# 6\textsuperscript{th} international Workshop and Meeting on Laser-Induced Incandescence

## Program

### Sunday, June 8, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>17:00 – 19:00</td>
<td>Registration at Backafallsbyn</td>
</tr>
<tr>
<td>18:00 – 20:00</td>
<td>Buffet at Backafallsbyn</td>
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</tbody>
</table>

### Monday, June 9, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8:00</td>
<td>Registration, Setting up of posters</td>
</tr>
<tr>
<td>8:30</td>
<td>Welcome</td>
</tr>
<tr>
<td>8:40</td>
<td>Talk 1.1 - Advances in Modeling Laser-Induced Incandescence from Carbonaceous Particles; H. A. Michelsen</td>
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<tr>
<td>9:00</td>
<td>Talk 1.2 - Influence of the internal multiple scattering on the absorption and scattering properties of soot fractal aggregates; J. Yon, F. Liu</td>
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<tr>
<td>9:40</td>
<td>Talk 1.4 - Gas dynamics of sublimated species in high-fluence laser induced Incandescence; F. Memarian, F. Liu, K.A. Thomson, D.R. Snelling, G.J. Smallwood</td>
</tr>
<tr>
<td>10:00</td>
<td>Talk 1.5 - Effects of volatile coatings and soot morphology on laser induced Incandescence; R. Bambha, M. Dansson, P. Schrader, H. A. Michelsen</td>
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<tr>
<td>10:20</td>
<td>Coffee</td>
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<tr>
<td>10:50</td>
<td>Poster advertisement session</td>
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<tr>
<td>12:00</td>
<td>Lunch</td>
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<tr>
<td>14:00</td>
<td>Talk 2.3 - On the Way to In-Cylinder 2D Time-Resolved LII measurements; A. Maier, A. Dreizler</td>
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<tr>
<td>14:20</td>
<td>Talk 2.4 - Photoacoustic Soot Measurement: Comparison with LII; J. Black, G. S. Humphries, J. Dunn, M. Lengden, I. S. Burns</td>
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<tr>
<td>14:40</td>
<td>Talk 2.5 - Assessment of soot particle-size imaging with LII at Diesel engine Conditions; E. Cenker, K. Kondo, G. Bruneaux, T. Dreier, T. Aizawa, C. Schulz</td>
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<tr>
<td>15:00</td>
<td>Coffee</td>
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<tr>
<td>16:00</td>
<td>Visit to the Tycho Brahe museum</td>
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<tr>
<td>18:00</td>
<td>Dinner</td>
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<tr>
<td>19:30 - 23:00</td>
<td>Poster session</td>
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<tr>
<td>Time</td>
<td>Session</td>
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<tr>
<td>8:30</td>
<td>Discussion 1</td>
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<tr>
<td>9:15</td>
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<tr>
<td>10:00</td>
<td>Coffee</td>
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<tr>
<td>10:30</td>
<td>Oral session 3</td>
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<tr>
<td>12:10</td>
<td>Lunch</td>
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<tr>
<td>13:30</td>
<td>Discussion 2</td>
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<td></td>
<td></td>
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<tr>
<td>15:00</td>
<td>Coffee</td>
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<td>15:30</td>
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<tr>
<td>18:00</td>
<td>Poster session</td>
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<tr>
<td>19:00</td>
<td>Dinner</td>
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<tr>
<td>21:00</td>
<td>Poster session</td>
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<tr>
<td>Time</td>
<td>Event</td>
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<tr>
<td>8:00</td>
<td>Poster session (9:00 - 10:00: Advisory committee closed meeting)</td>
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<td>10:00</td>
<td>Coffee</td>
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<tr>
<td>10:30</td>
<td>Non-soot LII</td>
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<td><strong>Chair:</strong> Christof Schulz, IVG and CENIDE, University of Duisburg-Essen, Duisburg, Germany</td>
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<td>Fundamental experiments and simulation (optical properties, accommodation coefficients, fluence dependence) on non-soot particles/new application of LII to non-soot particles/LII combined with other laser-induced emission signals or scattering, etc.</td>
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<tr>
<td>10:30</td>
<td>LII modeling</td>
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<td><strong>Chair:</strong> Hope Michelsen, Sandia National Laboratories, CA, USA</td>
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<td>Theoretical modeling of the LII process. The latest developments with regards to the model descriptions of the heat-up process involved in LII will be discussed.</td>
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<tr>
<td>12:00</td>
<td>Summary and closure of workshop</td>
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<tr>
<td>12:30</td>
<td>Lunch</td>
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</table>
Thursday, June 12, 2014

There will be a possibility of a guided tour at the division of Combustion Physics in Lund at 08:30. Optionally more tours can be arranged later the same day.

