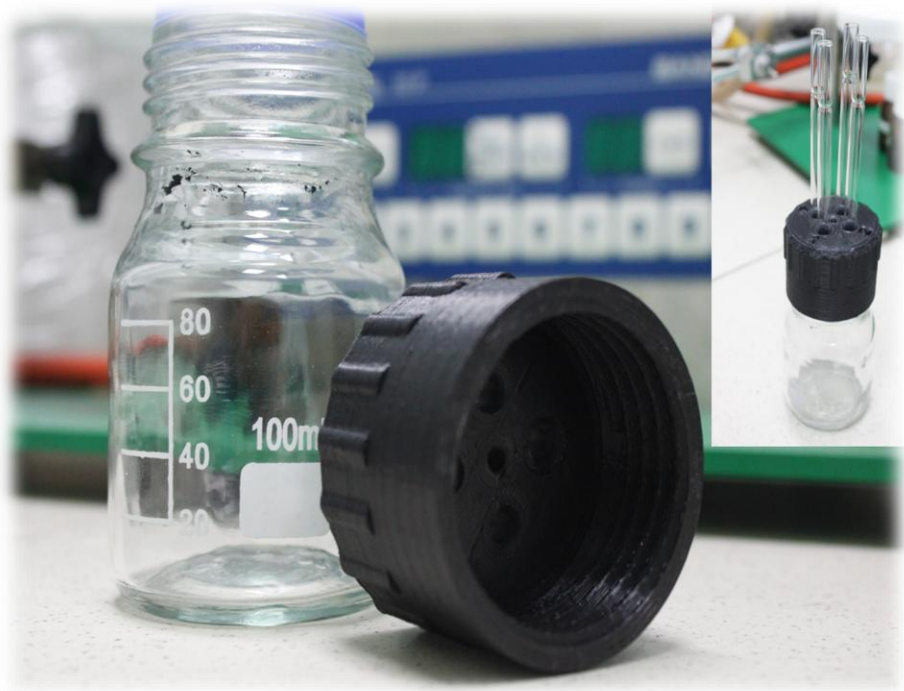
## Agmintest 3D FDM printing technology projects

### Funnel of knife mill



Adaptor for grinding large pellets. It avoids wedging of the mill at start-up with the loaded material for grinding. The mill starts milling empty and the pellets are gradually added in small portions.

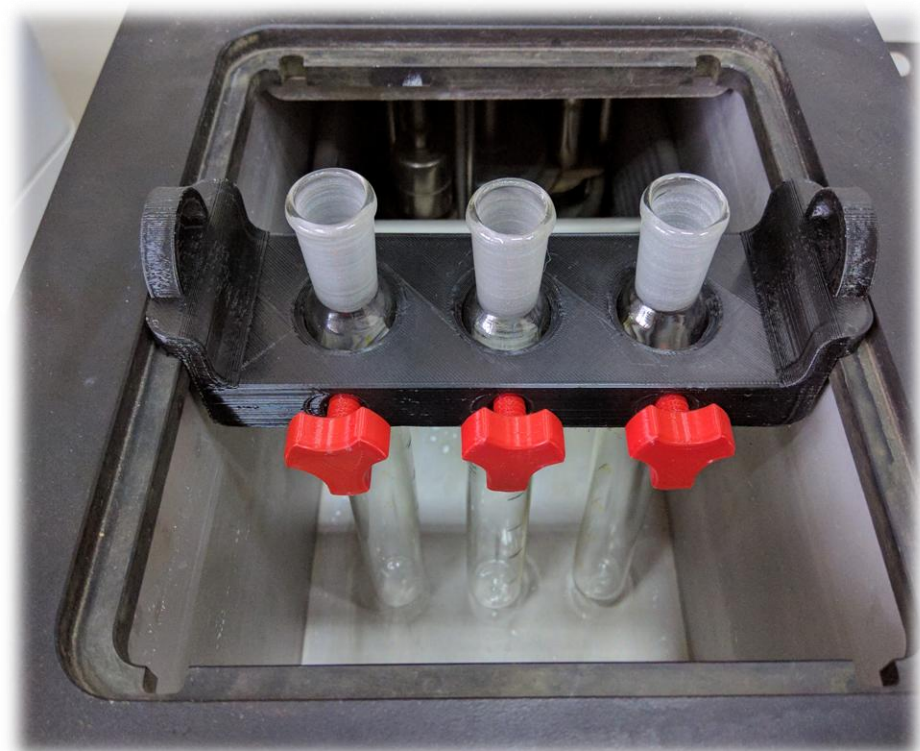
## Agmintest 3D FDM printing technology projects Holder of the sample preparation columns for glucosinolates determination



The compact holder saves workspace. It is very convenient to use it in a fume hood unlike bulky common laboratory holder.

## Agmintest 3D FDM printing technology projects

### Liquid thermostat rack-holder for tubes



Used in the process of sample preparation for urea determination. Holder allows using an existing circulating thermostat. It is an alternative to the purchase of specialized thermostating equipment.

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## Agmintest 3D FDM printing technology projects

### Cuvette holder for spectrophotometer

The most sophisticated and precise project is cuvette holder for the spectrophotometer for cuvettes with a length of 50 mm. It is an alternative to a commercially available cuvette holder which costs about 600 EUR.



## A brief summary of the actual status of project

Currently, the idea is implemented and constantly uses. The design of the printer permanently improves to increase the speed of printing and accuracy of making products.

[\\_\\_agmintest.com.ua](http://__agmintest.com.ua)

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[YOU CAN SEE VIDEO HERE](#)

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THANK YOU!

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