

*Fusion in Europe* is the official newsletter of EUROfusion, the European consortium for the realisation of fusion energy. Each issue, we will bring you the latest news and views on the progress of fusion research in Europe.

Dear \*|FNAME|\*,

Welcome to the new *Fusion in Europe*! Your beloved quarterly magazine has become a bimonthly newsletter delivering all the news and views on the progress of European fusion research directly to your inbox.

Despite Covid, 2021 is shaping up to be a very exciting fusion year. Right now in Naka, Japan, European and Japanese researchers are gearing up for first plasma in the newly upgraded JT-60SA this spring.

The crown piece of fusion news in 2021 will be the groundbreaking experiments ahead at the JET tokamak in Culham scheduled for this summer. JET remains the only tokamak in the world able to use deuterium-tritium (D-T) – the fuel of ITER, DEMO and future fusion power plants. We'll study how to create and sustain steady D-T plasmas, and learn how these behave in preparation for ITER operations.

In this first issue, we also get an important update on DEMO progress, explore the compact SPARC tokamak concept with Professor Hartmut Zohm in our new Expert Insights series, and learn how fusion research is helping dentists reduce Covid risks. Enjoy!

With best regards, Gieljan de Vries on behalf of the EUROfusion Communication team

This edition of Fusion in Europe:



# Testing fusion materials with a hail of

### neutrons

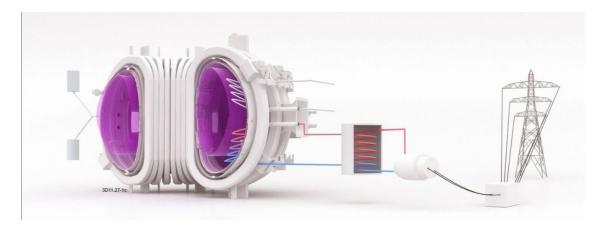
How will tungsten, steel and copper hold up under the punishing conditions in ITER? The Belgian nuclear research lab SCK CEN tested structural materials for ITER in a two-year regimen of high heat and intense neutron radiation flux.

JET defies Covid to post a record-breaking

## year

Europe's flagship fusion device JET in Culham (UK) has achieved high performance experiments in 2020, thanks to scientists and engineers working around the clock and despite the challenges posed by the global pandemic.





Expert panel approves next DEMO design phase

After a thorough external gate review of our work on DEMO, EUROfusion is ready for the next step of our Roadmap to Fusion Energy: the conceptual design of DEMO together with the European fusion community and industry.

Winding Europe's first ITER magnet

Fusion in Europe talks to ASG Superconductors, one of the companies in Europe's new fusion industry and learn about how they are creating jobs, training highly skilled workers as well as innovative technologies.





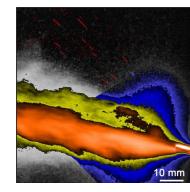
Expert Insight Small but fierce: SPARC

Our new series Expert Insight comments on news in the worldwide fusion community. This edition: what's happening in the US SPARC project?

### F4E technology transfer award

Fusion for Energy has set up its new Technology Transfer Award to celebrate and stimulate knowledge transfer from fusion laboratories to new markets.





## Fusion causing a splash in dentistry

Fusion alumnus Antonis Sergis transfered his research skills from fusion cooling methods to dentistry as he helped develop a novel dentists' protocol that reduces Coronavirus spread.

Nuclear Fusion Journal Award for Prof

Christian Theiler

The IAEA celebrates excellent fusion research with the Nuclear Fusion Journal Award, such as this year's winner Prof Christian Theiler at the Swiss Plasma Center.





EUROfusion brings together 5,000 fusion researchers, staff and students from 28 member states to develop near-limitless, carbon-free fusion energy.



### \*|IFNOT:ARCHIVE\_PAGE|\***Our mailing address is:** \*|HTML:LIST\_ADDRESS\_HTML|\* \*|END:IF|\* Want to change how you receive these emails? You can <u>update your preferences</u> or <u>unsubscribe from this list</u>.