

24-25-26 January 2022

INSTITUTE OF ENGINEERING
UNIVERSITY OF ALGARVE, CAMPUS DA PENHA, FARO-PORTUGAL

Fourth International Conference

CONSOLFOOD2022

>Advances in Solar

>Thermal Food Processing

Many people in developing countries still burn wood, charcoal, or even garbage on open fires for cooking purposes because they do not have access to electricity or gas. The inefficient burning of wood, charcoal, dung, and plant residues causes health problems, deforestation and greenhouse gas emissions. The potential of thermal solar energy for food processing tasks like drying, cooking, and pasteurization is well understood, but adoption of this technology is not increasing as rapidly as would be desirable. In the sunny parts of the developed world, few people would recognise a solar cooker, and most still use only gas and electricity for cooking. The introduction of solar cookers in sunny areas for cooking, food drying, and water sterilization is our goal.

CONSOLFOOD 2022 is being planned for 24th, 25th and 26th January, 2022. Once again, we will focus on advances in solar cooking, solar food processing, and related topics. As usual, experts from all over the world are presenting and discussing the latest developments.

Please find below a preliminary version of our programme (Lisbon time) which contains a well-balanced list of presentations by authors from many different parts of the world. For updated information on CONSOLFOOD2022 go to www.consolfood.org



REGISTRATION DATA

Name of participant:

Phone number:

Profession:

Email address:

Company or institution:

Address:

Country:

Name of payer of registration fee:

Address:

Country:

VAT Number (if you have one):

The registration fee is 80 euros for those people using an account of a bank of any country of European Community and 100 euros for other people.

When we receive your registration data, we will let you know about payment options.

Students or other individuals really interested in attending the conference but facing financial difficulties should contact the organizing committee for a free registration.

If you want to attend this online conference, the **deadline** for registration is **20th January, 2022**. Please send your data by email to cruivo@ualg.pt.

Additional information:

Department of Mechanical Engineering, Institute of Engineering, University of the Algarve

Email addresses: cruivo@ualg.pt (Chairman)

Phone: +351 289800166 / +351 289800900 (ext. 6571)

Organizing committee:

-Celestino Ruivo, (Chairman),
Institute of Engineering, University of Algarve, Portugal
Association for the Development of Industrial Aerodynamics, Portugal
-Armando Inverno, Institute of Engineering, University of Algarve, Portugal
-Célia Quintas, Institute of Engineering, University of Algarve, Portugal
-Ajay Chandak, PRINCE Suman Foundation, India

-Dave Oxford, SLiCK Solar Stove, UK
-Juan Bello Llorente, CIFP Someso, A Coruña, Spain
-Michael Bonke – LAZOLA Initiative for Spreading Solar Cooking, Germany
-Alberto Hernandez Neto, University of Sao Paulo, Brazil
-Luther Krueger, Big Blue Sun Museum of Solar Cooking, Minneapolis, USA
-Octavio García Valladares, I.E.R., Universidad Nacional Autónoma de México, México
-Eduardo Armando Rincón Mejía, Universidad Autónoma de la Ciudad de México, México

Lisbon time		Day 1: 24th January 2022	
14:15	Opening Waiting Room (zoomlink1)		
14:30	Opening Conference Session		
Session 1, 24th Jan; Moderator: Mod1			
14:50	Solar Cooking and Food Processing for Accomplishing Sustainable Development Goals: A hands-on Experience in Central India	Janak Palta McGilligan	India
15:10	A model for sustainable and replicable solar cooker lending programs	Lorena Hegedus, Nate Dempsey, Jennifer Gasser, Mary M Buchenic	USA
15:30	Solar cooking: versatile tool to face the climate crisis	Bello J., Bello, R.	Spain
15:50	Questions and Answers		
16:15	Break		
Session 2, 24th Jan; Moderator: Mod2			
16:30	A real cooking experience with solar concentrating cookers	Narayani A. Sagade, Atul Sagade	India
16:50	Cooking with the sun and the heart or How I got the solar cooking virus	Hannah Larndorfer	Austria/Portugal
17:30	Questions and Answers		
17:50	Surprise Session		
18:20	Closing first conference day		

