

# CONFATHER

## Providing thermal comfort

### MATURATION

### BENEFITS

- Compact geometry
- Low cost
- High-performance

**New generation of compact multifunctional exchangers for low-cost absorption machines.**

### CONTEXT

Today's society faces many challenges such as pollution, global warming, an increasing energy demand and the depletion of fossil resources. Confther aims to fight some of these challenges by offering low-cost absorption machines with a new generation of multifunctional exchangers. This technology allows to produce cold from renewable heat sources with very low electricity consumption, fulfilling the need for thermal comfort in a sustainable way.



### KEYWORDS

- Absorption machine
- Air conditioning

### INTELLECTUAL PROPERTY

- 1 patent pending

### LABORATORY



### MATURITY

- Preuve de concept laboratoire en cours

### TECHNOLOGY

- Compact adiabatic mass exchangers
- Manufacturing with 3D printing
- Compact global geometry
- High-performance and non-hazardous working fluid (H<sub>2</sub>O-LiBr)

### BENEFITS

- Low-cost
- Compactness
- Maintenance
- Robustness

### MATURITY

The machine architecture was defined on the basis of stationary and dynamic simulations. These simulations made it possible to define the necessary thermal and mass efficiencies of the various components. The current step is to optimize the components in order to implement them on a demonstrator

### APPLICATIONS

Cold production:

- Food preservation
- Storage of medicines
- Residential air conditioning
- Production of chilled water for static or mobile applications (marine industry)

### CONTACT

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