Nomination for the

EPS Plasma Physics Innovation Prize 2024

For the innovative work in the plasma science leading to break-through in applications

The prize was established in 2008 by the EPS Plasma Physics Division to acknowledge and promote the many benefits to society that derive from plasma physics research, such as applications in medicine, waste management, material processing or any other areas of societal, industrial or technological applications. The prize is awarded for scientific achievements in plasma science which have opened breakthroughs in the field of applications. Joint awards can be granted to groups of up to 3 researchers.

The previous Innovation Prize laureates are:

- J. Allen and B. Annaratone (2008)
- E. Marode (2009)
- U. Czarnetzki (2010)
- V.A. Litvak, M.K.A. Thumm, and K. Sakamoto (2011)
- E. Stamate (2012)
- C. Hollenstein (2014)
- T. von Woedtke and K.D. Weltmann (2016)
- M. Moisan (2017)
- A. Ehiasarian (2018)
- H. Barankova and L. Bardos (2019)
- A. Aanesland, D. Rafalskyi, and J. M. Martínez (2022)
- A. Bogaerts and G.Trenchev (2023)

The closing date for receipt of nominations is February 15th, 2024

The completed nomination form should be sent to the Chairperson of the Plasma Physics Division Board of the European Physical Society, Prof. Dr. Kristel Crombé, Laboratory for Plasma Physics, Royal Military Academy & Ghent University, preferably by electronic mail:

Kristel.Crombe@ugent.be

The board treats the nomination fully confidential and we kindly ask you the same.

European Physical Society Plasma Physics Innovation Prize – 2024

« For the use of plasma science in the field of applications »

Research in Plasma Physics has multiple and rich outcomes with direct or indirect applications. These applications, which are sometimes inconspicuous and even unknown to the layman, can have significant impacts on daily human life as well as on economic activity. Surprisingly, some of the impacts seem far from the basic Plasma Physics research which gave birth to these key original ideas, but nonetheless represent exemplary technological and scientific innovation. Today, applications of Plasma Physics flourish in vastly different domains, such as radioactive waste transmutation, medicine, isotope separation processes (with fundamental applications to cancer therapy), infection treatment, material processing, torch cutting and welding, lighting systems, thrusters, microelectronics, energy solutions, as well as countless other medical, industrial and engineering applications. Within the general framework of the relationship between "Science and Society", there is a strong effort on communication between research and public domains in many countries.

The European Physical Society is keenly aware of these important applications. As a dual gesture of stimulation and recognition, an annual prize was created in 2008 by the Plasma Physics Division of the European Physical Society. This prize targets research which has demonstrably led to robust innovative applications or important effects on society. Nominations in any fields are encouraged.

Establishment and Support

The prize has been established in 2008 and supported by the Plasma Physics Division of the European Physics Society. The Prize is given once a year and consists of 3000 euros and a certificate citing the contributions made by the recipient. A list of the previous winners can be found at: http://plasma.ciemat.es/eps/awards/innovation-award/.

Rules and eligibility

The recognized contribution may be a <u>spin-off</u> (product, process or tool) from research into plasma physics, currently employed <u>outside</u> this original field, for instance in medicine, waste management, material processing, etc. It shall correspond to an existing, <u>proven</u>, application, and not to an ongoing or projected development.

Self-nominations are not allowed.

There are no restrictions for the nationality, the gender or the home institution of the nominees. EPS membership is not required.

Joint awards can be granted to groups of up to 3 researchers.

NOMINEE 1 Full name and title of nominee: Present occupation/position: Date of birth: Affiliation: Full address: Postcode/Country: Daytime telephone number: Email address: **NOMINEE 2** (in case of a group nomination) Full name and title of nominee: Present occupation/position: Date of birth: Affiliation: Full address: Postcode/Country: Daytime telephone number: Email address: **NOMINEE 3** (in case of a group nomination) Full name and title of nominee: Present occupation/position: Date of birth: Affiliation:

Full address:

Postcode/Country:
Daytime telephone number:
Email address:
CITATION
Please describe the scientific achievements of the nominee(s) and how they have influenced the field of plasma physics. <u>Please restrict yourself to at most one page.</u>
SHORT CITATION
Please summarize the above citation in a few lines (not more than 350 characters).
BACKGROUND
Please list qualifications and honors of the nominee(s):
DIDLICATIONS
<u>PUBLICATIONS</u>
Please list the <u>five</u> most influential publications of the nominee (s):
<u>REFEREES</u>
Please give the names of three potential referees:
<u>SUPPORT</u>
If you wish to add letters of support, please list the names and affiliation of supporters:
DDODOSED
PROPOSER COLUMN 1 CO
Please give your own name, affiliation, full address and e-mail:
Full name of the proposer:
Affiliation:
Postcode/Country:
Daytime telephone number:

Email address: