



Master of Science in Computational Mechanics

ACCEPTANCE OF INTERNSHIP WORK PLAN

Name of the student	Artemii Sattarov
Company/Institution/ Department	Barcelona Supercomputing Center – Centro Nacional de Supercomputación, Computer Applications in Science and Engineering (CASE) Department
Name of the external supervisor	Daniel Mira Martinez
Start and end dates	07.03.2016-31.06.2016
Total number of hours	280

Topic: Numerical simulations of a swirling combustor in premixed and non-premixed conditions.
Main tasks: benchmark and assess the accuracy of a new turbulent combustion model, which is based on tabulated chemistry, for premixed and non-premixed combustion in the flamelet regime using the code Alya. The main activities involve mesh generation, setup and numerical simulation of different cases, such as adiabatic premixed conditions, adiabatic non-premixed conditions and non-adiabatic combustion.

Additional remarks:

Any change in the information contained in the internship agreement must be authorized by the local master coordinator.

Date:

Student's signature

External
supervisor's signature

Antonio Rodriguez Ferran