

# European CMetAC

## ECMetAC Newsletter No. 6

June 2021

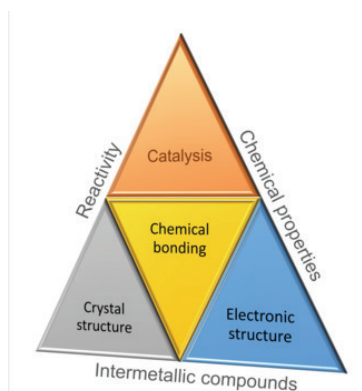
Dear colleagues of the ECMetAC network,

If we look up in the clear blue sky, there are indeed more or more planes passing by. Although caution is required, there are many signs that allow us to be optimistic! Before the summer break, several events will be organised on dedicated subjects. To keep up-to-date with the different workshops and conferences, we invite you to visit regularly our website.

Have a nice summer and stay healthy,

Julian Ledieu, Ronan McGrath,  
Marc Armbrüster, Jean-Pierre Celis  
and Émilie Gaudry

Catalysis Workshops– online



“Dear ECMetAC-Members, following the great experience and versatile activities during the Euroschool2021, we would like to invite you to online RAD Catalysis Meeting on July, 13. The meeting program will consist of short presentations of ECMetAC members in the field of heterogeneous catalysis and electrocatalysis, covering different type of reactions as well as different aspects of the catalyst materials. The short scientific discussions after presentations with following round-table discussion

will aim the enhancement of collaborations between the ECMetAC members, bringing different expertise to the origin of possible future research projects. Please register for this event (as contributor or listener) until July, 02 via sending E-mail to [Iryna.Antonyshyn@cpfs.mpg.de](mailto:Iryna.Antonyshyn@cpfs.mpg.de).

We are looking forward to have a wonderful and fruitful exchange in Catalysis.”

*Related recent publication:*

### **Hf<sub>2</sub>B<sub>2</sub>Ir<sub>5</sub>: a self-optimizing catalyst for the oxygen evolution reaction**

Ana M. Barrios Jimenez, Ulrich Burkhardt, Raul Cardoso-Gil, Katharina Höfer, Simone G. Altendorf, Robert Schlögl, Yuri Grin, Iryna Antonyshyn

*ACS Appl. Energy Mater.* 3 (2020) 11042-11052

[DOI: 10.1021/acsaem.0c02022](https://doi.org/10.1021/acsaem.0c02022).

Feedback from the ECMetAC EuroSchool 2021 – online.



‘ECMetAC Euroschool 2021: **Complex Intermetallic Compounds for Applications**’ was successfully held online from 24-28 May 2021, hosted by the University of Liverpool.

<https://ecmetac.eu/>

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The Euroschool trained PhD students and new researchers in the field of complex metallic alloys, focusing on potential applications of these materials in various areas such as materials for energy (catalysts, thermoelectricity, magneto-calorimetry), thin films and coatings, mechanical properties, additive manufacturing materials and magnetic properties. Altogether 28 young researchers from 17 institutes of 8 countries attended the event and 15 international experts in the field presented lectures and learning activities. In addition to the academic activities, the school offered sessions on communication and negotiation skills for researchers (organised by the equality and diversity group of the ECMetAC and trained by external experts), scientific publication and peer-review process (lecture given by an American Physical Society associate editor), and career opportunities (presentation by ex-PhD students of the ECMetAC). Hem Raj Sharma chaired the event.



Student feedback suggested that the Euroschool was appreciated for:

- the tutorials after the lectures:
- the knowledge obtained with specific tools,
- the possibility of establishing cooperation, The lectures on career development and on publishing articles have been especially relevant.

The event was followed by an online satellite meeting on “Materials for Energy” organised by Prof. S. Bühler-Paschen on Monday 31<sup>st</sup> 2021. After an introduction by the RAD leader Silke Bühler-Paschen it featured short presentations by Eteri Svanidze (MPI CPfS), Karol Synoradzki (Institute of Molecular Physics, Polish Academy of Sciences), Gaku Eguchi /Institute of Solid State Physics, TU Wien), and Michael Baitinger (MPI CPfS Dresden), followed by lively discussions. At focus were thermoelectric materials and ongoing and new collaborations within the network.

*Related recent publication:*

## **Pristine quantum criticality in a Kondo semimetal**

Wesley T. Fuhrman, Andrey Sidorenko, Jonathan Hänel, Hannes Winkler, Andrey Prokofiev, Jose A. Rodriguez-Rivera, Yiming Qiu, Peter Blaha, Qimiao Si, Collin L. Broholm and Silke Paschen.

*Science Advances* 19 May 2021:  
Vol. 7, no. 21, eabf9134

[DOI: 10.1126/sciadv.abf9134](https://doi.org/10.1126/sciadv.abf9134)

<https://advances.sciencemag.org/content/7/21/eabf9134/tab-pdf>

ECMetAC Days 2021 – **NEW dates!!**



The ECMetAC Days 2021 will be organised by the University of Split from **6<sup>th</sup> – 9<sup>th</sup> December 2021**. More information will be available on our website after the summer.

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## Related Upcoming Events

### *1st International School on Hypermaterials*

#### **Registration is now open**

The 1<sup>st</sup> school on Hypermaterials will be held jointly with the IRN Aperiodic and organised online from 21<sup>th</sup>-25<sup>th</sup> June 2021. "Hypermaterials" is the name of a research project that is being conducted in Japan from 2019 to 2023. This project aims at establishing a new concept of substances, "hypermaterial", which is a high-level concept that includes the existing concept for substances, and also at creating a new theory that incorporates the concept of hypermaterial. The targeted audience is clearly a non-specialist: Master and PhD students, young or experienced scientists working in the field of crystallography, chemistry, material science or solid state physic and willing to have a basic understanding of hypermaterials. For more details, visit the [website](#).

### *Kick-off meeting IRN Aperiodic*

#### **Abstract submission is now open**

*Abstract submission: July 5th*

*Registration: July 16th*

The 2021 meeting of the IRN-Aperiodic will be held in an hybrid form in Carry le Rouet France and online 3-7 October 2021. More information on the [website](#).

### *25<sup>th</sup> Congress of the IUCr*

*14th-22nd August 2021-01-22, Prague,  
Czech Republic <https://iucr2020.org/>*

## Missing Content?

If you have any news items for circulation, either on our website or in this newsletter, please send them to Julian Ledieu.

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## Imprint

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