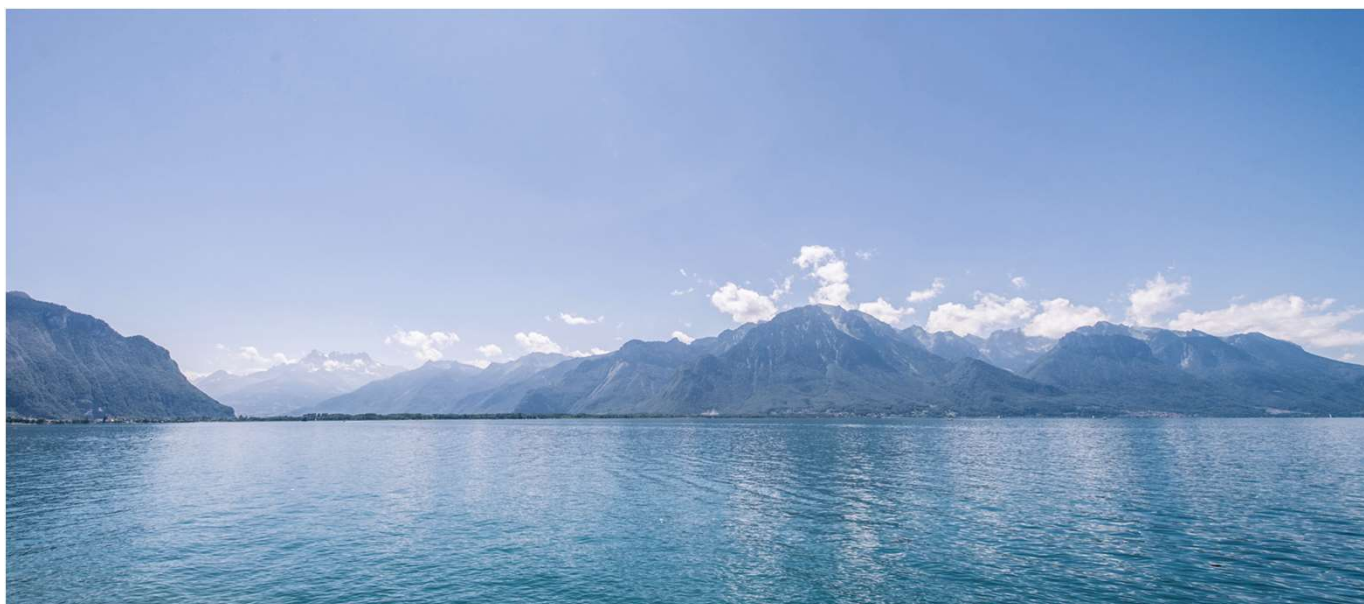


TCP on Clean and Efficient Combustion 41st Task Leaders Meeting



Montreux, Switzerland, November 3-8, 2019
Hotel Eden Palace au Lac

Organized by



With support of



Schweizerische Eidgenossenschaft
