



23rd European Conference on Thermophysical Properties

June 21 to June 24, 2026, France

Serge Kampf les Fontaines Campus

CONFERENCE *Guide*



**WELCOME
TO ECTP 2026!**

WELCOME MESSAGE

Dear Participants, Dear Colleagues,

On behalf of the Local Organizing Committee, it is my great pleasure to welcome you to the 23rd European Conference on Thermophysical Properties. We are honored to host this prestigious event at the Serge Kampf Les Fontaines Campus in Gouvieux, from June 21 to 24, 2026, in the picturesque setting near the historic Château de Chantilly and the beautiful city of Paris.

Over the past 58 years, the European Conference on Thermophysical Properties has established itself as a major international forum for researchers to exchange and discuss recent advances in the measurement and modeling of thermophysical properties of fluids and solids.

In this edition, we are delighted to welcome 281 researchers, from 29 countries across 5 continents, which makes ECTP 2026 a truly global event.

We are working hard to provide an inspiring and memorable conference, featuring a rich scientific program, prestigious awards, engaging sponsor sessions, exhibitions of analytical instrumentation, as well as a social program set in the relaxing atmosphere of the Les Fontaines Campus. We sincerely hope that you will find ECTP 2026 both enriching and enjoyable.

None of this would be possible without the invaluable support of the International Organizing Committee and of our valued sponsors. We would like to express our sincere gratitude for their contributions and commitment to the success of this event.

We look forward to welcoming you to Gouvieux and to the many insightful discussions and connections that await us.

Warm regards,

Silvia Lasala
Chair, 23rd European Conference on Thermophysical Properties

SUMMARY

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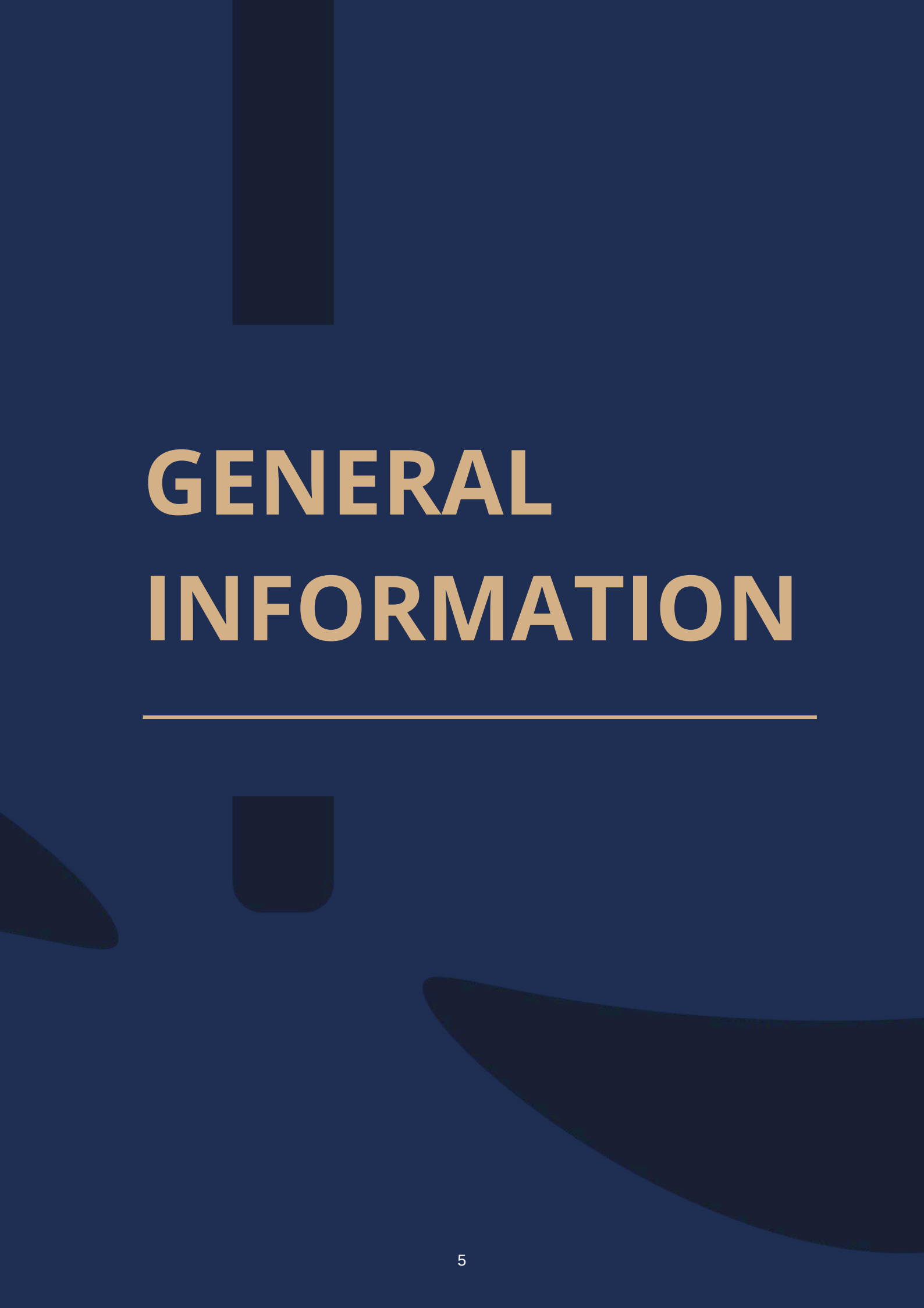
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GENERAL INFORMATION

KEY INFORMATION

KEY DATES

- **Conference dates:** June 21-24, 2026
- **Conference registration and hotel check-in:**
June 21, 15:00 - 00:00
June 22-23, 24h/day
- **Welcome cocktail:** Sunday, June 21, 19:30 - 22:00
- **Opening ceremony:** Monday, June 22, 08:30
- **Scientific sessions:** June 22-24, 2026
- **Gala dinner:** Tuesday, June 23, 18:30 - 00:00
- **Hotel check-out:** Wednesday, June 24 (or the day of your departure) before 09:00
- **Conference ending:** Wednesday, June 24, 16:30

ADDRESS

Serge Kampf Les Fontaines Campus
67 rue de Chantilly
60270 Gouvieux

WEBSITE

🖱 www.ectp2026.com

🌐 Useful links in one click



ABOUT THE ORGANIZING ENTITIES



Laboratoire Réactions et Génie des Procédés (LRGP)

Created in Nancy in 2010, the Reactions and Process Engineering Laboratory (UMR 7274) is a joint unit of the CNRS and the University of Lorraine. Its general scientific objective is to study processes in their entirety and complexity. The LRGP develops the scientific and technological knowledge required for the design, study, management and optimisation of complex physico-chemical and biological processes for the transformation of matter and energy.

The unit currently employs more than 300 people, including 12 researchers, 78 teacher-researchers, around thirty technical and administrative staff, around a hundred PhD students and around 20 post-docs and ATERs. The laboratory also welcomes around a hundred trainees a year.



Université de Lorraine

The Université de Lorraine (UL) is a prominent multidisciplinary institution in the Grand Est region of France, recognized for its cutting-edge research and innovation. With over 60 research units, UL excels in fostering collaborations across disciplines, addressing global challenges in health, science, and technology. Research activities are carried out by 4,000 teaching and research staff.

The University is home to 60+ research units, many of which are internationally recognized. These research units actively collaborate with industry leaders and public institutions, translating innovation into tangible societal impacts. The excellence of research at the Université de Lorraine is reflected in international thematic rankings, in which the university is regularly cited.



Centre National de la Recherche Scientifique (CNRS)

The French National Centre for Scientific Research (CNRS) is France's leading public research organization and one of the largest in the world. Active across all scientific fields, it is dedicated to advancing knowledge, fostering innovation, and contributing to scientific, economic, and societal progress. The CNRS works in close collaboration with universities, international institutions, and industry partners.

With more than 1,100 laboratories in France and around the world, the CNRS is a major player in research and innovation, and also employs more than 33,000 people.



COMMITTEES

Local Organizing Committee

- **Dr. Yohann Coulier**
(Université Clermont-Auvergne, France)
- **Dr. Rachid Hadjadj**
(Université de Lorraine, France)
- **Dr. Olivier Herbinet**
(Université de Lorraine, France)
- **Dr. Julien Joliat**
(Université de Lorraine, France)
- **Dr. Silvia Lasala**
(Université de Lorraine, France),
ECTP 2026 chair
- **Dr. Mario Marchetti**
(Université Gustave Eiffel, France)
- **Prof. Dimitrios Meimaroglou**
(Université de Lorraine, France)
- **Mr. Luis Pinilla Monsalve**
(Université de Lorraine, France)
- **Dr. Mauro Riva**
(Mines Paris – PSL, France)
- **Dr. David Vega-Maza**
(University of Valladolid, Spain)
- **Dr. Layella Ziyani**
(Université de Technologie de Compiègne)

International Organizing Committee members

- **Prof. Marc J. Assael** (Greece)
IOC Secretary (2014 to today)
- **Prof. Jean-Christophe Batsale** (France)
- **Prof. Jean-Luc Daridon** (France)
- **Dr. Hans-Peter Ebert** (Germany)
- **Dr. Laura Fedele** (Italy)
- **Prof. Josefa Fernandez** (Spain)
- **Prof. Hiroyuki Fukuyama** (Japan)
- **Dr. Bertrand Garnier** (France)
- **Dr. Ing. Wolfgang Hohenauer** (Austria)
- **Dr. Marcia L. Huber** (USA)
- **Dr. Silvia Lasala** (France)
IOC Chair 2026
- **Prof. Andreas Mandelis** (Canada)
- **Dr. Igor Medved** (Slovakia)
- **Dr. Nenad Milosevic** (Serbia)
- **Prof. Alberto Muscio** (Italy)
- **Prof. Carlos A. Nieto de Castro**
(Portugal)
- **Prof. Gernot Pottlacher** (Austria)
- **Prof. Luis Santos** (Portugal)
- **Prof. Sir William A. Wakeham** (UK)
- **Prof. Xing Zhang** (P.R. China)

Former IOC members

- **Dr. Ruby De Coninck** (Belgium)
- **Prof. Jochen Fricke** (Germany)
- **Dr. Ludovit Kubicar** (Slovakia)
- **Prof. Akira Nagashima** (Japan)
- **Dr. Guenther Neuer** (Germany)
- **Dr. Wolfgang Neumann** (Austria)
IOC Secretary (1990 to 2002)
- **Dr. Francesco Righini** (Italy)
IOC Secretary (2002 to 2017)
- **Prof. Jean-Francois Sacadura** (France)
- **Dr. Hans E. Schmidt** (Germany)
- **Prof. Alexander I. Sheindlin** (Russia)

USEFUL INFORMATION

Conference venue: Serge Kampf Les Fontaines Campus

ADDRESS

Serge Kampf Les Fontaines Campus
67 rue de Chantilly
60270 Gouvieux

HIGHLIGHTS OF THE PLACE

- Located in Gouvieux
- XIXth century Rothschild Château for convivial moments
- 52-hectare wooded park with a pond, a Normandy farm and 7 contemporary villas

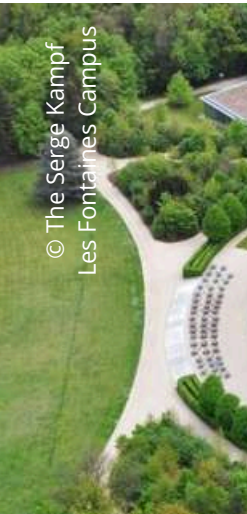


© The Serge Kampf Les Fontaines Campus

A SHOWCASE OF ELEGANCE AND INNOVATION

Nestled in the heart of a 52-hectare green park, the Serge Kampf Les Fontaines Campus is an exceptional place combining refinement and modernity. This historic former estate has been transformed into an internationally renowned conference center, offering a unique setting conducive to exchange and reflection.

With its majestic XIXth century château, light-filled spaces and state-of-the-art infrastructure, the Campus is designed to inspire. The harmony between nature and architecture creates a serene atmosphere, ideal for hosting prestigious scientific events.



© The Serge Kampf
Les Fontaines Campus

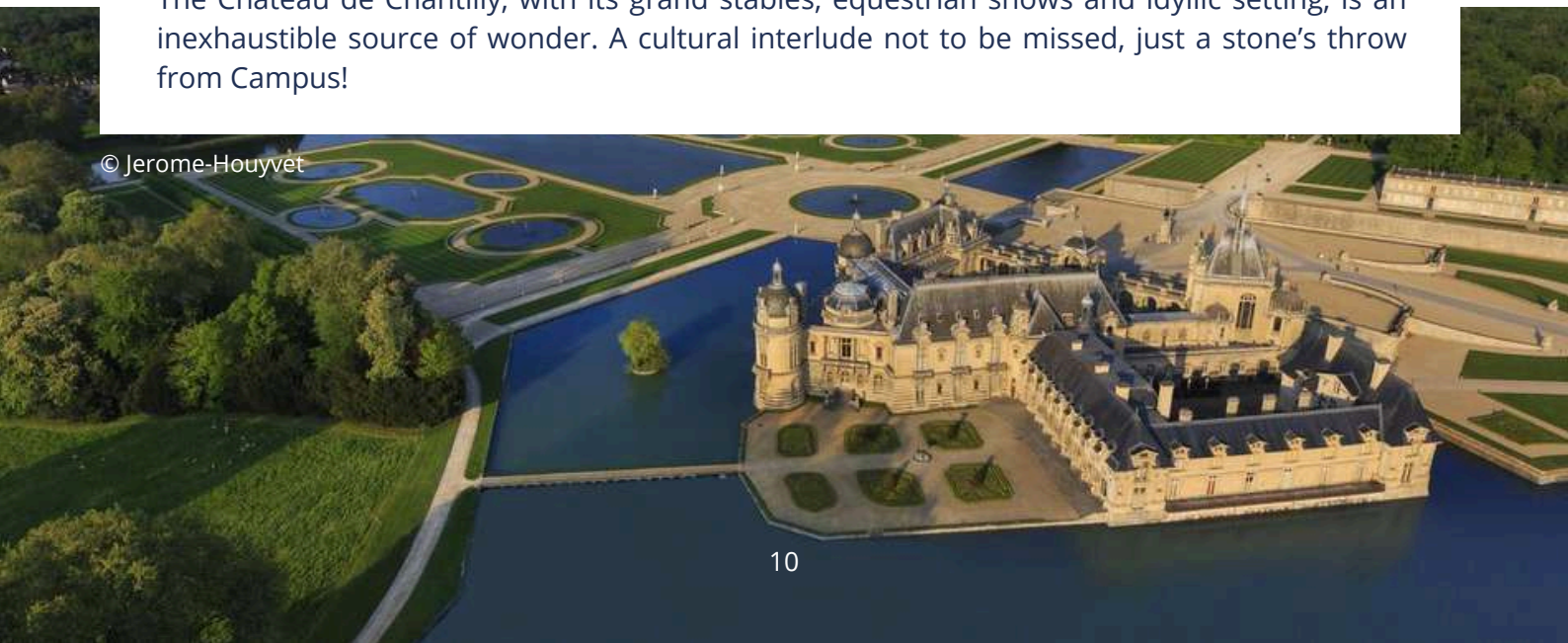


JUST A STONE'S THROW FROM THE CHÂTEAU DE CHANTILLY

The Château de Chantilly is just a few minutes from the Serge Kampf Les Fontaines Campus. A true treasure of French heritage, this castle embodies elegance and history, offering a fascinating glimpse into the world of the great princely families.

Surrounded by formal gardens designed by Le Nôtre and a romantic park punctuated by water mirrors, the château is an architectural masterpiece of beauty and harmony. Its sumptuous interiors house one of the finest collections of old paintings in France, rivaling the finest museums. The library and historical archives, meanwhile, bear witness to a rich cultural heritage.

