The idea of livMatS is to unify multiple branches of materials science in one project, and to develop multifunctional material systems using an interdisciplinary approach. Covid-19, which has been present for the majority of the project duration so far, has put a damper on interactions between researchers at livMatS. But even without Covid, not everyone works in the same building, during the same hours, and there are many young researchers that just have not had the chance to meet their peers properly yet.

The main goal of this PhDs-only retreat was to jump-start the interaction between PhD candidates, so that it may become more frequent, voluntary and fruitful in the future. The framework — a venue outside the city with the option of staying overnight, joint meals, evening activities and a hike in the Black Forrest — were designed to maximise the opportunity for meeting, talking and getting to know each other. But the retreat was meant to go beyond the basic hello-and-what's-your name. After a welcome and icebreaker activity, team building activities took center stage on day one.

Split into three groups, the participants rotated through a parkour for the senses, an egg drop challenge and a team effort to rescue items from an imaginary geyser. Each task tested the teams' abilities to cooperate in different ways. The parkour for the senses focused on communication of individual observations in smell, touch, hearing, tasting and seeing, and in each case arriving at an agreement as to the true nature of an otherwise obscured object or substance. The egg drop challenge was an engineering task under time and budget limitations. For a "Mars lander" that would break the fall of a raw egg dropped from a height onto concrete, teams had to come up with a design, agree on the materials to procure with their budget, and finally build the contraption within the set time frame. For the geyser rescue, each team was equipped with ropes, harnesses, poles, a ladder and various other hardware and challenged to retrieve three objects from within an area on the ground that was out-of-bounds for stepping in or touching.

Both of the action-related tasks saw creative and diverse team solutions that showed where collaboration had worked and where it hadn't. In addition, attendees had the chance to reflect on one's own and others' roles in a team, and to see what types of challenges and what types of colleagues one was most compatible with. Overall, the team building exercises were seen as a welcomed experience by the young researchers, and many participants found explicit praise for the coaches of Zwerger & Raab

The second day saw three parallel soft skills workshops - time management, conflict management and scientific writing. These topics were chosen by the students themselves as essential skills to successfully complete a PhD. Our formal training and academic studies rarely assumed that we either possess them already or learn them by ourselves. Yet so much depends on organising your own time within a PhD project, having a good working relationship with your colleagues, and documenting your work in a way that will get you published and your thesis accepted. Having professional

coaches give brief introductions to these topics was an opportunity to start making up for this gap between expectation and reality.

Feedback from the participants was resoundingly positive. People saw both the team building and the soft skills workshops as valuable to their life and work as a PhD candidate. Most people were keen to see the event repeated, and many expressed the wish to take part in those workshops that had run in parallel to their own.

This summary is adapted from a full report compiled by Young Researcher‘s Panel, whose members are:

- Christian Diestel
- Jasleen Lall
- Dennis Rusitov
- Sabrina Livanec
- Peter Kappel