

# Solar process heat for production and advanced applications

Task 49 / Task IV

## ***Preliminary Agenda for the 1<sup>st</sup> Workshop on “Solar Process Heat and Process Intensification – Applications in the food industry”***

***Graz, Austria, September 5<sup>th</sup>, 2012***

***SMART.events, Dreihackengasse 1, 8020 Graz  
Austria***

### **Objectives:**

- Collect existing solutions of solar process heat in combination with intensified technologies already applied in the food industry
- Identify new potential solutions for specific unit operations (e.g. evaporation, drying)
- Identify the necessary steps to evaluate the effects of new PI approaches and technologies on the potential of solar process heat
- Identify upcoming research needs

### **Wednesday, September 5th**

<b>09:00 –10:00</b>	<b>Welcome</b>
	<p>Welcome Adress Christoph Brunner, Operating Agent IEA Task 49</p> <p>Short introduction of the participants</p>
<b>10:00 –11:00</b>	<b>Introductory lectures:</b>
	<p><b>Roadmap for Process Intensification</b> Prof. Hans Schnitzer, TU Graz</p> <p><b>Solar Applications in the food industry and technological challenges</b> Christoph Brunner, AEE INTEC</p> <p><b>Solar Applications in water treatment</b> Christian Sattler, DLR</p>
<b>11:00 h</b>	<b>Coffee break</b>

<b>11:20 –12:00    <i>Introductory lectures:</i></b>	
	<p><b>Process Intensification – state of research in the UK</b> Prof. David Reay, Newcastle University</p> <p><b>Solar driven intensified processes in chemical engineering</b> Prof. Geert-Jan Witkamp, TU Delft (<b>invited</b>)</p>
<b>12:00 –13:00    <i>Group work – world cafe</i></b>	
	<p><b>Introduction to unit operations analysed within the group work</b> Bettina Muster, AEE INTEC</p> <ul style="list-style-type: none"> <li>• Drying</li> <li>• Fluid Separation / Evaporation</li> <li>• Mixing and heat transfer in process vessels</li> </ul>
<b>13:00 h</b>	<b>Lunch</b>
<b>14:00 – 16:00    <i>Group work – world cafe</i></b>	
	<ul style="list-style-type: none"> <li>• Drying</li> <li>• Fluid Separation / Evaporation</li> <li>• Mixing and heat transfer in process vessels</li> </ul>
<b>16:00</b>	<b>Coffee break</b>
<b>16:30 – 18:00    <i>Summary and Outlook</i></b>	
	Summary of the group work and definition of research needs and further steps