



The 21<sup>st</sup> European Conference on Thermophysical Properties (ECTP) will take place at Graz University of Technology from 3<sup>rd</sup> to 8<sup>th</sup> September 2017. It is organized by the Thermophysics and Metalphysics group of the Institute of Experimental Physics at TU Graz, with the help of ÖGI Leoben and of AIT, Vienna.

After the deadline for abstract submission, a summary of current activities is reported below.

## 1. Analysis of Submissions

**Oral contributions.** We accepted 216 abstracts for oral contributions (see Table 1). Authors were informed of the final decision regarding their presentation format by 26<sup>th</sup> of April.

Due to the large number of proposed oral presentations, there are 5 parallel sessions (once increasing to 6 parallel sessions).

**The time for oral contributions will be strictly limited to 15 minutes for the presentation and 5 minutes for the discussion!**

As we want to encourage the discussion, we ask you to keep to the allotted time. In relation to the large number of parallel presentations, session chairs will strictly enforce timing.

**Poster contributions.** We accepted 132 abstracts for poster contributions (see Table 1). Authors were informed of the final decision regarding their presentation format by 26<sup>th</sup> of April.

**The poster format will be A1 (594 mm width x 841 mm height).**

The posters must be mounted at the beginning of the conference and taken off at the end of the conference. All the posters will be displayed together in the same location (a map for the location of posters within the three story atrium with a glass roof will be provided). Attendees will be encouraged to look at the posters on two specific poster sessions, one on Monday and one on Tuesday. Material to fix your poster like adhesive tape or pins will be provided by the organizers.

The geographical distribution of all authors appearing in the submissions is shown in Table 2.

**2. Preliminary program.** A tentative program is shown in Table 3. Please note that it is a very preliminary version to be updated frequently. Please check the most recent version at <https://ectp2017.tugraz.at/files/ECTP-schedule.pdf>.

The conference will take place mainly in the physics building. The postal address is Petersgasse 16, 8010 Graz. Three sessions will be in other buildings close by. Please consult the menu link “venue” on our homepage: <https://ectp2017.tugraz.at/?s=venue>.

Please consult the indicated pages frequently for updates. Maps of the different floors of these buildings will be available there, as well as a site plan and details about the public transport network.

**Important note.** Upon registration at the conference website, you will get a 4 day ticket for public transport. It will be valid for 4 days after the first use.

The registration and welcome reception are on Sunday, September 3<sup>rd</sup>. Location: On the ground floor of the physics building, there will be signs to take you to the registration desk.

Coffee breaks will be on the first floor in front of the main lecture hall P1, from Monday to Thursday. Lunch will be in buffet style on the ground floor.

A visit to Castle Eggenberg is planned for Wednesday afternoon, including a visit to the Clock Tower. You are also welcome to join one of the guided city-walks. Use the public transport card to reach the different locations. Exact plans and time schedules will be available later on.

Everybody is welcome to the conference dinner in the Grazer Congress Stephaniensaal (Sparkassenplatz 1, 8010 Graz) on Wednesday evening at 19:00. The Lifetime Award presentation will take place during the dinner. Do not miss it!

The preliminary program shows all the scientific sessions. There will be three plenary lectures and six invited lectures.

The Young Scientist Award Ceremony will take place on Thursday after the plenary talk.

**Important Deadline.** End of early-bird registration is on May 31<sup>th</sup> 2017.

Please visit: <https://ectp2017.tugraz.at/> frequently for updates and more information.

We are looking forward to seeing all of you in Graz this summer!

*For the Local Organizing Committee*

Gernot Pottlacher

## Table 1: Accepted abstracts

| TOPIC   | ORAL | POSTER |
|---|------|--------|
| Biomaterials  | 0    | 1      |
| Emittance, Emissivity                                   | 10   | 2      |
| Engineering applications                                | 6    | 11     |
| Equation of state                                       | 4    | 5      |
| Fluids and properties fluids                            | 46   | 35     |
| Instrumentation and measuring techniques                | 25   | 11     |
| Ionic liquid and properties ionic liquids               | 13   | 13     |
| Materials   | 8    | 6      |
| Nanomaterials   | 7    | 3      |
| New measuring techniques                                | 5    | 1      |
| Optical and thermal radiative properties                | 5    | 0      |
| Phase equilibria  | 20   | 19     |
| Photothermal and photoacoustic thermophysics properties | 3    | 2      |
| Properties for materials science at high temperatures   | 24   | 5      |
| Solids and properties solids                            | 6    | 5      |
| Standard data and standard materials                    | 6    | 0      |
| Thermal insulation                                      | 3    | 2      |
| Theory and modelling                                    | 15   | 11     |
| Invited   | 6    |        |
| Plenary   | 3    |        |
| Prize   | 1    |        |
|   | 216  | 132    |

# Plenary lectures

**Christof Gaiser**

Physikalisch-Technische Bundesanstalt Institut Berlin, Germany

*“New SI” - Temperature and the Boltzmann constant*

**Andreas Mandelis**

Center for Advanced Diffusion-Wave and Photoacoustic Technologies (CADIPT), Dept. of Mechanical and Industrial Engineering, Univ. of Toronto, Canada

