



Call for Papers for the Special Session on Performance characterization of solar systems for cooking and drying food products

Sustainable development of materials, instruments, equipment and processes is crucial for life in our planet. Solar energy is a clean and safe energy and it has always been present in daily human activities, namely for drying food and clothes and heating water, as well as in new applications, such as industrial drying, thermal energy and electricity generation, water desalination, and in HVAC&R sector. The use of solar energy for direct solar cooking is well known, but only few enthusiasts and few institutions are adopting it in a regular daily basis. Solar energy should be considered part of the solution and imperatively adopted by communities and companies in sunny regions of our planet.

Well-designed solar equipment for cooking and drying can provide safe and marketable nutritious food. Numerous studies have been done and published regarding the characterization of the performance of such solar devices by using simple and complex methodologies based on experimental and numerical approaches.

Researchers are requested to submit studies on reporting performance data of solar cooking and solar drying systems and processes based on mathematical and experimental simulations as a solid and valuable contribution regarding: i) the optimization of the systems and processes, ii) reporting the performance of the systems under different operational conditions, iii) use of hybrid energy solutions, iv) use of storage thermal media and v) investigation of different simulation approaches and validity of assumptions of simplified approaches.

Special Session Organizer

- Celestino Rodrigues Ruivo, Univ. Algarve & ADAI - LAETA, Portugal

Important Dates

- Paper submission deadline: **March 28th, 2023**
- Notification of acceptance: **April 25th, 2023**
- Final paper submission deadline: **May 26th, 2023**
- Early bird registration deadline: **May 5th, 2023**
- Regular registration deadline: **June 30th, 2023**
- Conference and onsite registration: **from 3rd to 7th, July, 2023**

Participation

Authors can participate in this Special Session of INCREaSE 2023 by submitting a full paper of 10-16 pages, using the format available in INCREaSE web site ([word](#) or [latex](#)), and accepted papers will be invited to present (in-person or online) a 15-minute oral presentation and will be indexed by Springer.

Link for Submissions: <https://meetinghand.com/e/increase-2023-mtfbd/abstract>

INCREaSE 2023 Conference

The INternational CongRess on Engineering and Sustainability in the XXI cEntury – INCREaSE 2023 is a congress with the aim to bring together valuable and novel scientific contributions to the sustainable development in a multidisciplinary way. This 3rd edition of INCREaSE will be a hybrid event, held during July 5-7, 2023, in Faro, Portugal, organized by the Institute of Engineering and hosted by University of Algarve.



<https://increase.ualg.pt/>