PROJECT

SYNJET3C

Synthetic Jet flow Control CFD and Characterization

Funding: European (Horizon 2020)

Duration: Oct 2017 - Mar 2021

Status: Complete

Total project cost: €600,000

EU contribution: €600,000

Call for proposal: H2020-CS2-CFP04-2016-02

CORDIS RCN : 210610

Objectives:

The objective of the project is to develop scale models for the Synthetic Jet Actuator (SJA), that shall be used to enable the design of next generation SJA's, compared to state-of-the-art.

The development of this scale model is intended for improvement of performance predictions, and modelling accuracy of SJA actuators, for future applications. A demonstration rationale is therefore targeted in order to enable accurate theoretical performance estimations (for given actuator configurations), calculated from geometrical input parameters and transducer elements parameters.

In order to achieve such an objective, the project activities will focus first on analyses and testing of existing SJA's designs, provided by the topic manager. This will be in order to derive accurate numerical models and achieve lessons learnt before designing, manufacturing, and testing a third scale model.

Parent Programmes:

H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Lead Organisation:

Cedrat Technologies Sa

Address:
CHEMIN DU VIEUX CHENE 59
38240 MEYLAN
France

Organisation Website:
http://www.cedrat-technologies.com

EU Contribution: €462,500

Partner Organisations:

Trisitec Ug

Address:
TECHNOLOGIE CAMPUS 1
09126 CHEMNITZ
Germany

EU Contribution: €137,500

Technologies:

Aircraft design and manufacturing
Piezoelectrically driven Synthetic Jet Actuators

Development phase: Research/Invention

STRIA Roadmaps: Vehicle design and manufacturing

Transport mode: Air transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Other specified

Geo-spatial type: Other