The Château de Chantilly, with its grand stables, equestrian shows and idyllic setting, is an inexhaustible source of wonder. A cultural interlude not to be missed, just a stone's throw from Campus!



© Jerome-Houyvet

Getting to Les Fontaines: Transportation options

By train

Les Fontaines is 25 minutes by [TER](#) from [Gare du Nord](#) in Paris, which is the arrival station for the Eurostar as well as the RER services from [Roissy-Charles de Gaulle and Orly airports](#). The nearest station to Les Fontaines is "Chantilly Gouvieux", a 5-minute cab ride from the estate or a 20-minute walk. Train schedules are available on [SNCF Connect](#).

By car

From the A1 motorway, if travelling from Paris, take exit 7 – Survilliers or, if travelling from Lille, exit 8 – Senlis, toward Chantilly. From Chantilly, head toward Gouvieux (D909), then enter the following address in your satnav: "67 route de Chantilly – 60270 Gouvieux". The estate provides 25 charging stations for electric vehicles.

By plane

Les Fontaines is located in :

- A 35-minute drive from [Roissy-Charles de Gaulle airport](#)
- A 45-minute drive from [Beauvais airport](#)
- A 1 hour 30 minute drive from [Paris-Orly airport](#)

Useful taxi contact

Several drivers and operators are available to you from Chantilly/Gouvieux station:

- alltoLes voitures Cantiliennes: [+33 3 68 38 50 50](#)
- Bulo Maxime: [+33 6 09 09 43 44](#)
- Taxi Cantilien: [+33 6 50 04 61 18](#)

Pick-up location: On the parking lot at the *Victor Hugo* exit



© The Serge Kampf Les Fontaines Campus

From Charles de Gaulle Airport (CDG)

OPTION 1: UBER (APPROX. 40 MIN)

Take an Uber from Charles de Gaulle Airport (CDG) directly to the Serge Kampf Les Fontaines Campus. (Approx. €20–50). Book your ride: <https://www.uber.com/fr/fr/start-riding/>

OPTION 2: DIRECT BUS « AIREBUS » (APPROX. 1H10)

Step 1: From Paris Charles de Gaulle Airport (CDG) to Chantilly – Gouvieux

- Inside the airport, follow the signs for “Roissypôle / Terminal 3”. Go to the Roissypôle bus station (in French “Gare routière Roissypôle”).
- Go to the bus platform G3.
- Take the “AIREBUS” bus in the direction of: “Gouvieux – Collège Sonia Delaunay”.
- Get off at the bus stop: “Gare – Chantilly”.

Step 2: From Chantilly – Gouvieux station to Campus Les Fontaines

Walk approximately 20 minutes (1.5 km) to the Campus or take an Uber.

More information:

- View the « AIREBUS » timetable: <https://files.oise-mobilite.fr/ftp/lines/guide-horaires-airebus-06-10-2025.pdf>
- Tickets : <https://www.oise-mobilite.fr/en/mticket-your-ticket-oise-mobilite-application>
- Download the Oise Mobilité app: [Google Play](#) & [App store](#)

OPTION 3: RER TRAIN (APPROX. 1H50)

Step 1: From Charles de Gaulle Airport (CDG) to Gare du Nord

- From Charles de Gaulle Airport Terminal 1, take the RER B toward “Orsay Ville”.
- Get off at “Gare du Nord”.

Step 2: From Gare du Nord to Chantilly – Gouvieux

- Take the RER D toward “Creil”.
- Get off at “Chantilly – Gouvieux”.

Step 3: From the station to Campus Les Fontaines

Walk approximately 20 minutes (1.5 km) to the Campus.

More information:

- Journey planner: <https://www.ratp.fr/en>
- You can buy your tickets at the train station and on the website: <https://www.iledefrance-mobilites.fr/en/titres-et-tarifs/detail/ticket-metro-train-rer>
- Download the Île-de-France Mobilités app: [Google Play](#) & [App Store](#)

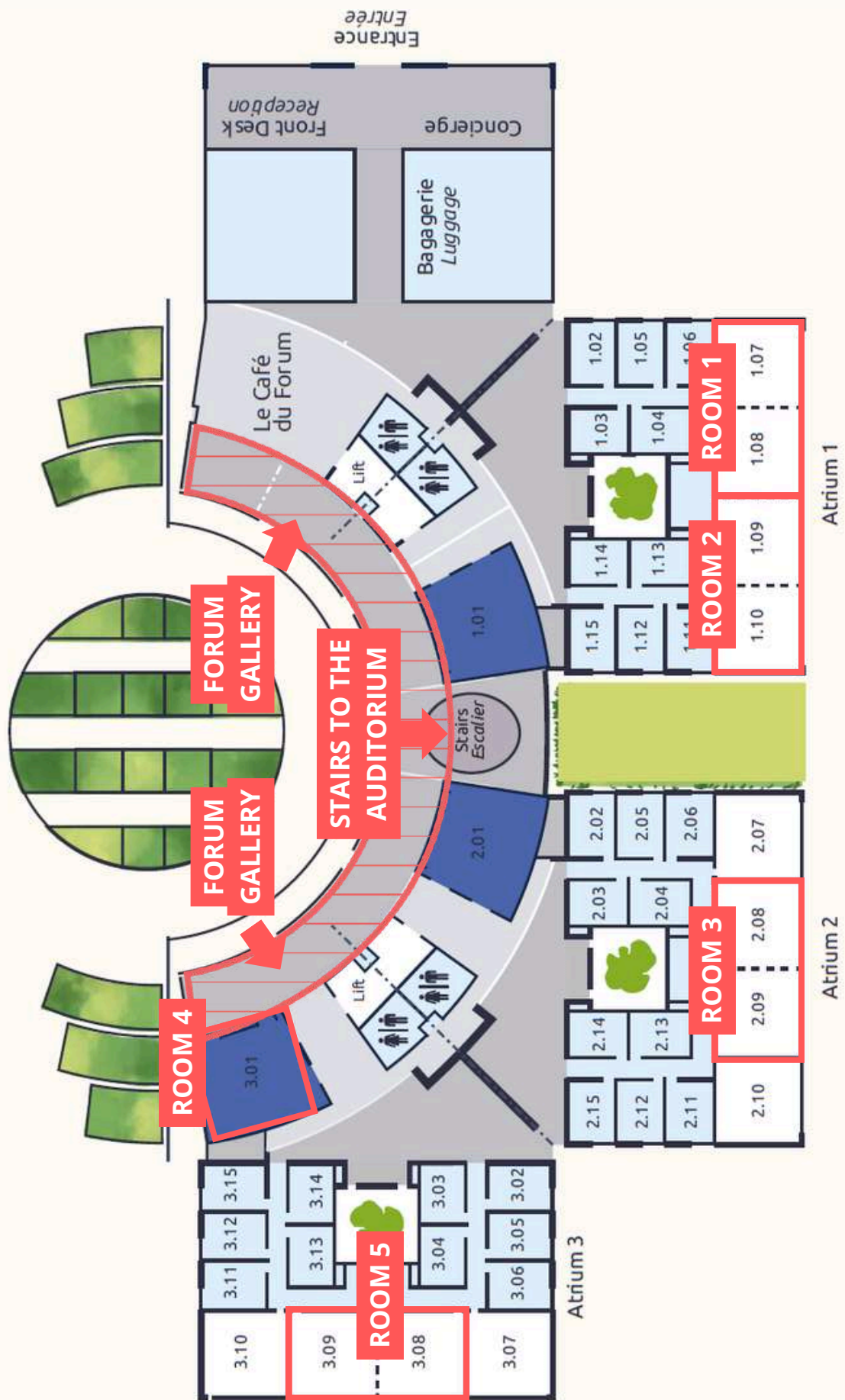
Map of the Serge Kampf Les Fontaines Campus



A focus on the main venues of the conference



Map of the “Forum” building



During the conference

Rooms

All rooms are located on the ground floor of the “Forum” building.

- **Room 1:** entrance via Doors 1.07 and 1.08
- **Room 2:** entrance via Doors 1.09 and 1.10
- **Room 3:** entrance via Doors 2.08 and 2.09
- **Room 4:** entrance via Door 3.01
- **Room 5:** entrance via Doors 3.08 and 3.09

Auditorium

The auditorium is located in the “Forum” building, in the basement.

Access card & conference badges

Upon arrival, you will receive a conference kit and your room access card. The room access card will grant access to your room. The conference kit includes the conference badge, which you are kindly requested to wear at all times during the conference, also when accessing coffee breaks, lunches, dinners and the gala dinner.

Wifi

You can benefit from a wifi connection throughout the duration of the conference.

Network: les_fontaines

Welcome & hotel registration services

The welcome desk is located at the reception area on the ground floor of the Le Forum building. Staff will be available at the welcome desk throughout the conference. A luggage storage area is available near the front desk for storing luggage on Wednesday morning. Please note that hotel check-out is before 09:00 on Wednesday, June 24, or on the day of your departure.

DAYS	WELCOME DESK HOURS	CHECK-OUT
Saturday, June 20	15:00-00:00 (accessible only if your registration includes arrival on Saturday)	
Sunday, June 21	15:00 - 00:00	/
Monday, June 22	24h/day	before 09:00 (only for participants leaving on Monday)
Tuesday, June 23	24h/day	before 09:00 (only for participants leaving on Tuesday)
Wednesday, June 24	/	before 09:00

Coffee breaks

Coffee breaks are held at the Forum Gallery, Serge Kampf Les Fontaines Campus.

DAYS	MORNING COFFEE BREAK	AFTERNOON COFFEE BREAK
Sunday, June 21 (accessible only if your registration includes IATP meeting in Sunday, June 21)	10:20-10:40	16:00-16:30
Monday, June 22	10:40 - 11:00	15:25 - 16:00
Tuesday, June 23	10:40 - 11:00	16:20 - 17:00
Wednesday, June 24	11:10 - 11:30	15:30 - 16:30

Breakfasts, lunches & dinners

Please be advised that lunch service ends at 14:00 and dinner service ends at 22:00.

DAYS	BREAKFAST	LUNCH	DINNER
Saturday, June 20	/	/	19:30 - 22:00 * (only for participants arriving on Saturday)
Sunday, June 21	07:00 - 09:00 (only for participants arriving on Saturday)	12:50-14:00 (accessible only if your registration includes IATP meeting in Sunday, June 21)	19:30 - 22:00 <i>Welcome Cocktail</i>
Monday, June 22	07:00 - 09:00	12:30 - 14:00	19:30 - 22:00
Tuesday, June 23	07:00 - 09:00	12:30 - 14:00	18:30 - 00:00 <i>Gala Dinner</i>
Wednesday, June 24	07:00 - 09:00	13:00 - 14:00	/

* Please check whether this option is included in your registration package.

What registration includes?

Your registration offers an all-inclusive package to ensure optimal conditions for scientific exchange and networking:

- Welcome reception
- Accommodation for three nights (Sunday to Wednesday), including breakfast, in the hotel of the Les Fontaines Campus
- Full access to the Les Fontaines Campus, featuring an impressive Château surrounded by a peaceful 52-hectare park. You will also have access to:
 - *The swimming pool*
 - *Sports facilities*
 - *Sauna, hammam, and fitness room*
- 6 coffee breaks
- Access to all scientific sessions
- The conference kit
- 3 lunches served during the conference
- 2 dinners at the Campus restaurant
- The gala dinner
- A ticket granting access to the prestigious Château de Chantilly during your stay.

Please note that any bar consumptions will be at your own expense. You may charge these to your room and settle the balance at the reception upon departure.



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Optional – Accompanying Person Package

This package includes:

- Welcome reception
- Accommodation for three nights (Sunday to Wednesday), including breakfast, in the hotel of the Les Fontaines Campus
- Full access to the Les Fontaines Campus, featuring an impressive Château surrounded by a peaceful 52-hectare park. You will also have access to:
 - *The swimming pool*
 - *Sports facilities*
 - *Sauna, hammam, and fitness room*
- 3 lunches at the Campus's restaurant (depending on the selected option with/without lunches)
- 2 dinners at the Campus restaurant
- The gala dinner
- A ticket granting access to the prestigious Château de Chantilly during your stay.

Please note that any bar consumptions will be at your own expense. You may charge these to your room and settle the balance at the reception upon departure.

SOCIAL PROGRAM

Welcome cocktail

DAY 1 – SUNDAY, JUNE 21, 2026

19:30 - 22:00

Location: Forum Gallery, Serge Kampf Les Fontaines Campus.

A cocktail dinner will be served in the Forum Gallery, a nice opportunity to discover the venue, enjoy a selection of gourmet bites, and exchange in an informal atmosphere.



© The Serge Kampf Les Fontaines Campus

Gala Dinner

DAY 3 – TUESDAY, JUNE 23, 2026

18:30 - 00:00

Location: Elegant nomadic tent behind the Château on the Serge Kampf Les Fontaines Campus (weather permitting; otherwise, dinner will be held in the Château).

18:30 - 19:30 : Champagne Cocktail

19:30 - 00:00 : Gala Dinner

The evening opens with a Champagne Cocktail and soft live music (Alice Remy & co). It continues with a refined Gala Dinner wrapped in a carefully curated musical atmosphere, before ending with a lively dancing session.



© Alice Remy & Co



© Chateau de Chantilly, Jerome-Houyvet

Ticket for the Chateau de Chantilly

As part of the ECTP 2026 Conference, complimentary admission to the Chateau de Chantilly is offered to all participants. Each participant will receive **an individual 1-day e-ticket** in their conference kit, allowing flexible access to the estate during opening hours. Participants are free to visit the Chateau at their convenience during their stay. **Please note that the Chateau de Chantilly is closed on Tuesdays.**

If you would like to visit the Chateau during your stay, we kindly invite you to collect your complimentary one-day admission ticket from the reception desk prior to your visit. The reception is open 24 hours a day throughout the conference, allowing you to pick up your ticket at your convenience.

The ticket includes access to:

- the Chateau,
- the Park,
- the Grandes Écuries (Great Stables),
- and all temporary exhibitions.

Opening hours:

- Chateau: 10:00 – 16:00
- Park: 10:00 – 20:00
- Grandes Écuries: 10:00 – 18:00

The estate is open every day except Tuesdays.

Click here to access to the plan of de Chateau de Chantilly or scan the QR code.

How to get there?

- Walking: approximately 50 minutes
- By car (taxi or Uber): approximately 7 minutes
- By public transport: approximately 36 minutes
 - Walk to the "Place Omer Vallon" stop
 - Take the DUC bus towards "Chantilly Boussac"
 - Get off at the "Chateau" stop



We hope you enjoy your visit to the Chateau de Chantilly!



© Chateau de Chantilly, Marc-Walter



© Chateau de Chantilly, Jerome-Houyvet



© Chateau de Chantilly, Sophie-Lloyd

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ORGANIZING ENTITIES





SCIENTIFIC PROGRAM

PRESENTATION INSTRUCTIONS

We kindly invite you to follow the guidelines below.

FOR ALL ORAL PRESENTATIONS

- All presentations must be delivered in English.
- Presentation files must be in PowerPoint or PDF format and uploaded to the computer in the presentation room no later than 10 minutes before the start of the session. You can upload your presentation by your own, in the folder "ECTP_Presentations > [Your session Day] > [Session Time]"
- All speakers are responsible for using only slides for which they own the copyright.
- A remote control with a laser pointer will be available for your convenience.
- Personal laptops cannot be used.
- We have a presentation template, but its use is not mandatory. The template is available on the official website under the "Scientific Program" menu, then "Oral and poster guidelines" ([Link to oral presentation template](#)).

