



EU-Japan cooperation research and innovation project launched!

The EU-Japan cooperation project, InRel-Npower, will focus on advanced materials for power electronics. Improvement in wide band gap material properties are expected to lead to a substantial improvement in device performance, reduced in-service degradation and lower maintenance needs and costs. The research consortium with nine European and two Japanese partners will start their research activities on 1 January 2017.

The European Commission launched a call for proposals to support research and innovation on advanced wide band gap materials for power electronics coordinated with co-funding for Japanese partners from the Japan Science and Technology Agency (JST) services. This is the first time the co-funding scheme developed by JST in close cooperation with the European Commission is applied. The co-funding scheme was agreed in May 2015 by the third meeting of the EU-Japan Joint Committee on Science and Technology Cooperation. The scheme is part of the 2011 Agreement between the European Union and the Government of Japan on Cooperation in Science and Technology (http://ec.europa.eu/research/iscp/pdf/policy/japan_agreement.pdf#view=fit&pagemode=none).

In the first stage, the European Commission received 17 eligible proposals which were evaluated by independent experts. Out of these, six proposals were invited to submit a full proposal in stage 2. Five synchronised submissions were received by the Japan Science and Technology Agency (JST) to co-fund the work of the Japanese partners. At the end of this process, the InRel-Npower project was selected to be co-funded by both the European Union and the Japan Science and Technology Agency.

InRel-Npower - Innovative Reliable Nitride based Power Devices and Applications – will be coordinated by Dr. Gaudenzio Meneghesso from the University of Padova, Italy.

The main objective of InRel-Npower is to develop reliable GaN-based power devices and systems for high and medium power electronics targeting industrial and automotive applications and bringing GaN power devices another step towards wide use in energy saving environments. The project also contains the development of novel device architecture (dual channel, substrate removal, e-mode), as well as the exploration of new material systems Aluminum Nitride (Al-based) devices.

This initiative is expected to lead to more robust European – Japanese research cooperation in the important area of wide band gap power electronic materials research. In order to assure such genuine EU-Japanese cooperation, the project includes strong integrated and coordinated research activities, including intensive exchange and training of researchers.

More detailed information on this project is available on [CORDIS](#).

Information on the co-funded Japanese project will be found on the [JST website](#).

The EU contribution for InRel-NPower is € 7.19 million and a budget of € 0.5 million is provided by the JST. The duration of the project is 36 months.