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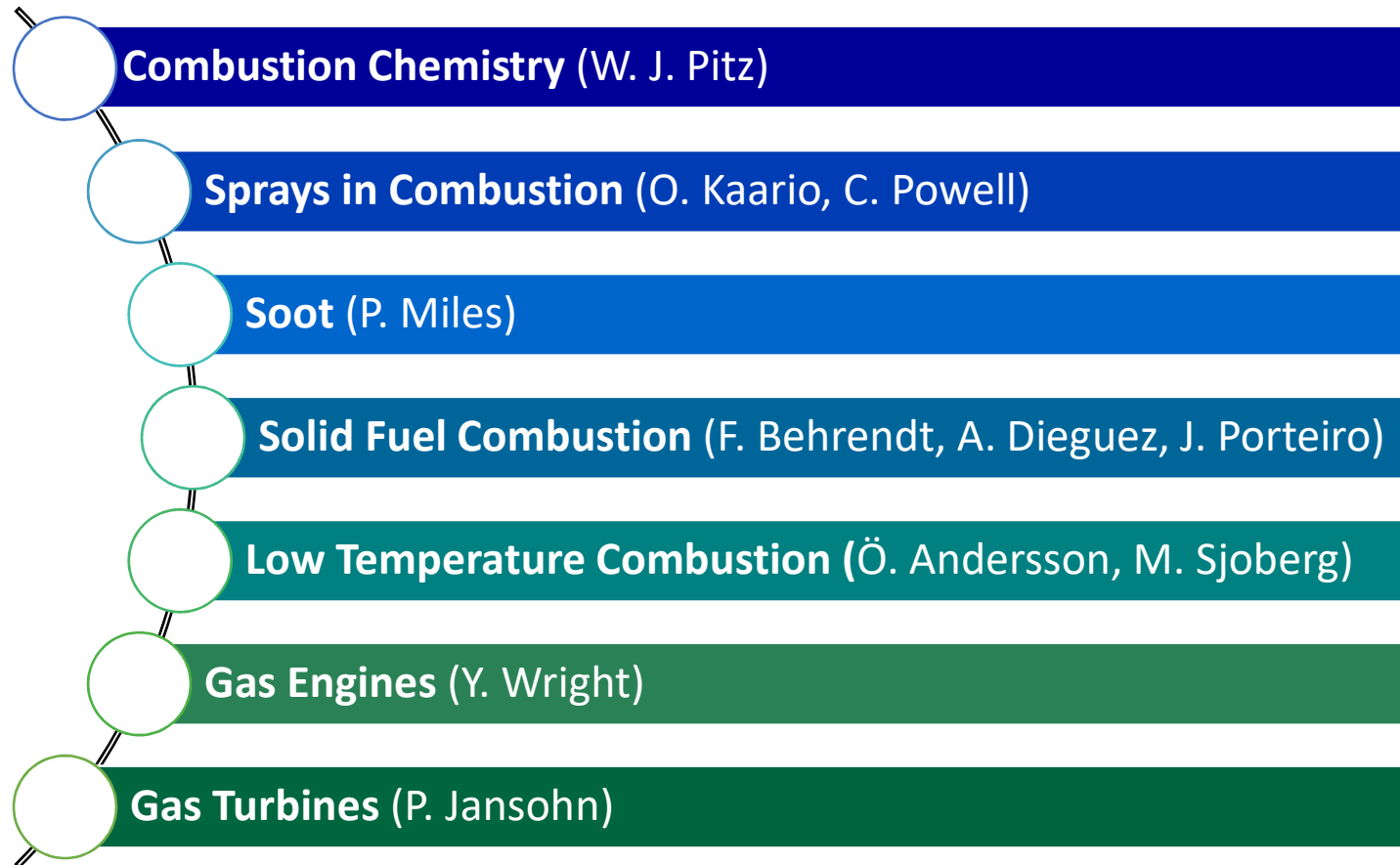
Swiss Federal Office of Energy SFOE

41st Combustion TLM 2019 – Program at a Glance

Sunday Nov. 3rd : 18:00 – 21:00 Welcome Reception at Hotel Eden Palace in Montreux

