

VIRTUAL MOBILITY (VM) GRANT REPORT TEMPLATE

This report shall be submitted by the VM grantee to VNS Manager, who will coordinate the approval on behalf of the Action MC, within 30 day from the VM activity end and in any case no later than the 31st October 2021.

Action number: CA19110

VM grant title: Plasma Sources video tutorial

VM grant start and end date: 27/09/2021 to 20/10/2021

Grantee name: Filippo Capelli

Description of the outcomes and achieved outputs (including any specific Action objective and deliverables, or publications resulting from the Virtual Mobility).

(max. 500 words)

A video reporting the most known plasma sources used in the agriculture field has been produced. The video is meant for a non-scientific audience and explains also what plasma is and the differences between a thermal plasma and a non-equilibrium plasma. Subsequently, three architectures of cold plasma sources are shown in order to explain the wide variety of choice that are present for agriculture applications.

Moreover, video contributions have been requested to the participants of the COST Action in order to give visibility to everyone interested in showing his results in the agriculture field. These contributions are short videos (maximum 90 seconds) explaining the main plasma application that a single research group is investigating at the moment with particular effort on the plasma source involved in the process.

This second typology of video was meant to show to the audience how every researcher may design a plasma source for a particular application, widening the field of applicability of this technology.

Description of the benefits to the COST Action Strategy (what and how).

(max. 500 words)

The COST Action benefits from the series of video produced since this material can be used to explain to the non-plasma community what is a plasma, which ones are the main common plasma sources used in the agriculture field, why plasma applications are interesting and also which studies are carried out within the COST participants at the moment. Moreover, inside the plasma community, there is always a need for clarity and the first video produced may help to categorize the wide variety of plasma sources used.

Finally, even if we are all part of the same community, it is not always easy to keep in touch and to know any single research going on: the second video shows in less than 5 minutes more than 10 different applications pursued, allowing a huge exchange of information among the researchers

Description of the virtual collaboration (including constructive reflection on activities undertaken, identified successful practices and lessons learned).

(max.500 words)

The virtual collaboration was the main feature of this VM-Grant, even if the time given to COST participants was extremely short, a lot of researchers answered to the call for contributions. In less than a month 11 videos have been collected. Unfortunately, some video was produced with a frame different from the required one for this call, indeed some researcher reused previous videos produced for different issues. The lack of time forced me to accept each video as it was sent, even if the recording does not fall within the parameters of the call.

For a second VM-Grant I would suggest giving to the grantee more time in order to have the possibility to improve the final quality of the videos produced.