Directions:

Take a train towards Malmö from the Landskrona train station. All trains make a stop in Lund. At the Lund central station it is a 15 minutes’ walk to the Department of Physics. Buses depart 4 times an hour from the bus stop at Clemencstorget called “Lundalänken”. Take green city bus, Line 1, marked “Östra Torn”. If you want to grab a Taxi, the address is Professorsgatan 1.
<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
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<tbody>
<tr>
<td>1</td>
<td>In situ analysis of the nanoparticle formation in the gas phase during carbon nanotube synthesis; A. Dichiara, Y. Ma, L. Zimmer, J. Bai</td>
</tr>
<tr>
<td>2</td>
<td>Mo nanoparticle sizing by Ti-Re LII and TEM; A. Eremin, E. Gurentsov, M. Yurischev</td>
</tr>
<tr>
<td>3</td>
<td>Soot measurements in premixed high-pressure flames using light emission, TiRe-LII, laser extinction, and TEM-sampling; M. Leschowski, T. Dreier, C. Schulz</td>
</tr>
<tr>
<td>4</td>
<td>LII in an Aero-Engine Exhaust Using a Low Peak Power Fibre Laser; J. D. Black, D. McCormick, Y. Feng</td>
</tr>
<tr>
<td>5</td>
<td>Spectrally- and temporally-resolved laser-induced incandescence (LII) on gas-borne silicon nanoparticles with varying laser fluence; J. Menser, T. Dreier, C. Schulz</td>
</tr>
<tr>
<td>8</td>
<td>Real-time Capable Characterization of Soot Nanoparticles by Wide-Angle Light Scattering (WALS); F. Huber, M. Altenhoff, S. Will</td>
</tr>
<tr>
<td>9</td>
<td>Approach to standardize a spray-flame nanoparticle synthesis burner; J. Menser, S. Kluge, T. Dreier, C. Schulz</td>
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<tr>
<td>10</td>
<td>Soot optical properties investigation by two-color laser-induced incandescence measurements; F. Migliorini, S. De Iuliiis, G. Zizak</td>
</tr>
<tr>
<td>11</td>
<td>Determination of small soot particles in the presence of large ones from time-resolved laser-induced incandescence; E. Cenker, G. Bruneaux, T. Dreier, C. Schulz</td>
</tr>
<tr>
<td>12</td>
<td>Sensitivity analysis for in-cylinder soot-particle size imaging with laser-induced Incandescence; E. Cenker, G. Bruneaux, T. Dreier, C. Schulz</td>
</tr>
<tr>
<td>13</td>
<td>Assessment of soot particle-size imaging with LII at Diesel engine conditions; E. Cenker, K. Kondo, G. Bruneaux, T. Dreier, T. Aizawa, C. Schulz</td>
</tr>
<tr>
<td>14</td>
<td>Soot volume fraction measurement by extinction and Laser Induced Incandescence in a wood-fired boiler under varying boiler conditions; S. Bejaoui, E. Therssen</td>
</tr>
<tr>
<td>15</td>
<td>Measurement of soot temperature, concentration and cooling rate; and bulk fluid temperature using modulated laser induced incandescence; D.R. Snelling, K.A. Thomson, R. A. Sawchuk, G.J. Smallwood</td>
</tr>
<tr>
<td>19</td>
<td>Effect of primary particle polydispersity on the absorption cross section of soot aggregate and the implications to the soot absorption function derived from low-fluence LII; F. Liu, J. Yon</td>
</tr>
<tr>
<td>20</td>
<td>Comparison of LII and Extinction Measurements of Soot Volume Fraction in Turbulent Jet Flames; C. R. Shaddix, J. Zhang</td>
</tr>
<tr>
<td>21</td>
<td>Soot Measurements in Counterflow Non-premixed Flames using Laser Induced Incandescence: Soot Volume Fraction, Particle Size, and Number Density; B.G. Sarnacki, H.K. Chelliah</td>
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