



EuroEAP Society

European Society for Electromechanically Active
Polymer Transducers & Artificial Muscles

EuroEAP Society Challenge 2024

Introduction

To promote innovation, creativity, and collaboration in the field of soft electroactive transducers the EuroEAP Society is pleased to announce the seventh annual EuroEAP Society Challenge.

The challenge is an open competition in which teams of talented researchers can showcase a project and compete with colleagues from academia and industry. The aim of the Challenge is to captivate and inspire the imagination of experts and the public alike with the possibilities that soft smart materials and soft transducers empower.

The announcement of the winning team will take place at the EuroEAP 2024 Conference, where the projects will be exhibited.

The challenge

Past challenges were focused on Electromechanically Active Polymers (EAPs). From 2023, the challenge expands its scope to soft smart materials and soft transducers.

Each team should build and test a new material / device / system and present a demo performing a given task or function of their choice.

As the Challenge has no predefined goals, participants have the opportunity to showcase their pet projects, which may be fun or interesting, and not necessarily of profound scientific importance. There are no restrictions on the type of technology to be utilised or the required functionality/application to be obtained.

Awards

The announcement of the winning teams will take place at the EuroEAP 2024 Conference.

EuroEAP Society Challenge prizes

- 1st prize: **200 EUR**
- 2nd prize: **100 EUR**
- 3rd prize: **100 EUR**



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Winners and their demos will also be featured on the EuroEAP website (<http://www.euroeap.eu/index.php/past-edition-winners>) and social media.

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

Participants	Prizes
1-2	no Challenge
3	1 st prize
4	1 st and 2 nd prizes

Procedure

Enrolment

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 the following enrollment form**:

<https://forms.gle/JKJFr9zC1j2juekQ6>

The enrollment form should include the following information items:

1. Project title.
2. List of team members and their affiliations.
3. A description of the project (in **max. 1500 characters**).
4. Statement confirming the team leader's 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).
5. A commitment to exhibit the demo at the EuroEAP 2024 Conference, as part of the EuroEAP Society Challenge exhibit.

The deadline for enrolment is 23.04.2024! A notification of acceptance will be sent by email within 10 days.



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Final submission

After confirmation of participation in the Challenge, the team leader should **fill the following participation form**:

<https://forms.gle/TJoXS9ybsMDsq91x5>

The participation form must include the following items:

1. A description of the final demo (**max. three A4 pages**).
2. A link to download a video file of the demo / project video. The video, with a **max. duration of 3 minutes**, should showcase the project in a creative way.

The video will be shown during the EuroEAP Conference and posted on the YouTube channel of the EuroEAP Society.

The deadline for the final submission is 23.05.2024!

Accessing the form requires a Google account, which can be created for free. Should this be an issue, please contact outreach@euroeap.eu for an alternative way to submit your entry.

Evaluation

Jury

The Jury will consist of two groups:

- A panel of experts composed of members from academia and industry.
- The EuroEAP 2024 Conference attendees.

Criteria for evaluating the demos

As the topic is open, no direct comparison among demos can be made. Instead, each demo will be evaluated based on the 6 criteria for the EuroEAP Society Challenge. The criteria, using a 0-10 points scoring, are presented below.

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 previous ideas in the past EuroEAP conferences. <http://www.euroeap.eu/index.php/past-edition-winners>

2. How innovative is the device?

Does the device use materials in a novel way? Is the purpose / function an



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imaginative implementation of soft smart materials and soft transducers technology?
("Can be purchased on Amazon" = 0 to "Never even contemplated such a contraption" = 10)

3. How ingenious is the approach / method?

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

4. How well does the device perform?

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

5. 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)

6. Aesthetics

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

Evaluation method

The demos will be ranked based on the total number of scores obtained on the six criteria reported above.

The panel of experts will evaluate and grade each demo before the EuroEAP Conference and will allocate half of the possible points.

After the demonstrations / presentations by each participating team, all participants of the EuroEAP Conference will be given the opportunity to express their own ranking, thereby allocating the second half of the available points for the EuroEAP Society Challenge.

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

Contact details for enquiries

For further questions please contact outreach@euroeap.eu.