Plenary

45-minute presentation, excluding questions

Keynote

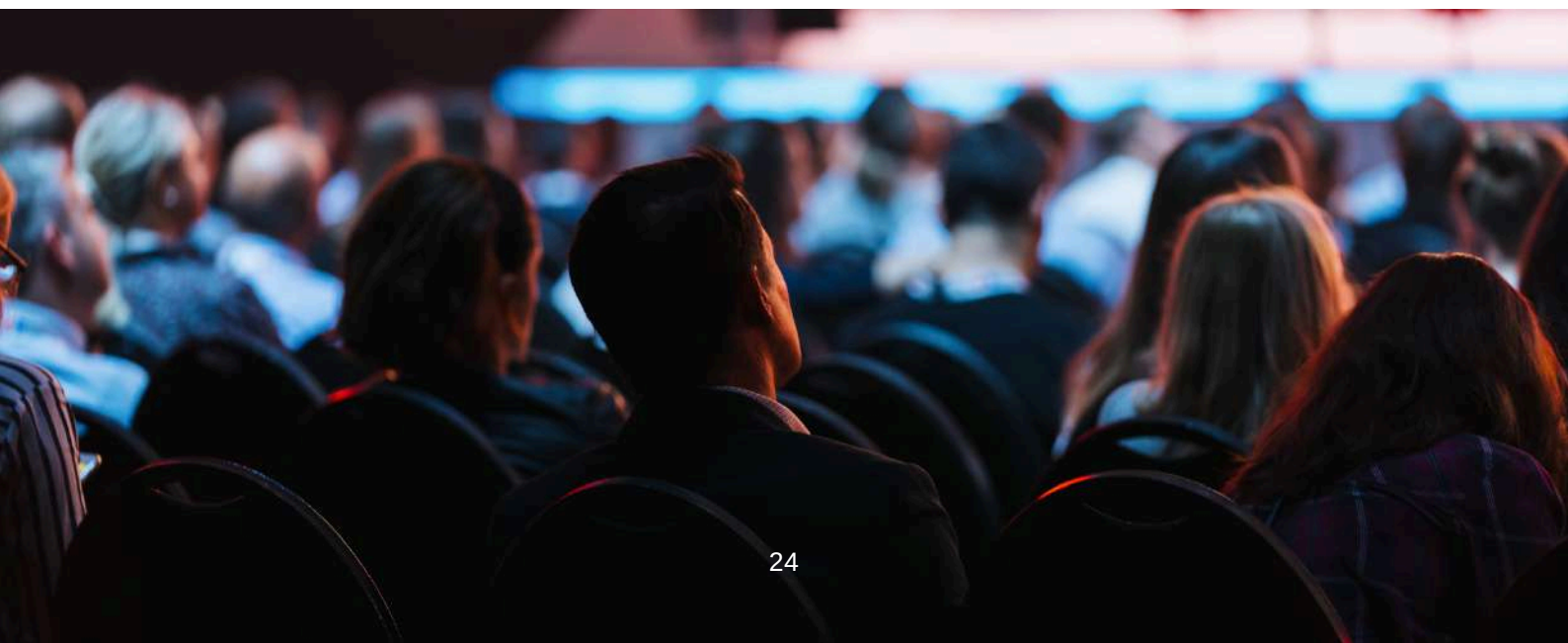
25-minute presentation + 5-minute questions

Invited talks

20-minute presentation + 5-minute questions

Regular talks

15-minute presentation + 5-minute questions



FOR POSTERS

Poster exhibition

Location: Forum Gallery

Poster hanging:

- Sunday, June 21, 15:00 - 18:30
- Monday, June 22, 08:00 - 09:00 | 12:30 - 14:00
- Tuesday, June 23, 08:00 - 09:00

Poster exhibition sessions:

- Monday, June 22, 15:25 - 16:00
- Tuesday, June 23, 10:40 - 11:00 (**Poster Committee Assessment for the Best Poster Award**)
- Tuesday, June 23, 16:20 - 17:00 (**Poster Committee Assessment for the Best Poster Award**)

- The recommended poster size is A0, portrait orientation (84.1 cm × 118.9 cm).
- Authors are kindly asked to print their own posters and ensure they are displayed from the start of the conference until Wednesday at 11:00, or until their departure from ECTP.
- All necessary materials for hanging will be provided.
- Each poster board will display a number corresponding to the poster listings at page 54. Please place your poster on the board assigned to you.
- Please also note that all speakers are responsible for ensuring that any images included in their presentations are used with the appropriate copyright permissions. Be aware as well that other participants may take photographs of the posters during the conference.
- You can find it on the official website under the “*Scientific Program*” menu, then “*Oral and poster guidelines*” ([Link of Poster A0 template](#)).

Poster pitch session

Monday, June 22, 17:20 - 18:53

Location : Auditorium

- Selected authors have been given the opportunity to present their poster orally in the auditorium as part of a Poster Pitch Presentation.
- The total duration of the presentation is **3 minutes**.
- This flash talk is intended to briefly present your work and direct the audience to the associated poster for further details.
- You may prepare a PowerPoint presentation of **3 slides max.** (including the cover slide) to support your talk.
- The **official template** to be used is available on the official website under the “*Scientific Program*” menu, then “*Oral and poster guidelines*” ([Link to the Poster Pitch Presentation](#)).
- Poster pitch presentations must comply with the guidelines available on the website and must be sent **by e-mail to Julien Joliat** (julien.joliat@univ-lorraine.fr) **no later than Saturday, June 20, at 23:00.**

SCIENTIFIC THEMES OF THE CONFERENCE

SESSION	THEMES
Session 1	Transport Properties
Session 2	Thermodynamic Properties
Session 3	Thermophysical Properties
Session 4	Advanced Experimental Techniques
Session 5	Advanced Materials Design and Characterisation
Session 6	Thermodynamic Modelling for Sustainable Processes

Abstract Book

➤ Direct link: www.ectp2026.com/participant-area

🌐 Access the Abstract Book by scanning this QR code

You will be redirected to a web page. The password required to access the Abstract Book is printed on your badge and was also included in the pre-event email.



Session 1

Transport Properties

- 1.1 - Viscosity Modelling
- 1.2 - Theory and Modelling
- 1.3 - Mass Diffusivity Measurement and Data-Driven Modelling
- 1.4 - Measurement and Modelling of Materials Emissivity
- 1.5 - High Thermal Conductivity Materials
- 1.6 - Mass Diffusivity Measurement
- 1.7 - Thermal Diffusivity Measurement
- 1.8 - Thermal Conductivity and Diffusivity Measurement
- 1.9 - Thermal Conductivity Measurement

Session 2

Thermodynamic Properties

- 2.1 - Density Measurement
- 2.2 - Data-Driven Modelling
- 2.3 - Theory and Data-Driven Modelling
- 2.4 - CO₂-Based Mixtures
- 2.5 - Pure Compounds Modelling
- 2.6 - Hydrogen Modelling
- 2.7 - Phase and Chemical Equilibria

Session 3

Thermophysical Properties

- 3.1 - Organic Hydrogen Carriers
- 3.2 - H₂ and H₂-Containing Mixtures I
- 3.3 - Liquid Metals
- 3.4 - Refrigerants I
- 3.5 - Complex Liquids I
- 3.6 - High-Temperature Materials I
- 3.7 - Electrolyte Solutions
- 3.8 - Hydrocarbon Mixtures
- 3.9 - H₂ and H₂-Containing Mixtures II
- 3.10 - Fluids for CCUS Applications I
- 3.11 - H₂ and H₂-Containing Mixtures III
- 3.12 - Fluids for CCUS Applications II
- 3.13 - Refrigerants and Lubricant Oils I
- 3.14 - Complex Liquids II
- 3.15 - Databases and Reference Data
- 3.16 - Hydrocarbon-Based Fluids
- 3.17 - Complex Liquids III
- 3.18 - Refrigerants and Lubricant Oils II
- 3.19 - Refrigerants II
- 3.20 - Hydrates
- 3.21 - High-Temperature Materials II

Session 4

Advanced Experimental Techniques

- 4.1 - Viscosity
- 4.2 - VLE and Speed of Sound
- 4.3 - Transport Properties
- 4.4 - Thermal Properties
- 4.5 - Micro- and Nano-Scale
- 4.6 - H₂ Mixtures and LNG
- 4.7 - Thermal Imaging

Session 5

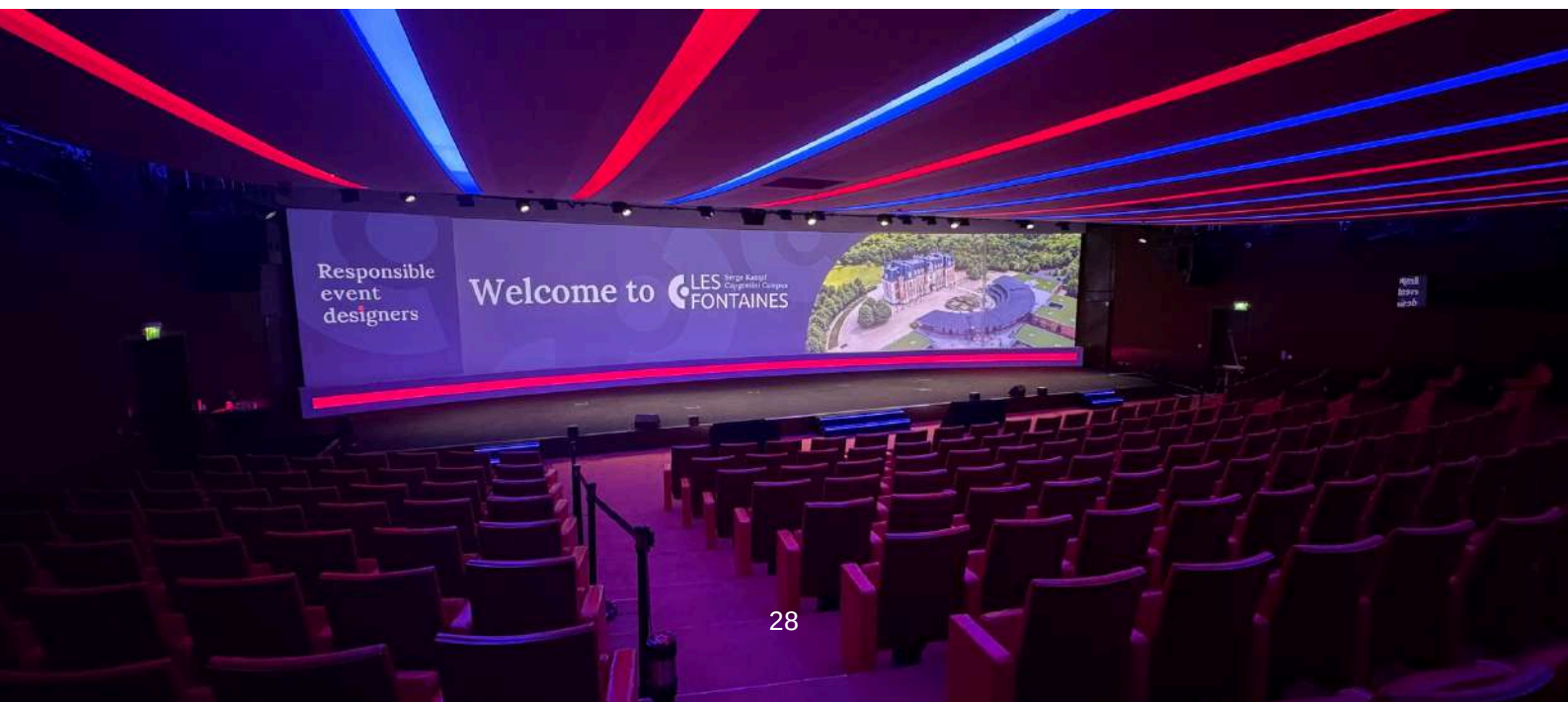
Advanced Materials Design and Characterisation

- 5.1 - Radiative Cooling I
- 5.2 - Multi-Scale Modelling
- 5.3 - Separation Processes
- 5.4 - Energy-Related Materials
- 5.5 - Amorphous and Polymer-Based Materials
- 5.6 - Thermal Energy Storage
- 5.7 - Nuclear Applications
- 5.8 - Radiative Cooling II

Session 6

Thermodynamic Modelling for Sustainable Processes

- 6.1 - Thermodynamic Cycles and Working Fluids
- 6.2 - Multi-Scale Modelling
- 6.3 - CCUS Applications



AWARDS

ECTP LIFETIME AWARD

The ECTP Lifetime Award is intended:

- To honour outstanding scientific work in any field of research on thermophysical properties.
- To encourage efforts over a long period of activity that help improve understanding and enable the prediction of the thermophysical properties of matter.
- To underline the importance attributed by the scientific community and by industry to the broadening of our knowledge about the thermophysical properties of matter.

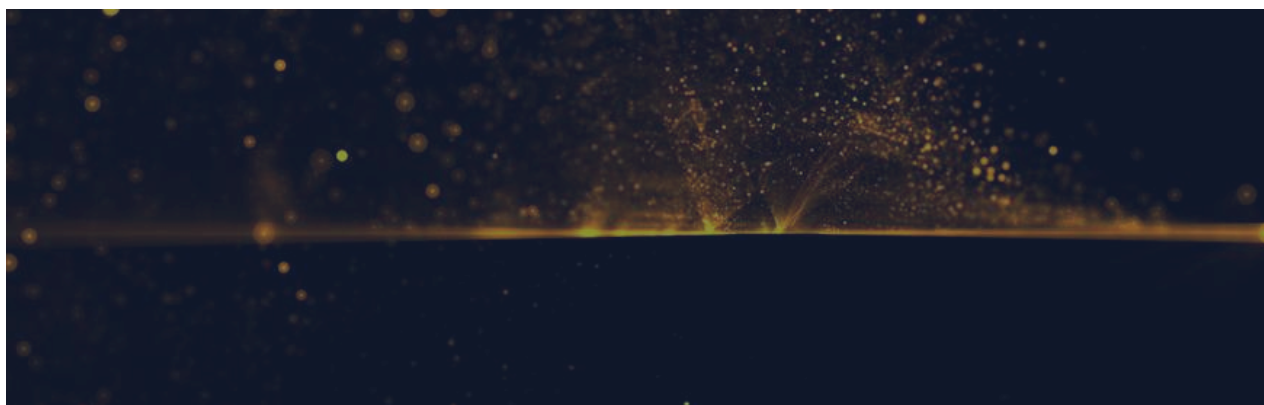
The ECTP Lifetime Award is presented at each ECTP conference. For more information on the application criteria, please visit the website and navigate to ["Menu > Scientific Program > Awards."](#)

List of ECTP Lifetime Award Recipients:

The ECTP Lifetime Award recipient will be announced on Tuesday at 08:30 in the auditorium.

YEAR	RECIPIENT
2023	Marc J. Assael (Greece)
2020	Eckhard Vogel (Germany)
2017	Francesco Righini (Italy)
2014	W.M. Haynes (USA)
2011	W. Wakeham (UK)
2008	A. Nagashima (Japan)
2005	R. Tye (UK)

YEAR	RECIPIENT
2002	K. Maglic (Serbia)
1999	R. Taylor (UK)
1996	H.E. Schmidt (Germany)
1993	W.M. G. Ruffino (Italy, posthumous)
1990	R.E. Taylor (USA)
1988	F. Cabannes (France)
1986	E. Fitzer (Germany)



ECTP-NETZSCH YOUNG SCIENTIST AWARD

Nominations are invited for the ECTP-NETZSCH Young Scientist Award in recognition of exceptional scientific achievements in thermophysical property research. The ECTP-NETZSCH Young Scientist Award is presented at each ECTP conference and sponsored by NETZSCH.