| approx. Time | Monday Nov. 4 th | Tuesday Nov. 5 th | Wednesday Nov. 6 th | Thursday Nov. 7 th | Friday Nov. 8 th | |
|--------------|--|--|---|---|--|------------------------------------|
| | Combustion TLM Day 1 | Combustion TLM Day 2 | Joint Workshop with AMF | Combustion TLM Day 4 | Technical Excursion to Liebherr | |
| 08:00 | Opening remarks | Opening remarks | Opening remarks | Opening remarks | Bus departure at Montreux | |
| | General Information and TCP Development | Task Session: Sprays in Combustion | Keynote Prof. K. Boulouchos ETHZ | Task Session: Low Temperature Combustion | Transfer by bus from Montreux to Liebherr | |
| | Special Session: System Analysis | <i>Coffee Break & Poster Session Sprays in Comb. + Soot</i> | Session 1: Low emission propulsion systems | <i>Coffee Break & Poster Session Solid Fuel + Low Temp. Comb.</i> | 09:00 Welcome & presentation of Liebherr Tour of laboratories & production site | |
| | <i>Coffee Break & Poster Session System Analysis + Comb. Chemistry</i> | Task Session: Soot | Key Research Questions | Task Session: Solid Fuel Combustion | | |
| | Task Session: Combustion Chemistry | Special Session: Exhaust After Treatment | 7 Breakout Groups | Task Leaders' Feedback & TLM Conclusions | | |
| | <i>Lunch Break & Poster Session System Anal. + Chemistry + Gas Turbine</i> | <i>Lunch Break & Poster Session Soot + EATS + Gas Engines</i> | <i>Networking Lunch</i> | Closing remarks | | |
| 12:30 | | | | | <i>Lunch Break @ Liebherr Restaurant</i> | |
| | Task Session: Gas Turbines | Task Session: Gas Engines | Session 2: Novel fuels for advanced engine concepts | <i>Lunch Break & Poster Session Solid Fuel + Low Temp. Comb.</i> | 13:45 Transfer to Fribourg train station with direct connections to Zurich and Geneva airports or back to Montreux | |
| | <i>Coffee Break & Poster Session Gas Turbine + Sprays in Combustion</i> | <i>Coffee Break & Poster Session: EATS + Gas Engines + Low Temp. Comb.</i> | Key Research Questions | ExCo Meeting | | Task Breakout Meetings (as needed) |
| | Task Breakout Meetings System Analysis, Chemistry, Gas Turbines, Sprays | Task Breakout Meetings Soot, Gas Engines, Solid Fuel, Low Temperatur Comb. | 7 Breakout Groups | | | |
| | | | <i>Coffee Break</i> | <i>Coffee Break</i> | | |
| | | | General discussion | ExCo Meeting | Task Breakout Meetings (as needed) | |
| 17:30 | Closing Day 1 | Closing Day 2 | Closing remarks | | | |
| | <i>Happy Hour RfE Success & Poster</i> | <i>Queen: The Studio Experience</i> | <i>Tour of Château Chillon</i> | | | |
| 19:00 | <i>Dinner @ Restaurant Le Museum</i> | <i>Joint dinner with AMF TCP @ Hotel Eden Palace with table speeches</i> | <i>Joint dinner with AMF TCP @ Château Chillon</i> | <i>ExCo Dinner @ Restaurant Le Pavois</i> | | |

Overview Collaborative Tasks and Task Leaders



Program TLM 2019: Monday November 4th

Venue: Hotel Eden Palace au Lac, Montreux

| | | |
|--|--|---|
| Venues | Sessions @ Salon Byron / Coffee Break & Lunch Break @ Lobby / Break out rooms @ Hotel Eden Palace, details tbd | |
| 08:00 – 08:10 | Opening remarks | C. Alles |
| General Information and TCP Development | | |
| 08:10 – 08:45 | Updates on TCP Strategy Development & Implementation Collaborative tasks: Mission, Roles & Responsibilities | TCP Leadership Team P. Miles |
| Special Session: System Analysis | | |
| 08:45 – 10:30 | Introduction task scope and goals Presentations Open discussion & wrap up | Gilles Bruneaux Participants All |
| 10:30 – 11:00 | COFFEE BREAK & Poster Session: System Analysis + Combustion Chemistry | All |
| Task Session: Combustion Chemistry | | |
| 11:00 - 12:30 | Introduction task program and goals Presentations Open discussion & wrap up | W. Pitz Task Members All |
| 12:30 – 13:45 | LUNCH BREAK & Poster Session: System Analysis + Comb. Chemistry + Gas Turbine | All |
| Task Session: Gas TurbineTask | | |
| 13:45 – 15:30 | Introduction task program and goals Presentations Open discussion & wrap up | P. Jansohn Task Members All |
| 15:30 – 16:00 | COFFEE BREAK & Poster Session Gas Turbine + Sprays in Combustion | All |
| Parallel Task Meetings in break out rooms: System Analysis, Gas Turbine, Combustion Chemistry, Sprays | | |
| 16:00 - 17:15 | Introduction, discussion topics & desired outcomes Discussion among task members Wrap-up and documentation | Task Leaders Task Members All / Task Leader |
| 17:15 | Closing Day 1 | |
| 17:15 | Happy Hour to celebrate successful RfE + Poster Session | All |
| 19:30 | Dinner @ Restaurant "Le Museum" Rue de la Gare 40, Montreux | All |