Lisbon time		Day 2: 25th January 2022	
14:15		Opening Waiting Room (zoomlink2)	
Session 3, 25Jan; Moderator: Mod3			
14:50	Challenges in promoting solar dryers in India: Social acceptance, old methods and technologies	Neha Mehta, Kinjal Pandya	India
15:10	Solar thermal drying plant for agricultural products	O. García-Valladares, N. M. Ortiz-Rodríguez, I. Pilatowsky-Figueroa, C. Menchaca-Valdez	Mexico
15:30	Pineapple dehydration in the Thermosolar Plant for agricultural products installed in Xochitepec, Morelos	A.L. César Munguía, O. García-Valladares, I. Pilatowsky Figueroa, A. Domínguez Niño, A. Maciel Tiburcio, E. Hernández Figueroa, J.R. Pérez Espinosa	Mexico
15:50	Development of a new solar dryer for thermal food processing	C. Brandão, G. Oliveira, C. Pereira, S. Lopes, E. Silva, I. Brás, A. Castro, D. Wessel	Portugal
16:00	Experimental study of drying peach (Prunus persica) by two different solar drying technologies	Diana Paola García Moreira, Erick César López Vidaña	Mexico
16:10	Second generation solar air heater for passive driers with sensible heat storage	Lecuona-Neumann, A.; Díaz-Infantes A., López-Gorría, A.; Anta-Gangosos, A.	Spain
16:20	Cooking- Dehydrated with asymmetric solar concentrators	Camarillo-Huerta, P., Zarate-Balderas, R., De Los Santos-Garcia, F., Saucedo-Colunga, M., Flores-Dosal, L., Nahmad-Molinari, Y.	Mexico
16:30	Questions and Answers		
16:50	Break		
Session 4, 25 Jan; Moderator: Mod4			
17:00	Constructal evolution of the solar oven Tolokatsin 2021	Rincón-Mejía, E., González-Mora, E.	Mexico
17:20	A new linear concentrating solar cooker: design, construction and experiment	Famiglietti, A., Lecuona-Neumann, A.	Spain
17:30	Experimental validation of a parabolic solar stove for cooking food, desalination and purification of water in Colombia	Ramírez Gil, R., Cruz Muñoz, B., Dorantes Rodríguez, R	Colombia/Mexico
17:40	Questions and Answers		
18:00	Closing second conference day		

Lisbon time		Day 3: 26th January 2022	
14:15	Opening Waiting Room (zoomlink3)		
Session 5, 26 Jan; Moderator: Mod5			
14:50	Bicycle Mounted Mobile Solar Cooker for Micro-Enterprise	Sunil Chouhan; Samir Sharma	India
15:10	The Chirinbicular, a movable solar kitchen by huerta bizarra. Towards an architecture without buildings	Abellán, A.	Spain
15:20	Solar cooking plastic into boat parts	Katharina Elleke; Michael Macris	Germany/Kenya
15:30	Adiabatic thermos as a complement to solar cooking	Pedro Serrano Rodríguez	Chile
15:40	Recycling and solar cooking: make solar cooker under one dollar?	Bozina Komatina	Montenegro
15:50	Development of a model to predict the performance of a box solar cooker including the radiation heat transfer between its inner surfaces	Henriques Lopes, M., Ferreira da Costa, V. A., Rodrigues Ruivo, C.	Portugal
16:00	Questions and Answers		
16:25	Break		
Session 6, 26 Jan; Moderator: Mod6			
16:40	Solar restaurants, feasibility and temporality	Pedro Serrano Rodríguez	Chile
17:00	Towards professional kitchen with Scheffler reflectors: standard test of a basic solution	Gabriel Guillet, Séverine Barbosa, Thomas Fasquelle, Benjamin Kadoch	France
17:10	Summary of two year of research on solar cookers thermal performance in Southern Iberian Peninsula	A. Carrillo-Andrés, X. Apaolaza-Pagoaga, C. Rodrigues Ruivo	Spain/Portugal
17:30	Questions and Answers		
17:50	Closing conference Session		