For more information about the application criteria, please visit the website and navigate to [“Menu > Scientific Program > Awards.”](#)

List of ECTP-NETZSCH Young Scientist Award Recipients:

The ECTP-NETZSCH Young Scientist Award recipient will be announced on Tuesday at 08:30 in the auditorium.

YEAR	RECIPIENT
2023	Thomas M. Koller (Germany)
2020	Umberto Berardi (Italy)
2017	Andriy Yakymovych (Austria)
2014	Mara G. Freire (Portugal)
2011	Robert Hellmann (Germany)

YEAR	RECIPIENT
2002	Jürgen Brillo (Germany)
1999	Maria José Vitoriano Lourenço (Portugal)
1996	Brian Monaghan (UK)
1993	Steffen Rudtsch (Germany)

ARED CEZAIRLIYAN ANNUAL BEST PAPER AWARD

The Cezairliyan Prize, named after the journal's founding Editor, Dr Ared Cezairliyan, recognises a paper judged to make a significant advance in the field of thermophysics, published in International Journal of Thermophysics in the previous calendar year, and is selected by a prize committee from the journal's Editorial Board. It carries a certificate and a cash award for the author, and is presented at the main thermophysics conference in each year (Asian Thermophysical Properties Conference, the European Conference on Thermophysical Properties, or the Symposium on Thermophysical Properties). Further information: [click here](#).

The Ared Cezairliyan Annual Best Paper Award recipient will be announced on Tuesday at 08:30 in the auditorium.

BEST POSTER AWARD

One Best Poster Award will be presented during the conference. For this edition of ECTP, the award is proudly sponsored by TotalEnergies. Poster Committee assessment for the Best Poster Award will take place on Tuesday during the two poster sessions: 10:40–11:00 and 16:20–17:00. Please be prepared to present your poster during these times. The ECTP Best Poster Award recipient will be announced on Wednesday at 08:30 in the auditorium.

PLENARY LECTURES



Professor J. P. Martin Trusler

MADE TO MEASURE: HIGH-PRECISION MEASUREMENTS OF THE SPEED OF SOUND IN FLUIDS

Monday, June 22 - 08:45 – 09:30

Location: Auditorium



Imperial College London, United Kingdom
Department of Chemical Engineering
[Scan the QR code to access his online resume.](#)

Martin Trusler is Professor of Thermophysics in the Department of Chemical Engineering at Imperial College London. Prof. Trusler's research interests focus on measurement and modelling of the thermophysical properties and phase behaviour of fluids, especially under extreme conditions of temperature and pressure, with applications in carbon capture & storage, hydrogen infrastructure and the energy industries widely. In 2016, he was awarded the Guggenheim Medal for contributions to research in thermodynamics by the UK Institution of Chemical Engineers. He is a Fellow of the Royal Society of Chemistry, an Associate Fellow of the Institution of Chemical Engineers and former editor of the Journal of Chemical Thermodynamics. Over his research career, he has published over 250 papers in peer-reviewed journals, supervised 35 doctoral students to completion and led numerous research projects sponsored by industry and public funding agencies. As a consultant, he has worked with leading companies on a variety of energy-industry related problems. He is currently Co-Director of the Digital Rocks research programme at Imperial.





Professor Gabriele Sadowski

25 YEARS OF PC-SAFT – THE JOURNEY TOWARDS MODELING COMPLEX MOLECULES

Tuesday, June 23 - 14:00 – 14:45

Location: Auditorium



TU Dortmund University, Germany

Laboratory of Thermodynamics

[Scan the QR code to access her online resume.](#)

Gabriele Sadowski received her PhD in physical chemistry and became Associate Professor at TU Berlin in 1992. She has been Full Professor for Thermodynamics at TU Dortmund University since 2001. She is also spokesperson for the Center for Advanced Liquid Phase Engineering Dortmund (funded with 70 million euros in 2020) and, from 2024, also Director of the Chemistry and Sustainability Research Center at the University Alliance Ruhr. She is a member of the German Academy of Science and Engineering acatech and 2022 was appointed to the German Council of Science and Humanities, which advises the German government on science policy issues. Her research focuses on investigating the thermodynamic properties of complex systems, with a particular focus on pharmaceutical molecules. Her group developed the thermodynamic model PC-SAFT. She is the co-author of more than 350 scientific papers and more than 500 conference contributions in the field of chemical, biochemical and pharmaceutical engineering. She has received numerous awards for her work, including the Leibniz Prize from the German Research Foundation (2011) and the Michael Michelsen Prize from the European Federation of Chemical Engineering (2021).



Professor Eric F. May

ROLE OF CRYOGENIC H₂, CO₂ AND CH₄ IN DECARBONISED ENERGY SYSTEMS: CHALLENGES AND OPPORTUNITIES

Wednesday, June 24 - 08:45 – 09:30

Location: Auditorium



Managing Director, Future Energy Exports CRC

Director, Gas Capture Technologies Pty Ltd.

Professor, The University of Western, Australia

[Scan the QR code to access his online resume.](#)

Eric May is Managing Director of the Future Energy Exports (FEnEx) CRC and was named the 2021 Western Australian Scientist of the Year. His research team works closely with industry, conducting projects in hydrogen liquefaction, LNG production and decarbonisation, gas separations, CCS and fluid property prediction. Eric was awarded the Malcolm McIntosh Prize for Physical Scientist of the Year as part of the 2012 Prime Minister's Prizes for Science. In 2017, he co-established *Gas Capture Technologies Pty Ltd*, a spin-out company for patented technologies to capture methane from coal mines, land-fill gas and other sources. Launched in 2020, the FEnEx CRC brings together over 36 industry, government and university partners with resources of \$163 million to conduct industrial-scale research that supports LNG and Hydrogen exports from Australia.

**André Bardow**

Professor at ETH Zurich (Switzerland)

Room 1 - Monday, June 22 | 11:00 – 11:30

THE LAW OF DIMINISHING RETURNS: WHY THERMODYNAMICS IS (AND ISN'T) THE KEY TO DECARBONIZING INDUSTRIAL HEAT

**Øivind Wilhelsem**

Professor at Norwegian University of Science and Technology – NTNU, (Norway)

Room 2 - Monday, June 22 | 11:00 – 11:30

TOWARDS A FUNDAMENTAL THEORY FOR TRANSPORT PROPERTIES OF COMPLEX MOLECULES

**Markus Richter**

Professor at Professor at Leibniz Universität Hannover (Germany)

Room 3 - Monday, June 22 | 11:00 – 11:30

GRAVIMETRIC DENSITY MEASUREMENTS: GOLD STANDARD OR YESTERDAY'S NEWS?

**Maria Grazia De Angelis**

Professor at University of Edinburgh (United Kingdom)

Room 4 - Monday, June 22 | 11:00 – 11:30

THERMODYNAMIC MODELS ACROSS MULTIPLE SCALES TO DESIGN MATERIALS FOR NET ZERO AND THE ENERGY TRANSITION

**Paul Stanwix**

Associate Professor at The University of Western (Australia)

Room 5 - Monday, June 22 | 11:00 – 11:30

EXPLORING THE PROPERTIES, BEHAVIOUR, AND CHALLENGES OF CRYOGENIC HYDROGEN

**Fèlix Llovell Ferret**

Professor at Universitat Rovira i Virgili (Spain)

Room 1 - Tuesday, June 23 | 11:00 – 11:30

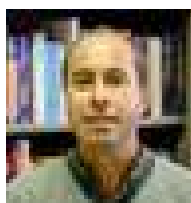
BRIDGING MODELING APPROACHES FOR THE PREDICTIVE DESCRIPTION OF THERMOPHYSICAL PROPERTIES IN DECARBONISATION APPLICATIONS

**Andreas Paul Fröba**

Professor at Friedrich-Alexander-Universität Erlangen-Nürnberg (Germany)

Room 2 - Tuesday, June 23 | 11:00 – 11:30

MEASUREMENT OF DIFFUSION COEFFICIENTS IN COMPLEX FLUIDS, INCLUDING MOLECULAR AND PARTICULATE SYSTEMS, BY DYNAMIC LIGHT SCATTERING

**Simão Pedro Pinho**

Professor at Instituto Politécnico de Bragança (Portugal)

Room 3 - Tuesday, June 23 | 11:00 – 11:30

BRIDGING EXPERIMENTS, SIMULATIONS, AND DATA SCIENCE TO DECODE SALT EFFECTS ON THE SOLUBILITY OF BIOMOLECULES

**Thijs J. H. Vlugt**

Professor at Delft University of Technology – TU Delft (Netherlands)

Room 4 - Tuesday, June 23 | 11:00 – 11:30

SHAPE-SELECTIVITY EFFECTS OF ZEOLITES ON HYDROISOMERIZATION OF LONG-CHAIN ALKANES

**Guillaume Galliero**

Professor at Université de Pau (France)

Room 5 - Tuesday, June 23 | 11:00 – 11:30

FROM MOLECULAR INSIGHTS TO SUBSURFACE ENERGY: HOW THERMOPHYSICAL PROPERTIES OF FLUIDS ADVANCE HYDROGEN AND GAS STORAGE

KEYNOTE LECTURES

WEDNESDAY, JUNE 24



Amparo Galindo

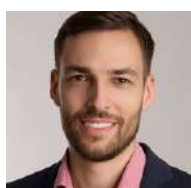
Professor at Imperial College (United Kingdom)

Room 1 - Tuesday, June 23 | 09:40 – 10:10

ADVANCING CO₂ CAPTURE THROUGH MOLECULAR MODELLING AND TRANSFER-LEARNING SURROGATES

INVITED SPEAKERS

MONDAY, JUNE 22



Philipp Rehner

Assistant Professor at ETH Zurich, Switzerland

Room 1 - Monday, June 22 | 14:00 – 14:25

UNLOCKING MOLECULAR EQUATIONS OF STATE FOR PROCESS DESIGN WITH LARGE-SCALE PARAMETRIZATION AND DATA-DRIVEN EXTRAPOLATION



Tobias Klein

Post-doctoral researcher at the Institute of Advanced Optical Technologies – Thermophysical Properties, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

Room 2 - Monday, June 22 | 14:00 – 14:25

DEFINITIONS AND PREFERRED SYMBOLS FOR MASS DIFFUSION COEFFICIENTS IN MULTICOMPONENT FLUID MIXTURES INCLUDING ELECTROLYTES



Mickael Courtois

Associate Professor at Université de Bretagne Sud - IRDL, France

Room 3 - Monday, June 22 | 14:00 – 14:25

EXPERIMENTAL AND NUMERICAL STUDY OF LIQUID METALS VISCOSITY. GRAVITY EFFECTS STUDY AND MICROGRAVITY EXPLORATION



Othon A. Moulτος

Associate Professor at Delft University of Technology, Netherlands

Room 4 - Monday, June 22 | 14:00 – 14:25

CAPTURING PFAS WITH CYCLODEXTRIN-BASED ADSORBENTS

INVITED SPEAKERS

MONDAY, JUNE 22



Aaron J. Rowane

Mechanical Engineer at National Institute of Standards and Technology (NIST), USA

Room 5 - Monday, June 22 | 14:00 – 14:25

THERMOPHYSICAL PROPERTIES FOR THE DEVELOPMENT OF NEXT-GENERATION REFRIGERANTS

INVITED SPEAKERS

TUESDAY, JUNE 23



Antonin Chapoy

Professor at Heriot-Watt University, United Kingdom

Room 1 - Tuesday, June 23 | 14:55 – 15:20

THERMOPHYSICAL PROPERTIES OF CCUS FLUIDS IN THE VICINITY OF THE CRITICAL POINT AND WIDOM LINE



Bruno Hay

Head of Photonics-Energetics division of LNE – « Laboratoire national de métrologie et d'essais », France

Room 2 - Tuesday, June 23 | 14:55 – 15:20

A TECHNICAL GUIDE ON HIGH TEMPERATURE THERMAL DIFFUSIVITY MEASUREMENTS BY THE LASER FLASH METHOD



Riley V. Latcham

Post-doctoral researcher at Imperial College London, United Kingdom

Room 3 - Tuesday, June 23 | 14:55 – 15:20

SPEED-OF-SOUND AND RAMAN SPECTROSCOPY OF HYDROGEN SPIN-ISOMER MIXTURES



Laura Fedele

Research Director at Consiglio Nazionale delle Ricerche (CNR), Italy

Room 4 - Tuesday, June 23 | 14:55 – 15:20

ADAPTING SMART MATERIALS FOR EFFICIENT THERMAL ENERGY STORAGE SYSTEMS



Hiroyuki Fukuyama

Professor at Tohoku University, Japan

Room 5 - Tuesday, June 23 | 14:55 – 15:20

SOLIDIFICATION REACTION PROCESSES IN MOLTEN STAINLESS STEEL CONTAINING BORON CARBIDE (B₄C)

INVITED SPEAKERS

WEDNESDAY, JUNE 24



João A. P. Coutinho

Professor at University of Aveiro, Portugal

Room 3 - Wednesday, June 24 | 09:40 – 10:10

USING SULFATE AND SULFONATE COMPOUNDS TO SHOW HYDROTROPY AS THE MISSING LINK BETWEEN SALTS AND SURFACTANTS



Ala Bazyleva

Research Chemist at National Institute of Standards and Technology (NIST), USA

Room 4 - Wednesday, June 24 | 09:40 – 10:10

THERMOPHYSICAL PROPERTY DATA IN THE AI AGE

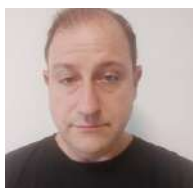


Jiangtao Wu

Professor of Engineering Thermophysics at Xi'an Jiaotong University

Room 5 - Wednesday, June 24 | 09:40 – 10:10

THERMAL CONDUCTIVITY OF MULTI-COMPONENT MIXTURES FOR NATURAL GAS



Ilya Polishuk

Professor at Ariel University, Israel

Room 1 - Wednesday, June 24 | 11:30 – 11:55

APPLICATION OF CP-PC-SAFT WITH UNIVERSAL k_{12} VALUE FOR SIMULTANEOUS PREDICTION OF VLE, LLE AND CRITICAL LOCI IN SYSTEMS OF GASES AND ALIPHATIC HYDROCARBONS WITH SUBSTITUTED AROMATIC AND HETEROCYCLIC COMPOUNDS



Sérgio Vilas Boas

Associated Researcher at Universidade de Santiago de Compostela, Spain

Room 2 - Wednesday, June 24 | 11:30 – 11:55

EXPLORING THE SOLUBILITY BEHAVIOR OF KRAFT LIGNIN ON ALTERNATIVE SOLVENTS AND THEIR AQUEOUS SOLUTIONS



Wei Yan

Professor at the Technical University of Denmark

Room 3 - Wednesday, June 24 | 11:30 – 11:55

ALGORITHMS FOR CHEMICAL AND PHASE EQUILIBRIUM CALCULATIONS



Nicolas Leclercq

PhD candidate at University of Liège, Belgium

Room 4 - Wednesday, June 24 | 11:30 – 11:55

AN ASSUMPTION TO SIMPLIFY THE MODELING OF OIL-REFRIGERANT MIXTURES IN THERMODYNAMIC CYCLES



Ismail Issa Alkhatib

Research Scientist at Khalifa University, UAE

Room 5 - Wednesday, June 24 | 11:30 – 11:55

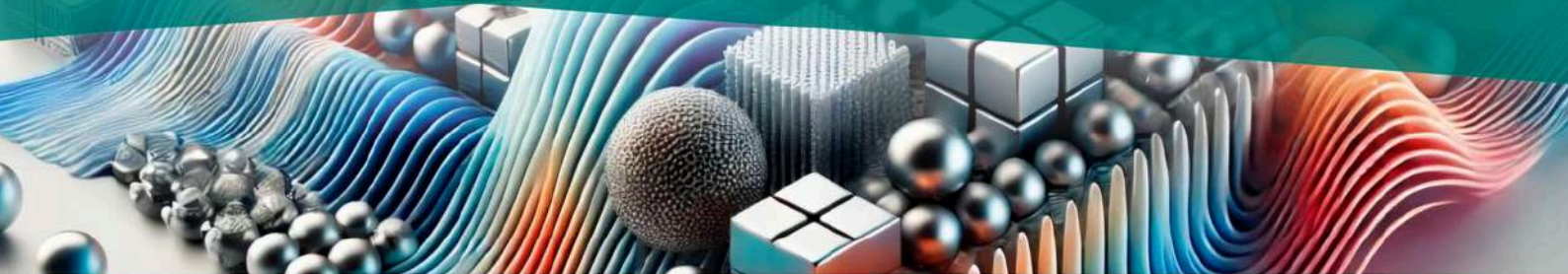
ON THE INTERSECTION OF THERMODYNAMICS AND MACHINE LEARNING FOR DESIGNING SUSTAINABLE REFRIGERANT BLENDS



OVERVIEW OF THE SCIENTIFIC PROGRAM

Exploring Thermophysical Properties by Means of Thermal Analysis

NETZSCH
Proven Excellence.



