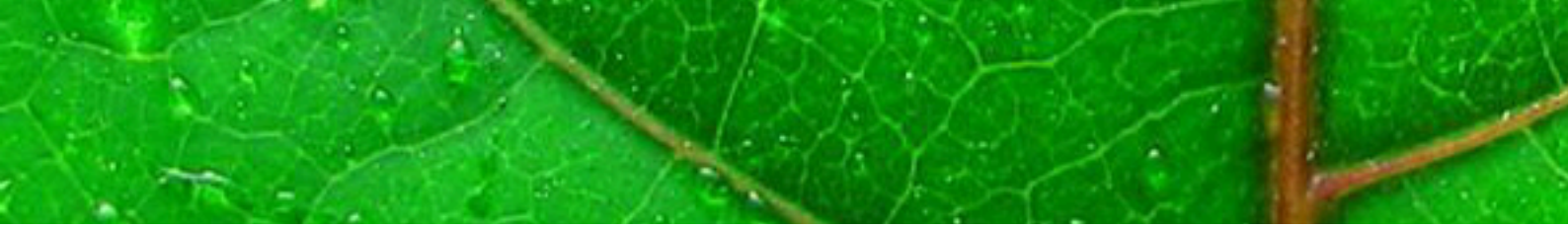

Internal flow with heat and mass transfer

The objective here is to participate in the development of a cost-effective tool for the direct numerical simulation (DNS) of internal aerodynamic configurations with possible heat and mass transfer.

By joining the CAGIRE-Inria-Bordeaux-Sud-Ouest team, whose project is supported by the university and inherent to the local socio-economic fabric (synergy between several laboratories and research entities), the LaTEP was able to demonstrate its know-how on issues concerning multiphase flow and thermodynamic modeling for complex flows (underexpanded jets).

In addition, it is developing its expertise by performing simulations of the cooling of combustion chambers.