Program TLM 2019: Tuesday November 5th

Venue: Hotel Eden Palace au Lac, Montreux

| Venues | Sessions @ Salon Byron / Coffee Break & Lunch Break @ Lobby / Break out rooms @ Hotel Eden Palace, details tbd | |
|---|--|-----------------------|
| 08:00 – 08:10 | Opening remarks | C. Alles |
| Task Session: Sprays in Combustion | | |
| 08:10 - 09:40 | Introduction task program and goals | O. Kaario / C. Powell |
| | Presentations | Task Members |
| | Open discussion & wrap up | All |
| 09:40 - 10:10 | COFFEE BREAK & Poster Session: Sprays in Comb. + Soot | All |
| Task Session: Soot | | |
| 10:10 – 11:50 | Introduction task program and goals | P. Miles |
| | Presentations | Task Members |
| | Open discussion & wrap up | All |
| Special Sessions New Task Exhaust After Treatment System | | |
| 11:50 – 12:30 | Introduction task idea & input presentations | St. Renz /all |
| | Open discussion & wrap up | all |
| 12:30 – 13:45 | LUNCH BREAK & Poster Session: Soot + EATS + Gas Engines | All |
| Task Session: Gas Engines | | |
| 13:45 – 15:30 | Introduction task program and goals | Y. Wright |
| | Presentations | Task Members |
| | Open discussion & wrap up | All |
| 15:30 – 16:00 | COFFEE BREAK & Poster Session: Soot, Gas Engines, Low Temperatur Comb. | All |
| Parallel Task Meetings in break out rooms: Soot, Gas Engines, Solid Fuel, Low Temperatur Comb. | | |
| 16:00 – 17:15 | Introduction, discussion topics & desired outcomes | Task Leaders |
| | Discussion among task members | Task Members |
| | Wrap-up and documentation | All / Task Leader |
| 17:15 | Closing Day 1 | |
| 18:00 | Visit of Queen: The Studio Experience | All |
| 19:00 | Joint DINNER with AMF TCP @ Hotel Eden Palace with table speeches | All |

Joint Workshop: Wednesday November 6th

Venue: Hotel Eden Palace au Lac, Montreux

| Venues | | Sessions @ Salon Byron / Workshop rooms: to be announced (all @ Hotel Eden Palace or Casino) |
|---|---|--|
| 08:30 – 08:40 | Opening remarks | St. Renz |
| 08:40 – 09:10 | Keynote | K. Boulouchos |
| Session 1: Low emission propulsion systems with conventional fuels | | |
| 09:20 – 09:40 | Point of view of the IEA Combustion TCP | IEA Combustion P. Miles + tbc |
| 09:40 – 10:00 | Point of view of the IEA Advanced Motor Fuels TCP | IEA AMF M. Lindgren N.-O. Nylund |
| 10:00 -10:05 | Introduction to the breakout groups | C. Alles |
| 10:05 – 10:30 | Coffee break | All |
| 10:30 – 11:30 | Discussion of topic 1 in breakout groups | All participants, in 7 groups, w/ facilitators & rapporteurs |
| 11:30 – 12:45 | Sharing of session 1 discussion highlights from the groups Open discussion | Rapporteurs + Facilitators All |
| 12:45 – 13:45 | Networking Lunch | All |
| Session 2: Novel fuels for advanced engine concepts | | |
| 13:45 - 13:50 | Welcome back / Introduction to the afternoon | S. Hermle |
| 13:50 - 14:10 | Point of view of the IEA Advanced Motor Fuels TCP | IEA AMF K. Winter |
| 14:10 - 14:30 | Point of view of the IEA Combustion TCP | IEA Combustion P. Miles + tbc |
| 14:30 – 15:30 | Discussion of topic 2 in breakout groups | All participants, in 7 groups, w/ facilitators & rapporteurs |
| 15:30 - 15:45 | Coffee break | All |
| 15:45 - 17:00 | Sharing of session 2 discussion highlights from the groups Open discussion | Rapporteurs + Facilitators All |
| 17:00 | Closing remarks | Chairs C. Alles + M. Lindgren |
| 17:10 | Meeting adjourns / Transfer to Chateau Chillon | |
| 18:00 | Arrival @ Chateau Chillon | All workshop guests are invited to the evening @ Chateau Chillon |
| 18:30 | Guided Tour of the Medieval Castle | |
| 19:15 | Dinner @ Chateau Chillon | |