NETZSCH thermophysical properties testing instruments deliver precise, reliable, and versatile measurement results with advanced technology, user-friendly software, and expert support to meet diverse material analysis needs across a wide temperature and application range.

Laser/Light Flash Analysis (LFA)



Non-destructive, non-contact, and absolute method to measure materials with higher thermal diffusivity

- Property measured: thermal diffusivity / mm^2/s
- Max. temperature range: -120°C to 2800°C
- Typical sample geometry*: $\varnothing 12.7 \text{ mm}$; thickness 2 mm
- Measuring range:
 - Thermal diffusivity: $0.01 \text{ mm}^2/\text{s}$ to $2000 \text{ mm}^2/\text{s}$
 - Thermal conductivity: $0.1 \text{ W}/(\text{m}\cdot\text{K})$ to $4000 \text{ W}/(\text{m}\cdot\text{K})$

PicoTR/NanoTR



Precise, non-destructive thermal characterization of ultra-thin films and interfaces

- Property measured: thermal diffusivity / mm^2/s
- Max. temperature range: -100°C to 500°C
- Typical sample thickness*: in the picometer and nanometer range
- Measuring range: up to $1000 \text{ mm}^2/\text{s}$

Heat Flow Meter (HFM)



Relative method to measure materials with low thermal conductivity

- Thermal conductivity λ / $\text{W}/(\text{m}\cdot\text{K})$
- Max. temperature range: -30°C to 90°C
- Typical sample geometry*: $200 \text{ mm} \times 200 \text{ mm} \times 25 \text{ mm}$ or $300 \text{ mm} \times 300 \text{ mm} \times 50 \text{ mm}$ or $600 \text{ mm} \times 600 \text{ mm} \times 100 \text{ mm}$
- Thermal conductivity range: $0.002 \text{ W}/(\text{m}\cdot\text{K})$ to $2 \text{ W}/(\text{m}\cdot\text{K})$

Guarded Hot Plate (GHP)



Determination of the thermal conductivity of insulations

- Max. temperature range: -160°C to 600°C
- Typical sample geometry*: $300 \text{ mm} \times 300 \text{ mm} \times 50 \text{ mm}$ to $900 \text{ mm} \times 900 \text{ mm} \times 100 \text{ mm}$
- Thermal conductivity range: $0.003 \text{ W}/(\text{m}\cdot\text{K})$ to $2 \text{ W}/(\text{m}\cdot\text{K})$

Guarded Heat Flow Meter (GHFM)



Determination of the thermal conductivity of round, solid specimens in the low- and medium-conductivity range

- Max. temperature range: -10°C to 300°C
- Typical sample geometry*: $\varnothing 51 \text{ mm}$; thickness 20 mm
- Thermal conductivity range: $0.1 \text{ W}/(\text{m}\cdot\text{K})$ to ca. $30 \text{ W}/(\text{m}\cdot\text{K})$

* Other sample dimensions and customized solutions available

More
Information



www.analyzing-testing.netzsch.com

Sunday, 21 June	Monday, 22 June	Tuesday, 23 June	Wednesday, 24 June
From 15:00: Hotel check-in & conference registration (24h/day)	08:30 Opening ceremony	08:30 Awards announcement: <i>Lifetime award, ECTP-NETZSCH Young Scientist award & Ared Cezairliyan Best Paper Award</i>	08:30 <i>Best Poster Award</i> announcement & next ECTP announcements
	08:45 Plenary lecture by Martin TRUSLER	08:45 Plenary lecture by the Lifetime Award recipient	08:45 Plenary lecture by Eric MAY
	09:40 – 10:40 Oral presentations	09:40 – 10:40 Oral presentations	9:40 Keynote and Invited lectures
	10:40 Coffee break with Sponsor Session	10:40 Coffee break with Poster & Sponsor Sessions	10:10 – 11:10 Oral presentations
	11:00 Keynote lectures	11:00 Keynote lectures	11:10 Coffee break with Sponsor Session
	11:30 – 12:30 Oral presentations	11:30 – 12:30 Oral presentations	11:30 Invited lectures
	12:30 Lunch	12:30 Lunch	11:55 – 12:55 Oral presentations
	14:00 Invited lectures	14:00 Plenary lecture by Gabriele SADOWSKI	13:00 Lunch
	14:25 – 15:25 Oral presentations	14:55 Invited lectures	14:00 – 15:20 Oral presentations
	15:25 Coffee break with Poster & Sponsor Sessions	15:20 – 16:20 Oral presentations	15:30 – 16:30 Farewell coffee & ECTP 2026 ending
19:30 – 22:00 Welcome Cocktail	16:00 – 17:20 Oral presentations	16:20 Coffee break with Poster & Sponsor Sessions	
	17:20 – 18:55 Pitch poster session	17:00 – 18:20 Oral presentations	
	19:30 – 22:00 Dinner	18:30 – 00:00 Musical Champagne Cocktail & Gala Dinner	



ORAL COMMUNICATIONS

Monday 22 June					
08:30	OPENING CEREMONY - in the Auditorium				
08:45 - 09:30	PLENARY LECTURE - in the Auditorium Martin TRUSLER: "Made to Measure: High-Precision Measurements of the Speed of Sound in Fluids"				
09:40 - 10:40	Room 1 (doors 1.07+1.08)	Room 2 (doors 1.09+1.10)	Room 3 (doors 2.08+2.09)	Room 4 (door 3.01)	Room 5 (doors 3.08+3.09)
	Transport Properties. Viscosity Modelling	Advanced Experimental Techniques. Viscosity	Advanced Experimental Techniques. VLE and Speed of Sound	Advanced Materials Design and Characterisation. Radiative Cooling (I)	Thermophysical Properties. Organic Hydrogen Carriers
	Chaired by Y. Coulier	Chaired by D. Vega-Maza	Chaired by M. Riva	Chaired by A. Muscio	Chaired by O. Herbinet
09:40	Influence of the Conformal State Point and Binary Interaction Parameters on ECS Viscosity Predictions for Asymmetric Mixtures	Evaluation of Line-Broadening Effects for an Accurate Determination of Viscosity and Interfacial Tension by Surface Light Scattering	Automated Vapor-Liquid Equilibrium Measurements with Raman Spectroscopy	EKHI: an open database of thermal radiative data	Experimental Investigation of Liquid Density and PC-SAFT Equation of State for Liquid Organic Hydrogen Carrier (LOHC) H ₀ -NEC/H ₁₂ -NEC
	Sabozin F., Thol M.	Martinez-Gonzalez P., Knorr J., Koller T., Fröba A. P.	Busch C., Flake C., Kasterke M., Koß H.-J., Bardow A.	Gabirondo-López J., Sainz-Menchón M., Tolosa-Lecea I., González de Arrieta I., Echániz T., López-Ferreño I., Urcelay-Olabarria I., Fuente R., López G. A., Arredondo I., Igartua J. M.	Yang Y., Zhou T., Yang J., Meng X., Wu J.
10:00	Effective Thermophysical Constants of Thousands of Fluids. II: Lennard-Jones and residual entropy scaling parameters for viscosity	Measurement of gaseous viscosity in thermodynamic equilibrium state: Based on acoustic method	Non-Ideal Polarization Mixing for VLE Measurements with Microwave Resonators	Predictive numerical modeling of radiative cooling under real atmospheric conditions	Fick Diffusivity, Thermal Diffusivity, Thermal Conductivity, Density, and Mixture Composition of the Liquid Organic Hydrogen Carrier System Based on γ -Butyrolactone and 1,4-Butanediol
	Xiaoxian Y.	Tan Y., Peng X., Yang Z., Zhang K., Duan Y.	Tenardi L., Hoshina T., Sellner G., Richter M., Stanwix P., May E.	Moreno-Sanabria L., Martín-González M., Manzano C. V.	Blabus H., Mombeini D., Rausch M., Klein T., Koller T., Kankanamge C., Geißelbrecht M., Wasserscheid P., Fröba A. P.
10:20	A prediction of viscosity for helium-methane binary system based on entropy scaling of viscosity	Modernization of an Oscillating Cup Viscometer	Selection of Scattering Geometry in Brillouin Speed of Sound Measurement	Development and Thermophysical Characterization of Particle-Based Coatings for Passive Daytime Radiative Cooling	Viscosity, Interfacial Tension, and Hydrogen Solubility for the Liquid Organic Hydrogen Carrier System Based on gamma-Butyrolactone and 1,4-Butanediol
	Yang Y., Sun J., Yang X., Huang Y.	Lourenço M. J., Chainho J., Costa I., Rodrigues P., Abreu M., Nieto de Castro C.	Li W., He M., Zhang Y.	Manara J., Stark T., Arduini M., Göbel A., Brütting M., Vidi S., Popp J., Narymany Shandy A., Zipf M., Hartmann J., Ebert H.-P.	Sun Y., Blabus H., Rausch M., Koller T., Geißelbrecht M., Wasserscheid P., Fröba A. P.
10:40 - 11:00	Coffee break with Sponsors session				

	Room 1 (doors 1.07+1.08)	Room 2 (doors 1.09+1.10)	Room 3 (doors 2.08+2.09)	Room 4 (door 3.01)	Room 5 (doors 3.08+3.09)
11:00 - 12:30	Thermodynamic Modelling for Sustainable Processes. Thermodynamic Cycles and Working Fluids <i>Chaired by Y. Coulier</i> KEYNOTE LECTURE	Transport Properties. Theory and Modelling <i>Chaired by G. Galliero</i> KEYNOTE LECTURE	Thermodynamic Properties. Density Measurement <i>Chaired by C. Nieto de Castro</i> KEYNOTE LECTURE	Advanced Materials Design and Characterisation. Multi-Scale Modelling <i>Chaired by A. Chapoy</i> KEYNOTE LECTURE	Thermophysical Properties. H ₂ and H ₂ -Containing Mixtures (I) <i>Chaired by A. P. Fröba</i> KEYNOTE LECTURE
11:00	The Law of Diminishing Returns: Why Thermodynamics is (and isn't) the Key to Decarbonizing Industrial Heat <u>Bardow A.</u>	Towards a fundamental theory for transport properties of complex molecules <u>Wilhelmsen Ø.</u> , Jervell V. G., Løken J. S., Hammer M.	Gravimetric density measurements: gold standard or yesterday's news? <u>Richter M.</u>	Thermodynamic models across multiple scales to design materials for net zero and the energy transition Ismaeel H., Ricci E., Fabiani T., Papchenko K., Atiq O., Giacinti M., <u>De Angelis M. G.</u>	Exploring the properties, behaviour, and challenges of cryogenic hydrogen <u>Stanwix P.</u> , Sellner G., Tenardi L., Barwood M., Dhakal S., Johns M., May E., Luther F., Richter M., Bond E., Trusler M. J. P.
11:30	The Power of Reversible Chemical Reactions in Working Fluids for Thermodynamic Cycles <u>Barakat A.</u> , Lasala S., Sesmat A.	Aqueous Hydroxide and Hydroneum Diffusion-coefficients and Lifetimes Revealed by the Differences Between Experimental and Simulated Electrical Conductivity <u>Lagerweij V.J.</u> , Moutos O.A., Vlught T. J. H.	Dew-Point Density Measurements of Gas Mixtures with Low Uncertainty <u>Bernardini L.</u> , McLinden M., Richter M.	Accelerating Sustainable Materials Discovery with Artificial Intelligence <u>Abranches D. O.</u>	Experimental Investigation of Hydrogen-Brine Interfacial Tension: Influence of Salinity, Cation Species, and pH <u>Al L.</u> , Trusler M. J. P.
11:50	Thermodynamic modelling of reactive working fluids for thermodynamic cycle applications <u>Joliat J.</u> , Vlught T. J. H., Lasala S.	Extending revised Enskog theory to liquid-like densities: Understanding collisional transfer of momentum and energy <u>Jervell V.G.</u> , Wilhelmsen Ø.	Liquid Density of R1132(E) Measured by a Vibrating-Tube Densimeter <u>Yamauchi H.</u> , Nishiyama T., Akasaka R., Gao L.	Assessing the heat transfer performance of an LTES tank with PCM encapsulated in tubes: Scale-up insights <u>Vallese L.</u> , Menegazzo D., Barison S., Agresti F., Scattolini M., De Carli M., Bobbo S., Fedele L.	Density and isobaric heat capacity measurements for hydrogen-gas mixtures <u>Cassiede M.</u> , Stenby E., Yan W.
12:10	A Graph-Neural-Network-Enhanced Crossover PR Equation of State for High-Precision Prediction of Working Fluid Thermodynamic Properties <u>Ren K.</u> , He M., Zhang Y.	Viscosity, thermal conductivity and self-diffusion coefficient of the Lennard-Jones spline fluid: Evaluation of theories for a short-ranged potential <u>Løken J.</u> , Jervell V., Hammer M., Hafskjold B., Trinh T., Wilhelmsen Ø.	Novel Measurement Protocol for LNG Density at Cryogenic Conditions Using a Vibrating-Tube Densimeter <u>Lin G.</u> , Bernardini L., Trusler M. J. P., Richter M.	Comparative Study of CAMD and Graph Diffusion-Based Approaches for Organometallic Molecular Design <u>Hur J.</u> , Ryu B.C., Hwang S. Y., Kang J. W.	Experimental Validation of the Revised Dielectric Model for Hydrogen at Cryogenic Conditions <u>Sellner G.</u> , Incerti L., Tenardi L., May E., Stanwix P.
12:30 - 14:00	Lunch				

