

### 3<sup>rd</sup> ESSHS Programme (Tentative)

#### Monday, 21<sup>st</sup> July 2008

- 09:00-10:30 *Registration and coffee*  
10:45-11:00 *Opening ceremony*  
11:00-11:45 J. Lee (McGill University) and J. Shepherd (Caltech):  
Introductory workshop on fundamentals and effects of hydrogen explosions – Part 1  
11:45-12:00 *Break*  
12:00-12:45 J. Lee (McGill University) and J. Shepherd (Caltech):  
Introductory workshop on fundamentals and effects of hydrogen explosions – Part 2  
12:45-14:00 *Lunch*  
14:00-14:15 Paperwork – Social Programme & Expenses  
14:15-15:00 J. Lee (McGill University) and J. Shepherd (Caltech):  
Introductory workshop on fundamentals and effects of hydrogen explosions – Part 3  
15:00-15:15 *Break*  
15:15-16:00 J. Lee (McGill University) and J. Shepherd (Caltech):  
Introductory workshop on fundamentals and effects of hydrogen explosions – Part 4  
16:00-16:15 *Tea*  
16:15-17:00 Round table discussion  
18:00-20:00 *Welcome Reception*

#### Tuesday, 22<sup>nd</sup> July 2008

- 10:00-10:45 E. Oran (U.S. Naval Research Lab): The origin of DDT in gas-phase explosions  
10:45-11:15 *Coffee*  
11:15-12:00 E. Oran (U.S. Naval Research Lab): Flame acceleration, DDT, and hydrogen in channels  
12:00-12:45 Round table discussion  
12:45-14:00 *Lunch*  
14:00-14:15 Paperwork – Social Programme & Expenses  
14:15-15:00 F. Williams (UCSD): New developments in the understanding of hydrogen laminar burning velocities and spontaneous ignition (Part 1)  
15:00-15:15 *Break*  
15:15-16:00 F. Williams (UCSD): New developments in the understanding of hydrogen laminar burning velocities and spontaneous ignition (Part 2)  
16:00-16:15 *Tea*  
16:15-17:00 Round table discussion  
*Social event*

#### Wednesday, 23<sup>rd</sup> July 2008

- 10:00-10:45 K. Hayashi (Aoyama Gakuin University): Fundamentals of hydrogen ignition  
10:45-11:15 *Coffee*  
11:15-12:00 K. Hayashi (Aoyama Gakuin University): High pressure hydrogen jet auto-ignition  
12:00-12:45 Round table discussion  
12:45-14:00 *Lunch*  
14:00-14:15 Paperwork – Social Programme & Expenses  
14:15-15:00 P. Sunderland (University of Maryland): Fire Hazards of Small Hydrogen Leaks  
15:00-15:15 *Break*  
15:15-16:00 P. Sunderland (University of Maryland): Hydrogen Vehicle Fire Hazards  
16:15-17:00 Round table discussion  
17:00-19:00 Sport events (optional)  
*Social event*

#### Thursday, 24<sup>th</sup> July 2008

- 10:00-10:45 D. Bradley (University of Leeds): Hydrogen powered vehicles for transport  
10:45-11:15 *Coffee*  
11:15-12:00 D. Bradley (University of Leeds): Hydrogen-air turbulent burning velocities  
12:00-12:45 Round table discussion  
12:45-14:00 *Lunch*  
14:00-14:15 Paperwork – Social Programme & Expenses  
14:15-15:00 T. Hubert (BAM): Sensors for Hydrogen Safety  
15:00-15:15 *Break*  
15:15-16:00 G. Newsholme and P. Donnelly (HSE): Lecture – Using ATEX and industry best practice to manage the risk from hydrogen in conventional and nuclear workplaces  
16:00-16:15 *Tea*  
16:15-17:00 Round table discussion  
*Homework*

**Friday, 25<sup>th</sup> July 2008**

- 10:00-10:45 G. Newsholme and P. Donnelly (HSE): Mock-up workshop; presentations by syndicate groups  
10:45-11:15 *Coffee*  
11:15-12:00 G. Newsholme and P. Donnelly (HSE): Mock-up workshop; presentations by syndicate groups  
12:00-12:45 Round table discussion  
12:45-14:00 *Lunch*  
14:00-14:15 Paperwork – Social Programme & Expenses  
14:15-15:00 S. Dorofeev (FM Global): Flame acceleration and transition to detonation: a framework for estimating potential explosion hazards in hydrogen mixtures, Part 1  
15:00-15:15 *Break*  
15:15-16:00 S. Dorofeev (FM Global): Flame acceleration and transition to detonation: a framework for estimating potential explosion hazards in hydrogen mixtures, Part 2  
16:00-16:15 *Tea*  
16:15-17:00 Round table discussion  
*Social event*

**Saturday, 26<sup>th</sup> July 2008**

- 10:45-11:30 Work in progress presentations by young researchers  
11:30-12:00 *Coffee*  
12:00-12:45 Work in progress presentations by young researchers  
12:45-14:00 *Lunch*  
14:00-14:15 Paperwork – Social Programme & Expenses  
14:15-18:00 *Free time*  
18:00-22:00 *BBQ*

**Sunday, 27<sup>th</sup> July 2008**

*Sunday's Social events*

**Monday, 28<sup>th</sup> July 2008**

- 10:00-10:45 B. Somerday (Sandia National Laboratories): Hydrogen Effects in Materials, Part 1  
10:45-11:15 *Coffee*  
11:15-12:00 B. Somerday (Sandia National Laboratories): Hydrogen Effects in Materials, Part 2  
12:00-12:45 Round table discussion  
12:45-14:00 *Lunch*  
14:00-14:15 Paperwork – Social Programme & Expenses  
14:15-15:00 J. LaChance (Sandia National Laboratories): Quantitative Risk Assessment, Part 1  
15:00-15:15 *Break*  
15:15-16:00 J. LaChance (Sandia National Laboratories): Quantitative Risk Assessment, Part 2  
16:00-16:15 *Tea*  
16:15-17:00 Round table discussion  
*Social event*

**Tuesday, 29<sup>th</sup> July 2008**

- 10:00-10:45 M. Groethe (SRI): Large-Scale Testing, Part 1  
10:45-11:15 *Coffee*  
11:15-12:00 M. Groethe (SRI): Large-Scale Testing, Part 2  
12:00-12:45 Round table discussion  
12:45-14:00 *Lunch*  
14:00-14:15 Paperwork – Social Programme & Expenses  
14:15-15:00 M. Maes (NASA White Sands Test Facility): Hazards Analysis, Part 1  
15:00-15:15 *Break*  
15:15-16:00 M. Maes (NASA White Sands Test Facility): Hazards Analysis, Part 2  
16:00-16:15 *Tea*  
16:15-17:00 Round table discussion  
*Social event*

**Wednesday, 30<sup>th</sup> July 2008**

- 10:00-10:45 A. Ruiz (US DoE): TBC  
10:45-11:15 *Coffee*  
11:15-12:00 Round table discussion  
12:00-12:45 Closing lecture by EC representative: TBC  
12:45-13:15 Round table discussion  
13:15-14:30 *Lunch*  
14:30-14:45 Paperwork – Feedback & Expenses  
15:00-15:30 *Closing ceremony*  
15:30-16:00 *Farewell party*