Program TLM 2019: Thursday November 7th

Venue: Hotel Eden Palace au Lac, Montreux

| Venues | | Sessions @ Salon Byron / Coffee & Lunch Break @ Lobby / ExCo @ Victoria & Regence (all @ Hotel Eden Palace) | |
|--|---|---|------------------------------------|
| 08:00 – 08:10 | Opening remarks | | C. Alles |
| Task Session: Low Temperature Combustion | | | |
| 08:10 - 09:50 | Introduction task program and goals Presentations Open discussion & wrap up | | M. Sjöberg Task Members All |
| 09:50 - 10:20 | COFFEE BREAK & Poster Session: Solid Fuel + Low Temp. Comb. | | All |
| Task Session: Solid Fuel Combustion | | | |
| 10:20 – 11:30 | Introduction task program and goals Presentations Open discussion & wrap up | | J. Porteiro Task Members All |
| Wrap up & Feedback Task Leaders & Conclusions | | | |
| 11:30 – 12:50 | Short presentation 1 slide / 5 Minutes all Tasks Participants' Feedback Conclusions Operating Agent | | Task Leaders All P. Miles |
| 12:50 - 13:00 | Closing remarks | | C. Alles |
| 13:00 - 14:00 | LUNCH BREAK & Poster Session: Solid Fuel + Low Temp. Comb. | | All |
| ExCo Meeting | | | |
| 14:00 – | ExCo Agenda | Tasks Break Out Meetings In the afternoon break out rooms are available for additional task meetings. @Task Leaders: Please check with Carina or Stephan if you need a room. | ExCo Delegates |
| | COFFEE BREAK | | All |
| - 18:00 | ExCo Agenda | | ExCo Delegates |
| 18:00 | Closing ExCo Meeting | | C. Alles |
| 19:00 | DINNER @ Restaurant Le Pavois, Avenue de Chillon 63, Montreux | | All |

Special Session: Workshop with AMF

The IEA Technology Collaboration Programmes (TCP) on **Advanced Motor Fuels (AMF)** and on Energy Conservation and Emissions Reduction in **Combustion** deal with the topics of **novel fuels and combustion systems**. On **November 6th** these two TCPS will convene in a **joint workshop** on the topics of

- **Low emission propulsion systems**
- **Novel fuels for advanced engine concepts**

with the objectives to get to know the work of the two TCPs better, to generate inputs for research and to identify possible topics for a more intense cooperation between these TCPs.

Advanced Motor Fuels TCP



56th ExCo-Meeting (2018)

www.iea-amf.org

Clean and Efficient Combustion TCP



40th Task Leaders Meeting (2018)

www.ieacombustion.com

Technical Tour to LIEBHERR in Bulle

Site in Bulle Switzerland

Development and manufacturing of diesel and gas engines up to 4500 kW

About LIEBHERR

More than 43,500 co-workers help to facilitate technological advancement in various sectors. The Group is managed to this day by the Liebherr family.



General Information

Venue

Hotel Eden Palace au Lac
Rue due Théâtre 11
1820 Montreux
<https://www.edenpalace.ch/en/>

Registration

Online **event registration** now open:
<https://www.ieacombustion.com/meetings-publications/tlm-2019-registration/>
with early-bird discounts [through 9 September 2019](#).

Please use the **hotel reservation** form at the link above to secure your room at the discounted rate [before 9 September 2019](#).

Contact person

Linda Thomann linda.thomann@bfe.admin.ch

Travel

10 minutes from Montreux train station on foot, by taxi or city bus
Train travel times to Montreux are as follows:
From Geneva airport: approx. 1 hr 15 mins
From Zurich airport: approx. 3 hrs
Train schedules at <https://www.sbb.ch/en>

Leisure Activities

Get inspired by
<https://www.myswitzerland.com/en-ch/montreux.html>

Travel Information



Zurich Airport

Geneva Airport

Montreux



Train Station Montreux

Hotel Eden Palace au Lac

Château Chillon



Hotel Eden Palace au Lac



Château Chillon



**Montreux
Jazz Festival**



**“We all came out to Montreux
On the Lake Geneva shoreline
To make records with a mobile
We didn't have much time
Frank Zappa and the Mothers
Were at the best place around
But some stupid with a flare gun
Burned the place to the ground**

**Smoke on the water, fire in the sky
Smoke on the water”**