	Room 1 (doors 1.07+1.08)	Room 2 (doors 1.09+1.10)	Room 3 (doors 2.08+2.09)	Room 4 (door 3.01)	Room 5 (doors 3.08+3.09)
14:00 - 15:25	Thermodynamic Properties. Data-Driven Modelling <i>Chaired by D. Meimaroglou</i>	Transport Properties. Mass Diffusivity Measurement and Data-Driven Modelling <i>Chaired by B. Hay</i>	Thermophysical Properties. Liquid Metals <i>Chaired by O. Herbinet</i>	Advanced Materials Design and Characterisation. Separation Processes <i>Chaired by F. Llovel</i>	Thermophysical Properties. Refrigerants (I) <i>Chaired by D. Vega-Maza</i>
14:00	INVITED LECTURE Unlocking molecular equations of state for process design with large-scale parametrization and data-driven extrapolation Rehner P., Hemprich C., Bauer G., Gross J., Bardow A.	INVITED LECTURE Definitions and preferred symbols for mass diffusion coefficients in multicomponent fluid mixtures including electrolytes Klein T., Kankanamge C., Koller T., Rausch M., Fröba A. P., Assael M., Wakeham W., Guevara-Carrion G., Vrabec J.	INVITED LECTURE Experimental and numerical study of liquid metals viscosity. Gravity effects study and microgravity exploration Le Mener M., Courtois E., Bourges C., Pierre T., Courtois M.	INVITED LECTURE In silico capture of PFAS with cyclodextrin-based adsorbents Sha B., Soodan A., Lompe K. M., Vlucht T. J. H., Barin G., Peristeras L., Moultos O. A.	INVITED LECTURE Thermophysical Properties for the Development of Next-Generation Refrigerants Rowane A. J., McLinden M. O.
14:25	Machine Learning and Molecular Representations: Key Challenges in Data-Driven Thermodynamic Property Prediction Prokopidou M., Herbinet O., Lasala S., Meimaroglou D.	Fick Diffusion Coefficients in Blowing-Agent-Loaded Polymer Melts by Dynamic Light Scattering and Molecular Dynamics Simulation Schmidt P., Kankanamge C., Klose J., Jander J., Vergadou N., Economou I., Klein T., Fröba A. P.	Electrical Conductivity of Iron Oxide Containing Oxide Melt Shinohara S., Sumita T., Saito N.	Engineering MOF-on-MOF@Ionic Liquid+ Composites for Enhanced CO₂, Capture and Selectivity Huang S., Huang W., He M., Wang D., Liu X., Xu X.	Parametrization in PC-SAFT Framework for Accurately Describing Second-Order Derivative Properties of Hydrofluoroalkene (HFO) systems Tan Y., Yang Z., Duan Y., Peng X.
14:45	Symbolic Regression for Shared Expressions: A single Saturation Pressure Model for over 20 Substances Frotscher O., Martinek V., Baumbert M., Falloon P., May E., Herzog R., Richter M.	A Machine Learning Approach to Predict the Self-Diffusivity of the Lennard-Jones Fluid Gravanis G., Papadopolou S., Voutetakis S., Diamantaras K., Tsimpanogiannis I. N.	Measurement of the density of liquid metals in aerodynamic levitation at high pressure and high temperature Boungou A., Bourges C., Courtois E., Pierre T., Courtois M.	Uio-66 Based Porous Ionic Liquids: A Synergistic Strategy for Dual Enhancement of CO₂ Solubility and Diffusion Coefficient Huang S., Xu X., Huang W., Wu Z., Liu X., He M.	Quantum Study for Global Warming Potentials of HFO-1243yc Kondo C., Sakuda E., Yokoo T.
15:05	Machine-Learning-Guided Measurement and Modeling of Thermodynamic Properties: Symbolic Regression, Optimal Experimental Design, and a New Setup for LLE Characterization Baumbert M., Frotscher O., Martinek V., Herzog R., Richter M.	Physically Consistent Prediction of Diffusion Coefficients with Machine Learning Wagner J., Specht T., Hasse H., Jirasek F.	Fast surface tension measurement of liquid iron and 304L steel using an aerodynamic levitation apparatus and a new multi-bursts excitation Mouyele D., Bourges C., Courtois E., Pierre T., Courtois M.	Impact of Supercritical CO₂ on the Molecular Architecture of Recycled High-Density Polyethylene Zimmermann J., Hirschberg V., Jaeger P., Fischlschweiger M.	Extending the Vapor-Liquid Equilibrium Study of the Propane-Pentane System for Refrigeration: New Measurements at Low Temperatures Tognoli M., Riva M., Toppi T.
15:25 - 16:00	Coffee break with Sponsors Session and Poster Session				

16:00 - 17:20	Room 1 (doors 1.07+1.08) Thermodynamic Properties. Theory and Data-Driven Modelling Chaired by T. J. H. Vlugt A new thermodynamic function for binary mixtures: the co-molar volume Olsen K. P., Hafskjold B., Lervik A., Hansen A. A Stochastic Helmholtz Equation of State Mixture Model with Quantified Model Errors	Room 2 (doors 1.09+1.10) Transport Properties. Measurement and Modelling of Materials Emissivity Chaired by A. Bazyleva Emissivity Assessment of Sandblasted Surfaces: Decoupling Roughness and Surface Chemistry Effects Nurit M., Geslain E., Pouvreau C., Bigerelle M., Le Goic G. Influence of the spectral emissivity of refractories on the energy performance of industrial furnaces: Measurement and Modeling Augé A., Farges O., Vincent A., Leplay P., Rozenbaum O.	Room 3 (doors 2.08+2.09) Advanced Experimental Techniques. Transport Properties Chaired by D. Vega-Maza Development of a Gas Viscosity Measurement System Using Helmholtz Acoustic Resonance Nishihashi K., Kano Y. Characterization of Semiconductor Process Gases using Acoustic Resonators Al-Barghouti K., Fortin T., McLinden M.	Room 4 (door 3.01) Advanced Materials Design and Characterisation. Energy-Related Materials Chaired by L. Fedele Inverse Method for Estimating the Thermal Properties of a Cylindrical Battery Cell Aboufalah H., Darmet N., Remy B., Elmaakoul A., Rabeh R., Blet N. Multi-Objective Molecular design of Ionic Liquids on Small Dataset for High-Performance Lithium Metal Battery Electrolytes Zhang Y., Liu X., He M.	Room 5 (doors 3.08+3.09) Thermophysical Properties. Complex Liquids (I) Chaired by J. Coutinho Chemical stability of ionic liquids for high temperature MeOH synthesis at 513 K Fabian J., Alcantara M., Sosa F., Coutinho J. A. P. Detailed comparison between the Group Contribution models available in the literature for estimating the density of ionic liquids over a wide temperature and pressure range de Medeiros Araújo P., Feitosa F. X., de Sant'Ana H.
16:00					
16:20					
16:40	Thermodynamic Property Model Based on Physics-informed Neural Network (PINN) and Chaos Theory Gao K., Wu G. Fundamental Reverse van der Waals Equation of State	Performance Assessment of a Selective-Emissivity Roof Coating for Industrial Buildings Sciurti G., Magazzeni P., Muscio A. Emissivity Characterisation of Engineering Materials and Thermographic Phosphors within ThermoSI Adibekyan A., Mueller I., Monte C., Mendieta A., Bevilacqua L., Sutton G.	Efficient Detection of Temperature and Concentration Fluctuations via FFT-Segmented Autocorrelation Photon Correlation Spectroscopy Li W., He M., Zhang Y. Thermal Conductivity Measurement: A Comprehensive Review from a Manufacturer's Perspective	The $\text{Li}_2\text{CO}_3\text{-Na}_2\text{CO}_3\text{-K}_2\text{CO}_3$ Molten Eutectic. Challenges and Gaps in Thermophysical Property Data Nunes V., Chainho J., Rodrigues P., Lourenço M. J., Nieto de Castro G. Optical and Thermal Properties of n-Type Porous Silicon Fabricated by Short-Time Electrochemical Etching at Different HF Concentrations Rojas Trigos J., Nogal Luis U.	Influence of Different Gases and Molecular Catalysts on the Interfacial Tension and Viscosity of Ionic Liquids Zhai Z., Hantal G., Khan S., Haumann M., Smith A. S., Koller T. Analysis of the Influence of the Cation Alkyl Chain on the Structure and Properties of Aqueous Mixtures of $[\text{C}_n\text{mim}][\text{C}(\text{CN})_3]$ ($n=2,4,6$) Almeida R. M., Van Horebeek E., Santos H., Constantino J., Lourenço M. J., Nieto de Castro G.
17:00					
17:20 - 18:55	POSTER PITCH session - in the Auditorium				
19:30 - 22:00	Dinner				

Tuesday 23 June					
AWARDS ANNOUNCEMENTS – in the Auditorium					
The ECTP Lifetime Award, the NETZSCH Young Scientist Award and the ARED CEZAIRLIYAN Annual Best Paper Award					
PLENARY LECTURE - in the Auditorium					
ECTP Lifetime Award Recipient					
08:30	Room 1 (doors 1.07+1.08)	Room 2 (doors 1.09+1.10)	Room 3 (doors 2.08+2.09)	Room 4 (door 3.01)	Room 5 (doors 3.08+3.09)
	Transport Properties. High Thermal Conductivity Materials <i>Chaired by O. Herbinet</i>	Advanced Experimental Techniques. Thermal Properties <i>Chaired by M. Riva</i>	Advanced Experimental Techniques. Micro- and Nano-Scale <i>Chaired by M. Assael</i>	Advanced Materials Design and Characterisation. Amorphous and Polymer-Based Materials <i>Chaired by J. Joliat</i>	Thermophysical Properties. High-Temperature Materials (I) <i>Chaired by M. Courtois</i>
09:40-10:40	Experimental Study on High thermal conductivity UV-curable resin by the Transient Hot-wire Method	Optical Differential Scanning Calorimetry Setup for Modern Material Science at High Temperature	Investigation of measurement conditions for reliable STNM thermal properties measurements on a nanostructured sample	How the Thermodynamic Formation History Affects Glass Properties: Defining the Glass Transition Pressure	The joint direct pulse heating facilities - measurement of thermophysical properties of solid and liquid metals and alloys from RT to above 4000 K
	Narita H., Taguchi Y.	Zipf M., Shandy A. N., Manara J., Hemberger F., Vidi S., Hartmann J.	Fleurence N., Douri S., Dévallée A., Morán-Meza J., Hameury J., Felin N., Hay B.	Corbisieri C.	Milošević N., Pottlacher G., Stepanić N.
10:00	Study on Heat Flux Sensors Sensitivity under Various Conditions	LNE initiatives in the development of traceable calorimetric measurements for operando battery cells	Development of an Optofluidic Diffusion Sensor Using Light-induced Dielectrophoresis for Picoliter-scale Nanofluid Droplet	Upscaling the curing process for the production of large components	A Shadowgraph-Based Approach for Measuring Thermal Expansion of Ultra-High-Temperature Solids under Pulsed-Current Heating
	Akoshima M.	Razouk R., Hameury J., Hay B.	Kamata M., Taguchi Y.	Strasser C., Moukhina E., Hartmann J.	Orikasa L., Watanabe H.
10:20	Microfabrication of High-Thermal-Conductivity Composite Resins by Two-photon 3D Printing	Measurement of Critical Temperature with Commercial Calorimeters: Resurrection of Unjustly Abandoned Technique	Infrared Thermography for Precise Microscale Temperature Measurements on NiTi wires used for actuators and elastocaloric devices	Impact of Tacticity on the Solid-Liquid Equilibrium of Polypropylene Solutions	Determination of Effective Radiative and Optical Properties of a Heterogeneous Fibrous Material by Homogenization
	Nomura Y., Taguchi Y.	Štefja V., Kocian Š., Arltová E., Fulem M., Růžicka K.	Javed M. A., Navarro de Sosa I., Maaß B., Zipplies D., Richter M.	Behrle M., Fischlschweiger M., Enders S.	Sever L., Rozenbaum O., Daout C., Rochais D.
10:40 - 11:00	Coffee break with Sponsors Session and Poster Session (Poster Committee Assessment for the Best Poster Award)				

	Room 1 (doors 1.07+1.08)	Room 2 (doors 1.09+1.10)	Room 3 (doors 2.08+2.09)	Room 4 (door 3.01)	Room 5 (doors 3.08+3.09)
11:00 - 12:30	Thermodynamic Modelling for Sustainable Processes. Multi-Scale Modelling <i>Chaired by I. Alkhatib</i>	Transport Properties. Mass Diffusivity Measurement <i>Chaired by M. Trusler</i>	Thermophysical Properties. Electrolyte Solutions <i>Chaired by Ø. Wilhelmsen</i>	Thermophysical Properties. Hydrocarbon Mixtures <i>Chaired by V. G. Jervell</i>	Thermophysical Properties. H ₂ and H ₂ -Containing Mixtures (II) <i>Chaired by E. May</i>
11:00	KEYNOTE LECTURE <i>Bridging Modeling Approaches for the predictive description of Thermophysical Properties in Decarbonisation Applications</i> Albà C.G., Alkhatib I. I. I., Eusebio T.M., Vega L. F., Llovell F.	KEYNOTE LECTURE <i>Measurement of diffusion coefficients in complex fluids, including molecular and particulate systems, by dynamic light scattering</i> Schmidt P., Klein T., Rausch M., Fröba A.P.	KEYNOTE LECTURE <i>Bridging Experiments, Simulations, and Data Science to Decode Salt Effects on the Solubility of Biomolecules</i> Pinho S. P.	KEYNOTE LECTURE <i>Shape-selectivity effects of zeolites on hydroisomerization of long-chain alkanes</i> Vlugt T. J. H.	KEYNOTE LECTURE <i>From Molecular Insights to Subsurface Energy: How Thermophysical Properties of Fluids Advance Hydrogen and Gas Storage</i> Galliero G.
11:30	Assessment of the interfacial behavior of ethers-based systems using machine learning for practical industrial applications Huenovil-Pacheco L., Llovell F., Mejía A.	Characterization of Particle Diffusion Under Confined Conditions by Using Dynamic Light Scattering (DLS) Chittam P., Gálvez N., Margaretti P., Harting J., Vogel N., Schmidt P., Fröba A. P.	A Hybrid Model for Predicting Activities in Aqueous Electrolyte Solutions Kohns M., Hasse H., Jirasek F., Romero Z.	Thermophysical properties of sustainable liquid fuels Ladu L. R. T., Trusler M. J. P.	Transport Properties of Binary Gas Mixtures of H ₂ with N ₂ , O ₂ , CO ₂ , H ₂ S, and H ₂ O from First Principles Hellmann R., Bich E.
11:50	Compressed liquid density measurements of acetic acid and carbon dioxide mixtures for reactive heat pump applications Menegazzo D., Vallese L., Fedele L., Bobbo S., Joliat J., Lasala S.	Prediction of Diffusion Coefficients for High-Pressure Binary Gas Mixtures Kobeissi S., May E. F., Johns M. L.	Associative electrolyte PC-SAFT: Thermodynamic properties of aqueous, non-aqueous, and mixed solvent electrolyte solutions Hammer M., Wilhelmsen Ø., Yang F.	Investigation on the predictability of LKP and LKP-SJT binary interaction parameters for asymmetric n-alkane mixtures Schneegans M., Sabozin F., Thol M., Bretkopf C., Jäger A.	Physics-informed Neural Network for Thermodynamically Consistent Modelling of Carbon Dioxide-Hydrogen Mixtures in Underground Storage Applications Rostaminikoo E., Joonaki E., Khajenoori L., Asimakopoulou E., Nastani H. R.
12:10	Turbulent Reactive Phase Change via Reactive Vapor-Liquid Equilibrium Thermodynamics Lasala S., Yao R., Duwig C.	Influence of α -Helical Content on the Thermomodification of Apomyoglobin Rudani B., Docter S., Schott-Verdugo S., Buitenhuis J., Stadler A., Gohlke H., Wiegand S.	Diffusivities in Electrolyte Mixtures by Dynamic Light Scattering and Molecular Dynamics Simulations Kankanamge C., Klein T., Fröba A. P.	In pursuit of the high-pressure liquid-vapor and liquid-solid equilibria of asymmetric mixture Medeiros H. D., Daridon J. L., Feitosa F., de Sant'Ana H.	Measuring and modelling of dew points of water and hydrogen enriched natural gas Sulberg C., Span R., Wolf M., Anderbruegge T.
12:30 - 14:00	Lunch				

