

## **Study and characterization of promising thermal energy storage materials**

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The activities carried out in the *PTR 2022-24—Objective: Technologies—Project 1.2/WP4 National program* led to the development and characterization of a mixed oxide of manganese and aluminum ( $\text{MnAl}_2\text{O}_4/\text{MnAl}_2\text{O}_{4-\delta}$ , spinel structure), a particularly promising thermal energy storage material, both in terms of cost and environmental impact and in terms of chemical and physical stability, able to store and release heat at temperature (550-700°C).