*Photothermal Coherence Tomography: Principles and Applications of a New Thermophysics-Based Three-Dimensional Imaging Methodology*

**Wolfgang Schützenhöfer**

Department Testing Laboratories, BÖHLER Edelstahl GmbH & Co KG, Kapfenberg, Austria

*Numerical Simulation as an Optimization Tool at a Special Steel Producer (Böhler Edelstahl)*

## Invited talks

**Boris Wilthan**

Thermodynamics Research Center, Material Measurement Laboratory, Protiro @ National Institute of Standards and Technology, Boulder CO, USA

*A free online NIST/TRC Resource for Thermophysical Property Data of Metals and Alloys*

**Douglas M. Matson**

Tufts University, Medford MA, USA

*In-Situ Property Measurement for Selection and Control of convection in EML Space Experiments*

**Hiroyuki Shibata**

IMRAM, Tohoku University, Sendai, Japan

*Thermal diffusivity measurement for metallic and oxide glasses using a laser flash method*

**Michal Fulem**

University of Chemistry and Technology, Prague, Czech Republic

*Thermodynamic properties and phase behavior of molecular crystals – theory and experiment hand in hand*

**Manuel J Monte**

University of Porto, Portugal

*Estimation of phase transition properties of halogenated benzenes*

## Table 2: Geographical distribution of authors

| COUNTRIES      | PARTICIPANTS |
|----------------|--------------|
| Algeria        | 4            |
| Arab Emirates  | 1            |
| Australia      | 1            |
| Austria        | 10           |
| Belgium        | 6            |
| Brazil         | 5            |
| Canada         | 5            |
| China          | 44           |
| Czech Republic | 11           |
| Egypt          | 1            |
| France         | 11           |
| Germany        | 52           |
| Great Britain  | 12           |
| Greece         | 2            |
| Hungary        | 2            |
| India          | 3            |
| Iran           | 1            |
| Italy          | 8            |
| Japan          | 53           |
| Malaysia       | 1            |
| Mexico         | 6            |
| Poland         | 8            |
| Portugal       | 20           |
| Russia         | 16           |
| Sweden         | 1            |
| Serbia         | 1            |
| Slovakia       | 4            |
| Spain          | 12           |
| South Africa   | 2            |
| South Korea    | 12           |
| Turkey         | 2            |
| Ukraine        | 1            |
| USA            | 16           |
| <b>33</b>      | <b>334</b>   |

## Table 3: Preliminary program

| ECTP 21 <sup>st</sup> European Conference on Thermophysical Properties |                    |                                |                                  |                           |   |                                    |   |                    |        |  |  |  |
|--|--------------------|--------------------------------|----------------------------------|---------------------------|---|------------------------------------|---|--------------------|--------|--|--|--|
| Graz, Austria, September 03 - 08, 2017                                 |                    |                                |                                  |                           |   |                                    |   |                    |        |  |  |  |
|  | Saturday 02.09.    | Sunday 03.09.                  | Monday 04.09.                    | Tuesday 05.09.            | Wednesday 06.09.  | Thursday 07.09.                    | Friday 08.09.                           |                    |        |  |  |  |
| 08:00  |                    |                                | Registration                     | Registration              | Registration  | Registration                       |   |                    |        |  |  |  |
| 09:00  | Satellite Meetings | IAPT Meeting<br>(members only) | Opening Ceremony                 | Invited Monte             | Invited Matson  | Plenary Lecture<br><b>MANDELIS</b> | Plenary Lecture<br><b>SCHÜTZENHÖFER</b> | Satellite Meetings |        |  |  |  |
| 10:00  |                    |                                | Plenary Lecture<br><b>GAISER</b> | Invited Shiflett          | Invited Wilthan   | Coffee                             | Young Scientist Award                   |                    |        |  |  |  |
| 11:00  |                    |                                | Invited Fulem                    | Invited Shibata           | Oral Session 3<br>8 Talks   | Oral Session 5<br>9 Talks          | Coffee                                  |                    | Coffee |  |  |  |
| 12:00  |                    |                                | Oral Session 1<br>6 Talks        |                           |   |                                    | Oral Session 6<br>7 Talks               |                    |        |  |  |  |
| 13:00  |                    |                                | Lunch Buffet                     | Lunch Buffet              | Lunch Buffet  | Closing Ceremony                   |   |                    |        |  |  |  |
| 14:00  |                    |                                | Posters & Coffee                 | Posters & Coffee          | Citywalk,<br>Castle Eggenberg,<br>see the Clocktower<br>before the Conference<br>Dinner | Satellite Meetings                 |   |                    |        |  |  |  |
| 15:00  |                    |                                | Oral Session 2<br>8 Talks        | Oral Session 4<br>8 Talks |   |                                    |   |                    |        |  |  |  |
| 16:00  |                    |                                |                                  |                           |   |                                    |   |                    |        |  |  |  |
| 17:00  |                    | Registration Desk opens        |                                  |                           |   |                                    |   |                    |        |  |  |  |
| 18:00  |                    | Welcome Reception              | a b c d e                        | a b c d e                 |   |                                    |   |                    |        |  |  |  |
| 19:00  |                    |                                |                                  |                           |   | Conference Dinner                  |   |                    |        |  |  |  |