PLENARY LECTURE - in the Auditorium Gabriele SADOWSKI: " 25 years of PC-SAFT - the journey towards modeling complex molecules "					
14:00 - 14:45	Room 1 (doors 1.07+1.08)	Room 2 (doors 1.09+1.10)	Room 3 (doors 2.08+2.09)	Room 4 (door 3.01)	Room 5 (doors 3.08+3.09)
14:55 - 16:20	Thermophysical Properties. Fluids for CCUS Applications (I) Chaired by M. Assael INVITED LECTURE Thermophysical Properties of CCUS Fluids in the Vicinity of the Critical Point and Widom Line <u>Chapov A.</u> , Ahmadi P. Jiao F., Johns M., Stanwix P., May E., Al Ghafri S. John I. J., Performance Analysis of Modified Apparatus for Liquid CO ₂ Boil-off Study with Liquid Nitrogen Impurity Effects on VLE and Prediction Assessment in a CO ₂ -Rich System for CCUS	Transport Properties. Thermal Diffusivity Measurement Chaired by P. Rehner INVITED LECTURE A technical guide on high temperature thermal diffusivity measurements by the laser flash method <u>Hav B.</u> , Milošević N., Pavlásek P., Wu J. Refinement of the Extended Pulse Technique for the Measurement of the Thermal Diffusivity of Solids On the measurement of the in-plane thermal diffusivity: Data analysis in thin foils experiments	Thermophysical Properties. H ₂ and H ₂ -Containing Mixtures (III) Chaired by L. Bernardini INVITED LECTURE Speed-of-Sound and Raman Spectroscopy of Hydrogen Spin-Isomer Mixtures <u>Latcham R. V.</u> , Hauser M., Trusler M. J. P. Design of a Low-Temperature Cryostat System and Acoustic Resonator for Precise Speed-of-Sound Measurements in H ₂ and Other Light Gases A microwave-resonant cavity for liquid hydrogen boil-off studies	Advanced Materials Design and Characterisation. Thermal Energy Storage Chaired by Y. Coulier INVITED LECTURE Adapting Smart Materials for Efficient Thermal Energy Storage Systems Vallese L., Menegazzo D., Bobbo S., Scattolini M., <u>Fedele L.</u> Thermodynamic, kinetic and structural characterization of Thermochemical Materials for Thermal Storage Fanous K. M. H. G., Fasolin S., Armelao L., Barison S. Rational Design of Deep Eutectic Electrolytes for Sustainable Energy Storage	Advanced Materials Design and Characterisation. Nuclear Applications Chaired by A. Barakat INVITED LECTURE Solidification Reaction Processes in Molten Stainless Steel Containing Boron Carbide (B ₄ C) <u>Fukuyama H.</u> , Higashi H., Adachi M., Ohtsuka M., Yamano H. Thermal Properties Characterization of U ₃ Si ₂ /Al Composite Fuels: Multiscale Experimental and Modeling Approaches Klosek V., Doualle T., Iltis X., Martin F., Raymond M., Sanchez A., Vernière A. Experimental and numerical study of mesostructural effects on the effective thermal conductivity of granular media <u>Esmiol D.</u> , Vanson J. M., Bemachy-Barbe F., Rigollet F., Ehret N., Gardarein J. L.
15:20					
15:40	Morales R., Marcelino Neto M., <u>Rocha J.</u> , Unveiling the Widom Region of Supercritical CO ₂ through Non-Equilibrium Fluctuations Fruton P., Imuetinyan H., Lisoir E., Giraudet C., <u>Croccolo F.</u>	Accurate In-Plane Thermal Diffusivity Characterization of Low-Diffusivity Materials by Flash Method Shinoda Y., Gomez-Gomez A., Dilsch N., Stobitzer D., Beckstein F., Diez S.	Freeze-out Measurements of Impurities in Hydrogen with a Microwave Resonant Cavity Barwood M., Wu W., Dunn J., Tenardi L., May E., Stanwix P., <u>Bond E.</u>	Linking Structure and Transport Properties: A CALPHAD Framework for Multicomponent Ionic Melts Zhang R., Kjellqvist L., Mao H., Naraghi R., Chen Q.	Density, surface tension and viscosity of uranium melts at high temperatures: towards a new database for corium properties Delacroix J., Bitard H., Molina D., Journeau C., Piluso P., Bonev P., Le Tellier R., Tourneix A.
16:20 - 17:00	Coffee break with Sponsors Session and Poster Session (Poster Committee Assessment for the Best Poster Award)				

17:00-18:20	Room 1 (doors 1.07+1.08)	Thermodynamic Properties. CO ₂ -Based Mixtures	Room 2 (doors 1.09+1.10)	Advanced Experimental Techniques. H ₂ Mixtures and LNG	Room 3 (doors 2.08+2.09)	Room 4 (door 3.01)	Room 5 (doors 3.08+3.09)
	Chaired by M. Gatti	Chaired by A. Hajlaoui	Chaired by W. Wakeham	Chaired by A. Galindo	Chaired by N. Leclercq		
	High-Pressure Equilibrium and Transport Behaviour of CO ₂ + Cyclohexanol + Toluene Ternary Mixtures	New Fundamental Equation of State for Triethylene glycol	Design of a Cryogenic Thermal Conductivity Measurement System Using Transient Hot Wire (THW) Method	Density and Viscosity of MDEA Solutions Promoted by PZ or AMP for CO ₂ Capture Applications	Measurement of thermal conductivity of R-454A and R-454B mixtures using transient hot wire method		
17:00	Saric D., Bazile J. P., Giraudet C., Guevara-Carrion G., Daridon J. L., Vrabec J., Croccolo F.	Schöne J., Span R., Kollmer L., Span R., Lemmon E. W., Thol M.	Kim D., Lee S., Kwon S.	Pérez-Milian Y., Vega-Maza D., Trusler M. J. P.	Holmontee T. I., Morshed M., Saber M. T., Tuhin A. R., Matsunaga T., Tarafdar D., Miyara A.		
17:20	High-pressure phase behavior of the CO ₂ + 2,6,10,14-tetramethylpentadecane system: experimental investigation	Two distinct 4-parameter cubic equations tailored to reference thermodynamic property formulation. Application to argon, propane, and water.	Measurement of thermal conductivity and diffusivity at cryogenic temperatures	New VLE Data for CO ₂ -based Binary and Multicomponent Mixtures Relevant to CO ₂ Transport for CCUS Applications	Viscosity measurements for various pentaerythritol esters in the range of temperatures between 273.65 K and 373.15 K		
17:40	Isothermal Vapor-Liquid Equilibrium of Binary CO ₂ and C ₃ O ₈ Containing Mixtures and Classical Cubic Models of Equation of State	Theoretical modeling of solid, liquid, and gas phases of water	Modified vibrating-wire viscometer for measurements of gas mixtures containing hydrogen	Speed of Sound Measurements of Gaseous CO ₂ + O ₂ Mixtures Using a Spherical Resonator at Temperatures between (280 and 340) K and at Pressures up to 10 MPa	Simultaneous Measurement of Speed of Sound and Density for Refrigerant Mixtures Containing Hydrofluoroolefins		
	Bazile J.-P., Daridon J.-L., Vitu S.	Hrubý J., Blahut A.	Ibos L., Pierre T., Petit R.	Signorini S., Di Bona D., Giudici F., Razmjoo N., Gatti M.	Bobbo S., Rossi S., Menegazzo D., Vallese L., Heithorst B., Fedele L.		
	Abdulagatov A., Khairutdinov K., Khabriev K., Kabirotov K.	Cerdeiríña C., Troncoso J.	Harten R., Meier K.	Bokel L., Betken B., Thol M., Gatti M., Span R.	Kano Y., Nishihashi K., Kayukawa Y., Sato A.		
18:00	Thermophysical Property Calculation Model for CO ₂ -based Mixtures Using the Crossover Volume-Translation SRK Equation of State	Measurements and modelling of pure solids for solubility predictions	Advanced Thermal Analysis Under Hydrogen Atmosphere: From Oxide Reduction to Zirconium Hydride Formation	Thermophysical properties of CO ₂ and brine: density and viscosity	High-Pressure VTD Employed on Accurate Measurement of Liquid Density of Hydrofluoroethers and Other Reference Fluids		
	Wang R., Wang E., Qing K., Yang Z., Duan Y.	Wu W., Barwood M., Falloon P., Xiao X., May E.	Sergeev D., Rosenschon M., Rapp D., Hanss J.	Jayeola O., Cassiède M., Smith S., Yan W.	Prokopová O., Čenský M., Součková M., Blahut A.		
18:30-00:00	   MUSICAL CHAMPAGNE COCKTAIL & GALA DINNER   						

Wednesday 24 June					
08:30	Next ECTP Announcement & Best ECTP Poster Award – in the Auditorium				
08:45 - 09:30	PLENARY LECTURE - in the Auditorium Eric F. MAY: “ Role of Cryogenic H₂, CO₂ and CH₄ in Decarbonised Energy Systems: Challenges and Opportunities ”				
09:40 - 11:10	Room 1 (doors 1.07+1.08) Thermodynamic Modelling for Sustainable Processes. CCUS Applications <i>Chaired by O. Moulτος</i>	Room 2 (doors 1.09+1.10) YSA Keynote and Thermodynamic Properties. Hydrogen Modelling <i>Chaired by P. Stanwix</i>	Room 3 (doors 2.08+2.09) Thermophysical Properties. Complex Liquids (II) <i>Chaired by Y. Coulier</i>	Room 4 (door 3.01) Thermophysical Properties. Databases and Reference Data <i>Chaired by M. Richter</i>	Room 5 (doors 3.08+3.09) Transport properties. Thermal Conductivity and Diffusivity Measurement <i>Chaired by S. Lasala</i>
9:40	KEYNOTE LECTURE Advancing CO ₂ Capture Through Molecular Modelling and Transfer-Learning Surrogates Galindo A.	KEYNOTE LECTURE NETZSCH Young Scientist Award recipient	INVITED LECTURE Using sulfate and sulfonate compounds to show hydrotrophy as the missing link between salts and surfactants Cordova I. W., Abranches D. O., Pinho S. P., Ferreira O., Coutinho J. A. P.	INVITED LECTURE Thermophysical property data in the AI age Bazyleva A.	INVITED LECTURE Thermal conductivity of multi-component mixtures for natural gas Wu J., Li X.
10:10	Evaluation of Equations of State for Predicting Solid CO₂ Formation in CCS and Natural Gas Applications Maltby T. W., Aasen A., Hammer M., Wilhelmsen Ø.	Cryogenic Thermophysical Properties of Hydrogen from Molecular Dynamics with a Feynman–Hibbs–Corrected Mie Potential Ferra-Maury T., Harrison S., Sahadevan V., Rhead A., Chew J., Herdes C.	Predicting the Solubilization of Hydrophobic Solutes in Aqueous Surfactant Systems Völkel M., Sadowski G.	A Practical Guide to the Uncertainty Evaluation of Thermophysical Properties Bernardini L., McLinden M., Yang X., Richter M.	European inter-laboratory comparison on thermal diffusivity measurements of high conductive materials by the laser flash method Hay B., Beaumont O., Fleurence N., Wu J., Mildeova P., Akoshima M., Milošević N.
10:30	Experiments and Modeling of Thermophysical and Electrical Properties in CO₂-Rich Mixtures Tiuman E., Longo J., Trento E., Marozo F., Kabaczniak D., Simão C., Santos E., Silva M., Morales R., Marcelino Neto M.	Development of New Fundamental Equations of State for Hydrogen Lemmon E. W., Thol M., Span R., Nguyen T. T. G.	Physical origin of the non-monotonic behavior of the Soret coefficient in salt solutions Rudani B., Brieles W., Wiegand S.	Korea Thermophysical Properties Databank (KDB): Integrated Platform for Critically Evaluated Thermophysical Data and Property Estimation Hwang S. Y., Ryu B. C., Rhee J. E., Kang J. W.	New Data on the Heat Capacity, Thermal Conductivity and Viscosity of the Li₂CO₃–Na₂CO₃–K₂CO₃ Molten Eutectic Nieto de Castro C., Lourenço M. J., Chainho J., Gil M., Nunes V., Rodrigues P., Costa I., Serra J.
10:50	Vapor-Liquid Interfacial Properties of CO₂ Mixtures for Sequestration Applications: Classical Molecular Simulations, Classical Density Functional Theory, and Equations of State Raju D., Skartlien R., Ramdin M., Vlugt T. J. H.	Calculation of Thermodynamic Properties of Hydrogen by Path Integral Monte Carlo Simulations Using Ab Initio Potentials Marienthagen P., Garberoglio G., Hellmann R., Meier K.	Experimental determination of enthalpy of mixing, heat capacity and density for CO₂ + γ-valerolactone system Hailaoui A., Coulier Y., Pazoki F., Hevia F., Lozano-Martin D.	Collection and Evaluation of Properties for the development of Korean Thermophysical Properties Databank (KDB) Ryu B. C., Kim C. G., Kang J. W.	Thermal Conductivity of [C₄mim][N(CN)₂] and [C₆mim][N(CN)₂] Mixtures with H₂O. Understanding Structural Effects. Nieto de Castro C., Almeida R. M., Santos H., Lourenço M. J.
11:10 - 11:30	Coffee break with Sponsors Session				

	Room 1 (doors 1.07+1.08) Thermophysical Properties. Hydrocarbon-Based Fluids <i>Chaired by D. Vega-Maza</i>	Room 2 (doors 1.09+1.10) Thermophysical Properties. Complex Liquids (III) <i>Chaired by R. V. Latcham</i>	Room 3 (doors 2.08+2.09) Thermodynamic properties. Phase and Chemical Equilibria <i>Chaired by M. Riva</i>	Room 4 (door 3.01) Thermophysical Properties. Refrigerants and Lubricant Oils (II) <i>Chaired by A. J. Rowane</i>	Room 5 (doors 3.08+3.09) Thermophysical Properties. Refrigerants (II) <i>Chaired by S. Bobbo</i>
	INVITED LECTURE Application of CP-PC-SAFT with universal k_{12} value for simultaneous prediction of VLE, LLE and critical loci in systems of gases and aliphatic hydrocarbons with substituted aromatic and heterocyclic compounds Polishuk I.	INVITED LECTURE Exploring the Solubility Behavior of Kraft Lignin on Alternative Solvents and their Aqueous Solutions Vilas-Boas S. M. , Altoé F. S., Dias R. M., da Costa M. C.	INVITED LECTURE Algorithms for chemical and phase equilibrium calculations Yan W.	INVITED LECTURE An Assumption to Simplify the Modeling of Oil-Refrigerant Mixtures in Thermodynamic Cycles Leclercq N. , Lemort V.	INVITED LECTURE On the intersection of Thermodynamics and Machine Learning for Designing Sustainable Refrigerant Blends Alkhatib I. I. I. , AlAli S., Vega L. F.
11:30-12:55	Vapor-Liquid-Liquid Equilibria and Their Related Interfacial Properties for Ternary Aqueous Mixtures Ulloa A., Cartes M., Alonso G., Mejia A.	Integrated COSMO-RS and soft-SAFT Modelling for the Pre-design of Deep Eutectic Solvents in Lignocellulosic Biomass Fractionation Rodríguez-Reartes S. B., Llovell E.	A Robust Algorithm for Generating Pressure-Temperature Phase Diagrams with Solid-Liquid Vapor Equilibrium Yang X. , Richter M.	Density and Speed of Sound Measurements of Asymmetric Oil-Refrigerant Mixtures Klink S., McLinden M., Richter M.	Molecular Simulation-Guided Design of Eco-friendly and Safe Refrigerant Blend Akula D., Kumar T. S., Choudhary N.
12:15	Interfacial Tension in Multiphase Systems Consisting of an n-Alkane or/and a 1-Alcohol with Carbon Dioxide Using Equilibrium Molecular Dynamics Simulations and Surface Light Scattering Zhai Z., Fröba A. P., Koller T. M., Sanchouli N., Zhao Y., Zhao Y., Gong M.	Solvent extraction of levulinic acid from its aqueous solution: A Monte Carlo simulation study Kapadiya P. , Adhikari J.	Inconsistencies in Entropy for the Reaction of Ammonium Carbamate ($\text{NH}_2\text{COONH}_4$) to CO_2 and NH_3 Determined by Equilibrium Measurements and Calorimetry Woodfield B. F., Tolley H. D.	Gas-Solubility Measurements of Refrigerants in Refrigeration-Oil Surrogates Using Raman Spectroscopy Luther F., Klein T., Fröba A. P., Richter M.	Thermodynamic Evaluation of Cubic Equations of State for Solid-Fluid Equilibrium Predictions in Deep-Cryogenic Mixtures Wang X., Zhao Y., Gong M.
12:35	Thermophysical Properties of Paraffinic, Naphthenic, Polyalphaolefin and Ester Base Lubricants at High Pressures Villamayor A., Guimarey M. J. G., Mariño F., Lfiñeira del Río J. M., Urquiola F., Urchegui R., Comuñas M. J. P., Fernández J.	A Comprehensive Analysis of Thermophysical Properties of Nanofluids Falcone F. , Coccia G.	Solubility prediction and molecular modeling of pharmaceutical compounds and solvents with SAFT- γ Mie Bernet T. , Paliwal S., Boroujeni S. N., Brown F., Adjiman C., Jackson G., Galindo A.	Thermophysical Properties of Binary Mixtures of Refrigerants and Refrigeration-Oil Surrogates by Dynamic Light Scattering Rausch M. , Krug D., Richter M., Klein T., Fröba A. P.	Density measurements on mixtures relevant for hydrogen liquefaction processes Sellin J. , Kruse L., Span R.
13:00-14:00	Lunch				

