**EuroEAP Society Online Challenge 2021**

Introduction

To promote innovation, creativity, and collaboration in the field of Electromechanically Active Polymer (EAP) technologies the EuroEAP Society is pleased to announce the fourth annual EuroEAP Society Challenge. The challenge is an open competition where teams of talented researchers can showcase a project of their choice and compete with colleagues in academia and industry. The final aim of the Challenge is to captivate and inspire the imagination of experts and the public alike with the possibilities that EAP technologies empower. The announcement of the winning team will take place during the EuroEAP 2021 online conference

Project Aim

Each team should build and test an EAP-based new material/device/system, presenting a demo that performs a given task or function of their choice. As the Challenge has no predefined goals, participants will have the opportunity to showcase their pet projects, which may be fun or interesting, not necessarily of profound scientific importance. There are no restrictions on the type of EAP technologies to be utilized or the required functionality/application to be obtained.

Award

The first three classified demos and their teams will be featured on the EuroEAP website. Prizes are:

* 1st place: Euro 500
* 2nd place: Euro 300
* 3rd place: Euro 200

We reserve the right to decrease the number of awarded prizes depending on the number of participating teams according to the table below:

|  |  |
| --- | --- |
| **Participants** | **Prizes** |
| 1-2 | No Challenge |
| 3 | 1st prize |
| 4 | 1st and 2nd prizes |
| 5 or more | All 3 prizes |

Enrolment: procedure and deadline

The Challenge is open to individuals or teams from anywhere in the world.

The only condition for participation is that at least the team leader is a member of the EuroEAP Society at the time of the enrolment in the Challenge.

To enrol, the team leader should fill in, sign and send by email to outreach@euroeap.eu the enrolment form, available for download from the [Challenge webpage](http://www.euroeap.eu/index.php/euroeap-society-challenge-home) on the EuroEAP website. The form includes the following items:

1. Project title;
2. List of team members and their affiliations;
3. Short description (free format) of the project goals;
4. Statement that the team leader has a confirmed subscription to the EuroEAP Society for the current calendar year (note: if the subscription is pending, the enrolment will not be accepted until the subscription is confirmed).

The deadline for enrolment is 15.05.21

A notification about the enrolment will be sent by email within 10 days.

Final submission: procedure and deadline

The team leader should fill in, sign and send by email to outreach@euroeap.eu the submission form, available for download from the [Challenge webpage](http://www.euroeap.eu/index.php/euroeap-society-challenge-home) on the EuroEAP website. The form includes the following items:

1) A description of the final demo (maximum 3 pages);

2) A link to download a video file of the demo. The video, with a maximum duration of three minutes, should showcase the project in a creative way. The video will be posted on a YouTube channel of the EuroEAP Challenge

The deadline for the final submission is 31.05.21

Criteria for judging the demos

Because EuroEAP will be held online in 2021, demos will be judged based on the video and description submitted by each team. As the topic is open, no direct comparison among demos can be made. Instead, each demo will be evaluated based on the five criteria presented below, using a 0-10 points scoring. The demos will be ranked based on the total number of scores obtained. The result of the work performed by each team will be evaluated according to six criteria.

1. *How novel is the idea?*

Has the device (or a very similar idea) been presented in a previous EuroEAP Society Challenge? The novelty of the idea or device will be checked against previously presented ideas. Here is the link to the previously winning ideas in the past EuroEAP conferences.

**http://www.euroeap.eu/index.php/past-edition-winners**

1. *How innovative is the device?*

Does the device use materials in a novel way? Is the purpose/function an imaginative implementation of EAP technology?

(“Can be purchased on Amazon” = 0 to “Never even contemplated such a contraption” = 10)

1. *How ingenious is the approach/method?*

(“This method can be found in a pre-school textbook” =0 to “Is there method to this madness?” = 10)

*How well does the device perform?*

(“Astonishingly poorly, this should have worked” = 0 to “Astonishingly well, I’m amazed it works at all” = 10)

1. *Clarity and quality of the submission?*

How is the overall clarity/quality of the submitted summary and video? Does it help to capture the imagination of the general public and the interest of scientists in other disciplines?

(“I cannot understand what the device was built for, I have no idea what has been done” = 0 to “A Eureka moment: the secret of the Universe have been revealed” = 10)

1. *Aesthetics*

(“Some things just can't be unseen” = 0 to “This should be a permanent exhibition in the Louvre” = 10)

Jury

The Jury will consist of two groups. A panel of experts will evaluate and grade each demo and will allocate half of the possible points before the EuroEAP 2021 conference.

All participants of the EuroEAP 2021 conference will be given access to the videos and submitted descriptions. They will have the opportunity to express their own ranking, thereby allocating the second half of the available points.

In case of a tie, the panel of experts will be asked to elect a winner.

Contact details for enquiries

For further questions contact outreach@euroeap.eu.

The enrolment and submission forms are available on the EuroEAP society website: <http://www.euroeap.eu/index.php/euroeap-society-challenge-home>

Sponsors

The EuroEAP Society Challenge 2021 is generously sponsored by Bürkert Fluid Control Systems. <https://www.burkert.com/en>