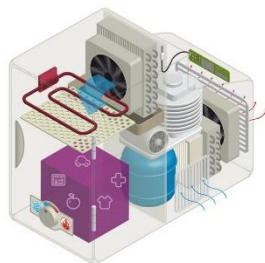




**CETIAT** is a public interest organization, created in 1960 to meet the demands of companies in the HVAC and air treatment sector. Its objective is to support industrial innovation by providing a link between industry and research. As a reference in the French and international industrial ecosystem, CETIAT develops an expertise that meets the current environmental challenges such as energy efficiency, renewable energies.

→ **CETIAT**

- Number of employees: 136
- Website: <https://www.cetiat.fr/>
- Industry: Industrial Equipment



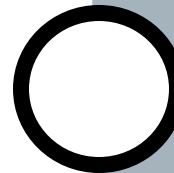
*"Dymola helps us to design and optimize the next generation heat pumps using low GWP (Global Warming Potential) refrigerants"*



**Alain GEVAUDAN**  
Head of Studies and Training Department



## CHALLENGES



For the design of its heat pumps, CETIAT had two main challenges:

- To provide more efficient tools to its customers by offering a reference solution in the field of heat pumps,
- To provide a high level of expertise in the design and engineering of heat pumps, thermal comfort and air conditioning systems,

## SOLUTION



DYMOLA allows :

- To access a library of components dedicated to the modeling of heat pumps and thermodynamic systems,
- To facilitate the creation of models specific to the user and to capitalize on these models,
- The opening and the compatibility of the solution to exchange standards which allow to create external interfaces (Excel, Python, Java) driving the models and facilitating the use and the deployment of the tool to non expert users.

## BENEFITS



Thanks to the use of DYMOLA, CETIAT has powerful virtual prototypes. This allows to reduce the number of real tests but also to validate the technological choices and the parametric solutions.

On the other hand, the flexibility of the tool allows to easily reuse what has been previously developed by CETIAT and to pilot models with Excel scripts for a deployment by external users.