

Thermal energy storage cyprus

PROTEAS is a multi-purpose facility built around a central hub of molten salt ...

The TESLAB was originally created for research in molten-salt thermal energy ...

The PROTEAS Facility is the largest research infrastructure in Cyprus. It is devoted to research, development and testing of Renewable Energy Sources with emphasis on Concentrating Solar Thermal (CST), Thermal Energy Storage (TES) and thermal Desalination of Sea Water (DSW) for bridging the gap between fundamental research and industrial needs.

PROTEAS is a multi-purpose facility built around a central hub of molten salt Thermal Energy Storage (TES), hybridised with batteries and other forms of storage. The facility is capable of poly-generation of heat and electricity using renewable energy technologies (CST, Wind, PV) and integration of these energy technologies with the TES, batteries, and seasonal water storage. Optimal solar radiation and environmental conditions are monitored via a state-of-the-art BSRN station. PROTEAS is complemented and enhanced by the Thermal Energy Storage Lab (TESLA) at the main Campus of CyI at Athalassa where instrumentation, controls and studies on suitable materials are also conducted.

CyI employment opportunitiesThe Cyprus Institute

Fig. The TESLAB molten salt (MS) TES. The principal steam lines of the 10kWth Rankine Cycle demonstrator plant which connect to the MS TES steam generator and superheater are also indicated.

The TESLAB was originally created for research in molten-salt thermal energy storage and, more specifically, allow for the development of ancillary hardware such as level sensors and heat exchangers, prior to being commissioned at the CyI CSP platform, PROTEAS. The 250 kWth TES has been used to test the first Rankine cycle developed in-house by the ARES group.

You are accessing a machine-readable page. In order to be human-readable, please install an RSS reader.

All articles published by MDPI are made immediately available worldwide under an open access license. No special permission is required to reuse all or part of the article published by MDPI, including figures and tables. For articles published under an open access Creative Common CC BY license, any part of the article may be reused without permission provided that the original article is clearly cited. For more information, please refer to <https://>

Feature papers represent the most advanced research with significant potential for high impact in the field. A Feature Paper should be a substantial original Article that involves several techniques or approaches, provides

an outlook for future research directions and describes possible research applications.

Feature papers are submitted upon individual invitation or recommendation by the scientific editors and must receive positive feedback from the reviewers.

Editor's Choice articles are based on recommendations by the scientific editors of MDPI journals from around the world. Editors select a small number of articles recently published in the journal that they believe will be particularly interesting to readers, or important in the respective research area. The aim is to provide a snapshot of some of the most exciting work published in the various research areas of the journal.

Contact us for free full report

Web: <https://www.kary.com.pl/contact-us/>

Email: energystorage2000@gmail.com

WhatsApp: 8613816583346

