

## **Program**

17h30-18h45

Solar air conditioning – residential perspective, Mark Goldsworthy (PhD), Research Scientist at CSIRO Energy Technology, Australia

18h50 – 19h30

On the potential of solar cooking, Celestino Ruivo (PhD), Professor at ISE-University of Algarve, Portugal

The deadline for booking the meeting is 10<sup>th</sup> September 2013. Registration data: name, phone, profession, e-mail, company/institute, postal address, invoice address and NIF.

Send the registration data to: Prof. Celestino Rodrigues Ruivo  
Instituto Superior Engenharia - Universidade do Algarve  
Campus da Penha, 8005-139 Faro-Portugal  
e-mail: [cruivo@ualg.pt](mailto:cruivo@ualg.pt); Fax: +351 289888405

The registration is valid after payment. The meeting fee is 20 euros. Preference payment is by check to *Universidade do Algarve*.

For additional information, contact: Prof. Celestino Ruivo ([cruivo@ualg.pt](mailto:cruivo@ualg.pt)) or Sec. Dep. Eng. Mecânica ([isedem@ualg.pt](mailto:isedem@ualg.pt))  
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The meeting will be held on 11<sup>th</sup> September 2013 at:  
Instituto Superior de Engenharia, Universidade do Algarve  
Campus da Penha, 8005-139 Faro-Portugal

# Meeting on *Solar Air Conditioning and Solar Cooking*



**Faro, 11 th September 2013**

## ***Organization***

Instituto Superior de Engenharia  
Universidade do Algarve, Portugal

## **Solar air conditioning**

*Mark Goldsworthy*

In any field of research it is important to continually re-assess the purpose of the work and the indicators of success. This is especially true in the field of Solar Air-Conditioning where cost, energy and emissions are key drivers that are constantly changing. Knowing exactly what constitutes 'success' leads to a detailed understanding of the purpose of the technology and the problems that it currently poses. It is this understanding that allows researchers to identify and remain focussed on solving the key problems, and so to transform their ideas into reality. The principles of solar air-conditioners have been long established, and yet nowhere are the devices in widespread use. Possible reasons for why this is the case will be explored in the context of the broader task of supplying residential buildings with heating, cooling and hot water. Recent research at the Commonwealth Scientific and Industrial Research Organisation in Australia on improving the viability of solar desiccant air-conditioning will also be discussed.

## **Solar cooking**

*Celestino Ruivo*

The south of the Iberian Peninsula has a great solar potential that have been explored in some thermal applications, namely the (domestic) hot water systems, but not for domestic or industrial cooking scale applications. With this great source of energy a significant number of families could cook their meals over 300 days per year. Taking into account some real examples of other regions of the world, namely in Chile and in India, the integration of a solar cooking process in canteens of schools and companies as well as in restaurants seems to be an attractive strategy towards the rational and sustainable use of energy.

Solar cooking is an interesting alternative to the conventional cooking process. Solar cookers can cook a large variety of meals, slowly or quickly as in a gas burner. There are several institutions acting in several parts of the world, namely non-governmental organizations, having as main goal the dissemination of solar cooking in large scale.