

## I progetti a partecipazione ENEA finanziati dalla UE

# NANOUP TAKE

## Overcoming Barriers to Nanofluids Market Uptake

### Dati progetto

Coordinatore:

**UNIV. JAUME - Spagna**

Responsabile ENEA:

**FALCONIERI MAURO FSN-TECFIS**

Sito WEB:

<http://nanouptake.eu>

Descrizione:

Nanofluids are defined as fluids that contain nanometre-sized particles with enhanced heat transfer properties. Since 1995, active research on this topic has been conducted (more than 1,700 papers in the last 3 years). Nanofluids improve the efficiency of heat exchange and thermal energy storage systems and they are specifically mentioned in the Strategic Energy Technology Plan and the Materials Roadmap to enable Low-Carbon Technologies as potential elements to improve the efficiency of heat exchange and thermal energy storage systems. Consequently, nanofluids address the European Horizon 2020 Energy and Climate objectives (Societal Challenges 3: Secure, efficient and clean energy; and 6: Climate action, environment, resource efficiency and raw materials). In addition, nanofluids fall within one of the Key Enabling Technologies (KET) supported by the European Commission. Although some nanofluid commercial applications currently exist, most of the current nanofluids are at Technological Readiness Levels (TRL) 1 to 3. Most of the nanofluids research in COST countries has been conducted by Research, Development and Innovation (R+D+i) centres through national funding. Additional coordinated research and development efforts are required to develop nanofluids up to higher TRL levels and to overcome commercial application barriers. If these barriers are overcome, nanofluids will be an important player in the Value Added Materials (VAM) for the energy sector. The objective of the NANOUP TAKE COST Action is to create a Europe-wide network of leading R+D+i institutions, and of key industries, to develop and foster the use of nanofluids as advanced heat transfer/thermal storage materials to increase the efficiency of heat exchange and storage systems.

Attività svolta da ENEA:

---

Programma Quadro:

**HORIZON 2020**

Programma UE:

**COST**

Tipo di progetto:

**N/A - Non applicabile**

**Partner del progetto**

	Ruolo	Tipologia	Nome	Nazione
1	---	RIC	ENEA	Italia
2	COORD	EDU	UNIV. JAUME	Spagna

## **Keyword**

Keyword associate al progetto dal database di CORDIS

---

**COORDINATION, COOPERATION**

**ENERGY SAVING**

Altre Keyword non presenti nel database di CORDIS

---

**Nanofluids**