	Room 1 (doors 1.07+1.08)	Room 2 (doors 1.09+1.10)	Room 3 (doors 2.08+2.09)	Room 4 (door 3.01)	Room 5 (doors 3.08+3.09)
14:00-15:20	Thermophysical Properties. Hydrates	Transport Properties. Thermal Conductivity Measurement	Advanced Experimental Techniques. Thermal Imaging	Advanced Materials Design and Characterisation. Radiative Cooling (II)	Thermophysical Properties. High-Temperature Materials (II)
14:00	Chaired by D. Meimaroglou Molecular insights into the growth/dissociation of CO ₂ /CH ₄ mixed hydrate: Effects of temperature, addition of NaCl, and CO ₂ Moorjani B., Chatterjee S., Adhikari J., Hait S.	Chaired by O. Herbinet Investigating Thermal Conductivity Anisotropy in Wurtzite Semiconductors: AlN, GaN, ZnO, ZnS Feulner S., Xu K., Wagner M. R., Graczykowski B., Linsels V., Reparaz J. S.	Chaired by M. Riva Coaxial 2D Imaging Method for Thermophysical Properties Using Lock-in Thermography Umeda S., Fujita R., Nagano H.	Chaired by D. Menegazzo Cool White: passive radiative cooling technologies for Africa Schumacher J., Rosemeyer T., Adibekyan A., Diergardt T., Peter A., Kleinbub M., Herzog H., Monte C.	Chaired by J. Joliat Interfacial reaction and reprecipitation mechanism between CaO-MgO-Al ₂ O ₃ -SiO ₂ melts and thermal barrier coatings Sano G., Tsukamoto K., Endo R., Watanabe T., Susa M.
14:20	Predicting the Melting Point of THF Hydrate Using Metropolis Monte Carlo Simulations Kapadiya P., Moorjani B., Adhikari J.	On the Effect of Heater Heat Capacity on Thermal Conductivity Components Estimation of Composite Materials when using the Plane Source Method D'Alessandro G., Pacheco C.	In-Situ Detection of Subsurface Defects in PBF-LB/M using High-Speed Infrared Thermography Höflin D., Sauer C., Hartmann J.	Impact of Low-Emissivity Paints and Films on Radiative Heat Transfer, Thermal Comfort, and Energy Demand: Experimental Characterization and Numerical Simulations Sciurti G., Morselli N., Puglia M., Muscio A.	Thermophysical Properties of High-Performance Carbon Insulation for Space Applications Ebert H.-P., Wiener M., Manara J.
14:40	Study of CO₂ solubility in hydrate inhibitor systems: Ethylene Glycol + Methanol Costa M., Medeiros H. D., Feitosa F. X.	Thermal Conductivity Prediction Model Based on Hidden Scale Invariance Wang X., Zhao Y., Gong M.	Noncontact Measurement of Interfacial Thermal Resistance in Three-Layer Laminates Using Lock-in Thermography Tanaka K., Fujita R., Nagano H.	All-day Passive Radiative Cooling Performance of Porous Materials: Anodic Aluminium Oxide and Cellulose-derivative Networks Manzano C. V., Díaz-Lobo A., Martín-González M.	Optical properties of Cr₂O₃ as a foundation for radiative transfer modeling in chromia-forming alloys Tolosa-Lecea I., Gabirondo-López J., Sainz-Menchón M., González de Arieta I., Igartua J. M.
15:00	Condensate Effects on Gas Hydrate Equilibrium and Nucleation Behaviour Li C., Sakurai S., Norris B., May E.	Liquid Viscosity Measurements for 3,3,3-Trifluoropropene (R1243zf) and its Binary Mixtures with 1,1,1,2-Tetrafluoroethane (R134a) at Pressures up to 40 MPa Ji H., Wang S., Wan J., Yang J., Wu J., Meng X.	Anisotropic Approximation to Layered Samples with the Transient Plane Source Landry D. M., Robson K. F.	Radiative Cooling Performance of Nanostructured PMMA inside Anodic Aluminium Oxide Iglesias-Elcano A., Moreno Sanabria L., Schneider M., Worgull M., Martín-González M., Manzano C. V.	Advancing Discharge Crucible Measurements Through Bayesian Experimental Design and Wetting Modeling Jonas Vallotton, Quentin Champdoizeau, Hani Henein
15:30 – 16:30	Farewell coffee and ECTP 2026 ending				



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Posters with <u>pitch</u> on Monday June 22				
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1	Wang F., <u>Sfarra S.</u> , Ibarra-Castanedo C., Liu Y., Maldague X.	Thermal Diffusivity Estimation in CFRP and GFRP: A Comprehensive MWIR–LWIR Comparative Study in Reflection and Transmission Pulsed Thermography		17:20 – 17:23
2	<u>Strasser C.</u> , Hartmann J.	Thermal conductivity of an amine-based epoxy resin during curing		17:25 – 17:28
3	Sainz-Menchón M., <u>González de Arrieta I.</u> , Cosson L., Rozenbaum O.	Emissivity of porous alumina membranes: phase transitions and spectral selectivity		17:30 – 17:33
4	Kang J., Nguyen V. P., Lee S. M., <u>Kim D.</u>	Platinum-ALD-Modified Graphene Aerogels for Ultralight Thermal Management		17:35 – 17:38
5	Rowley F., Qustv H., <u>Trusler M. J. P.</u>	Understanding solubility limits of amino-acid salt solutions for post-combustion carbon capture		17:40 – 17:43
6	<u>Gupta S.</u> , Jander J., Ratka M., Bonten C., Klein T., Schmidt P., Fröba A. P.	Fick Diffusion Coefficients and Solubilities in Blowing-Agent-Loaded Polypropylene Melts		17:45 – 17:48
7	<u>Senadeera K.</u> , Kankanamge C., Klein T., Fröba A. P.	Diffusivities in Ternary Electrolyte Mixtures		17:50 – 17:53
8	<u>Rhee J. E.</u> , Ryu B. C., Hwang S. Y., Kang J. W.	A Sigma-Profile Prediction Method based on Graph Convolution Network Extended to Silicon-containing Compounds		17:55 – 17:58
9	<u>Knöbel E.</u> , Thol M., Vinš V., Štejfa V., Jäger A.	Investigation of the performance of the LKP-SJT EOS by replacing the base fluids for modeling HFE300, Novec649, CO ₂ and their mixture		18:00 – 18:03
10	<u>Součková M.</u> , Čenský M., Prokopová O., Blahut A., Hrubý J., Vinš V.	Surface Tension of Binary Aqueous Mixtures with Salts Including the Supercooled Metastable Region		18:05 – 18:08
11	Shandy A. N., Hemberger F., Vidi S., Zipf M., Manara J., Hartmann J.	Convolution and FFT Modeling for new LFA application fields		18:10 – 18:13
12	<u>Rosemeyer T.</u> , Adibekyan A., Gieseler J., Fehse D., Häfner R., Monte C.	Emissivity measurements at PTB: development of a new spherical enclosure		18:15 – 18:18
13	<u>Nishiyama T.</u> , Yamauchi H., Akasaka R., Gao L.	Measurements of the Liquid-Phase Speed of Sound for R1132(E) at Temperatures from 10 to 80 °C and Pressures up to 10 MPa		18:20 – 18:23
14	<u>Kondou C.</u> , Nishifuji T.	Influence of Interfacial Enrichment on the Prediction of Surface Tension for Fluid Mixtures: A Molecular Dynamic Simulation Study		18:25 – 18:28
15	<u>Herrera J.</u> , Cartes M., Mejía A.	Thermophysical Properties Of Methyl Butirate+ Diethyl Carbonate Binary Mixture		18:30 – 18:33
16	<u>Lin G.</u> , Bernardini L., Luther F., Trusler M. J. P., Richter M.	A Reference Standard Raman Spectrometer for the Determination of the Hydrogen Isomer Composition		18:35 – 18:38
17	<u>Sprick M.</u> , Raabe G.	Force Field Development of Organometallic Compounds for Solvation Free Energy prediction		18:40 – 18:43
18	<u>Medina-Cid B.</u> , Mejía A.	Prediction of liquid-liquid-liquid phase equilibrium		18:45 – 18:48
19	<u>Bourges C.</u> , Le Mener M., Berckmans W., <u>Courtois E.</u> , Pierre T., <u>Courtois M.</u>	Carmélide: a new microgravity facility for measuring the viscosity of liquid metals at high temperatures		18:50 – 18:53

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21	Costa M., <u>Medeiros H. D.</u> , Feitosa F.	Joule-Thomson coefficient from hydrate inhibitor systems: methanol + methane case
22	<u>Lee S.</u> , Kim D., Lee S., Kang W., Kwon S.	Measurement of Isobaric Heat Capacity of Difluoromethane / Trifluoriodomethane Binary Mixtures
23	Mombeini D., <u>Blabus H.</u> , Chittem P., Schmidt P., Koller T., Rausch M., Adschiri T., Yoko A., Fröba A. P.	Effective Thermal Conductivity of Cyclohexane-Based Nanofluids Containing Cerium Dioxide Nanoparticles
25	<u>Ji H.</u> , Zhou X., Wang S., Yang J., Wu J., Meng X.	Viscosity Measurements of Binary Hydrogen Gas Mixtures Containing Nitrogen and Carbon Dioxide at Temperatures from (243 to 573) K and Pressures up to 20 MPa
26	Vera W. T., <u>Medeiros H. D.</u> , Feitosa F., de Sant'Ana H.	Revealing phase equilibria and the quadruple point in the CO ₂ + o-terphenyl system under high-pressure and high-temperature conditions
27	<u>Kapadiya P.</u> , Adhikari J.	Prediction of thermodynamic properties of m-cresol: Comparison of TraPPE-UA and OPLS-AA force fields
28	<u>Kapadiya P.</u> , Adhikari J.	Prediction of Henry's law constants for CO ₂ and CH ₄ in Levulinic acid via different Monte Carlo approaches
29	Shuaib A., Adhikari J.	Molecular Insights into "Sugaring out" of Acetonitrile from Its Aqueous Solution via addition of n-alkanols
30	<u>Hadjadi R.</u> , Joliat J., Vilas-Boas S., Herbinet O., Lasala S.	Thermochemical screening of reactive working fluids for energy conversion cycles
31	Santos J. P., Zelenovskii P., Figueiredo F., <u>Abranches D. O.</u>	Predicting and Understanding Peptide Aggregation using Stochastic Machine Learning
32	<u>Šteifa V.</u> , Kocian Š., Fulem M., Růžicka K.	The Contribution of Vapor Pressure Measurement to Unravelling of Polymorphic Behavior of Organic Compounds
33	<u>Cassiède M.</u> , Stenby E., Yan W.	High-pressure pH measurements for assessing chalk reactivity under CO ₂ storage conditions
34	Strasser C., Moukhina E., Hartmann J.	Degradation of an amine-based epoxy resin
35	<u>Kim Y.-G.</u>	Measurement of the melting-freezing transition temperature of palladium
36	<u>Bond E.</u> , Arellano Y., Trusler J. P. M.	Properties of pure and impure carbon dioxide for application in CCS
37	Prokopová O., <u>Čenský M.</u> , Blahut A., Vinš V.	Viscosity of Selected Reference Liquids and New Data for Hydrofluoroethers Measured with Rotational Viscometers
38	<u>Blahut A.</u> , Prokopová O., Lukianov M., Vinš V., Hrubý J.	Water-glycerol - density measurements entering supercooled region
39	<u>Khaddadi S.</u> , Herbinet O., Bounaceur R., Lasala S.	Generative and Predictive Approach for the Design of Energy Fluids Using Deep Learning

40	Fabian J., <u>Alcantara M.</u> , Sosa F., Coutinho J.	Experimental long term thermal stability of ionic liquids with minimum TGA experiments
41	<u>Zhu C.</u> , Feng C., Li C., Yang T.	Application of PC-SAFT EoS to DES systems with a Group Contribution Method
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44	<u>Kebou M. K.</u> , Lasala S., Bounaceur R., Herbinet O.	Predictive approach to the thermodynamic properties of working fluids using machine learning models
45	Altoé F. S., Blanco G. G., Dias R. M., Vilas-Boas S. M., da Costa M. C.	Influence of γ -Valerolactone on the Flash Point of Fatty Acid Ethyl Ester Mixtures
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47	<u>Barwood M.</u> , Falloon P., May E.	Accurate Predictions of the Fugacity of Pure Molecular Solids
48	<u>Falloon P.</u> , Zhu D., Norris B., May E.	Overview of the ThermoFAST Software Package
49	<u>Hou X.</u> , Li F., Xue J., Fan A., Zhang Y., Zhang F., Ma W., Zhang X.	Mechanism of Edge Hot-Spot Formation in GaN HEMTs: Multiphysics and Trap-State Modeling
50	Yang T., <u>Zhu C.</u> , Shen J.	Thermophysical Properties of Normal Hydrogen Probed by Monte Carlo Simulation
51	Costa S. F. M., Guimarães M. D., Abranches D. O., Ferreira A. M., Coutinho J. A. P., <u>Pinho S. P.</u> , Ferreira O., Martins M. A. R.	Machine learning-driven discovery of environmentally friendly solvents for polylactic acid recycling
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57	Aravena A., Morandim-Giannetti A., Olivieri G., Morgon N., <u>Torres R.</u>	Thermodynamic, spectroscopic, and computational studies of binary mixtures containing water + ionic liquid (IL) n-butylammonium propanoate (N4Prop)
58	Fernandes R., Olivieri G., Miranda V., Morgon N., <u>Torres R.</u>	Thermodynamic, spectroscopic, and computational approach of binary mixtures containing gamma-valerolactone (GVL) and alcohols
59	Krasovic P., Ramos B., <u>Torres R.</u> , dos Santos R., Olivieri G.	Process Simulation of a Thermodynamic Cycle Operating with Reversible Chemical Reactions
60	Panas A. J., <u>Omen L.</u> , Merillas B., Szczepaniak R., Kowalski M.	Investigation of the apparent thermal diffusivity of polyurethane aerogel using a modified method of temperature oscillation





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