## WORKSHOP ON PCM VISCOSITY, FREIBURG (GERMANY)

During the last years, as one of the Task 42-Annex 29-IEA activities, an intercomparative test was launched on PCM viscosity characterization. A first approach to characterize PCM viscosity has been tested until now by several institutions, using Parafol 19-97 and RT70 HC.

A workshop on the measurement of PCM viscosity in the framework of Task 58-Annex 33-IEA is going to be held at Fraunhofer ISE in Freiburg on 7th and 8th March 2018. The workshop offers the opportunity to know and use different rheology equipments, how to prepare different samples, to go in depth in the different measurement methodologies and to exchange our experience, with the ultimate goal of coming to comparable results and the proposal of a standardized procedure.

<table>
<tr><th></th><th>6th March</th><th>7th March</th><th>8th March</th></tr>
<tr><td>09:00-09:30</td><td rowspan="18"></td><td rowspan="2">Welcome + Introduction</td><td>Technical talk</td></tr>
<tr><td>09:30-10:00</td><td rowspan="6">Viscosity measurements</td></tr>
<tr><td>10:00-10:30</td><td rowspan="4">Technical talks</td></tr>
<tr><td>10:30-11:00</td></tr>
<tr><td>11:00-11:30</td></tr>
<tr><td>11:30-12:00</td></tr>
<tr><td>12:00-12:30</td><td>Lunch</td><td>Lunch</td></tr>
<tr><td>12:30-13:00</td><td rowspan="8">Viscosity measurements</td><td rowspan="8">Viscosity measurements</td></tr>
<tr><td>13:00-13:30</td></tr>
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<tr><td>15:30-16:00</td></tr>
<tr><td>16:00-16:30</td><td>Coffee break</td><td>Coffee break</td></tr>
<tr><td>16:30-17:00</td><td rowspan="4">Viscosity measurements</td><td rowspan="3">Workshop conclusions</td></tr>
<tr><td>17:00-17:30</td></tr>
<tr><td>17:30-18:00</td></tr>
<tr><td>18:00-18:30</td><td></td></tr>
<tr><td>19:30</td><td>Dinner/come together</td><td colspan="2">Dinner</td></tr>
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| **Technical talks on 7th March** | |
|---|---|
| 10:00-10:30 | First conclusions of PCM viscosity measurements in the frame of Task Annex 42-24-IEA-*Mónica Delgado-University of Zaragoza-Aragón Institute for Engineering Research* |
| 10:30-11:00 | Viscosity of Molten Salts and Polymer-based PCM: lessons learnt at the Birminghan Centre for Energy Storage-*Helena Navarro-Birmingham Centre for Energy Storage* |
| 11:00-11:30 | Viscosity measurements with the IMETER-*Stephan Höhlein-University of Bayreuth* |
| 11:30-12:00 | A short introduction to TA instruments rheometers-*Mr. Schwab-TA Instruments* |

| **Technical talk on 8th March** | |
|---|---|
| 09:00-09:30 | A short introduction to Haake Mars 60 rheometer-*Mr. Kull-Thermo Fischer Scientific* |

**Equipments available for viscosity measurements:**

1) Anton Paar MCR 502,

2) Thermo Fischer Haake Mars II,

3) Thermo Fischer HAAKE MARS 60

4) TA Instruments DHR2

**Substances to be measured:** Paraffin, $KNO_3$, HDPE, etc.