

# Geneva chemistry & biochemistry days

2021

TH 14 January 2021, 09:00–16:20

FR 15 January 2021, 09:00–11:50

**LIVE STREAMING VIRTUAL EVENT**

<https://bit.ly/2KTSpEU>

No registration required

**Prof. Yves Barral**

Eidgenössische Technische Hochschule Zürich

**Prof. Jonathan Clayden**

University of Bristol

**Dr Ivano Tavernelli**

IBM Research Zürich

**Prof. Oliver Wenger**

Universität Basel

Junior Speakers:

- Jafar Afshani Aghajari • Mireia Andreu-Carbó • Ryo Asakura •
- Ewa Banach • Lluc Farrera Soler • Michele Garbo • Daniel Hummel •
- Pitchnaree Kraikaew • Canwei Mao • Rémi Martinent • Manon Mottet •
- Johann Nuck • Pavol Ondrisek • Rémi Patouret • Anh-Tuan Pham •
- Niccolo Ricardi • Yanan Wang •

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FACULTÉ DES SCIENCES  
**SECTION DE CHIMIE ET BIOCHIMIE**



**UNIVERSITÉ  
DE GENÈVE**

## FOREWORD

The *Section de chimie et biochimie*, University of Geneva, has the pleasure to announce the 11<sup>th</sup> edition of its “**Geneva Chemistry & Biochemistry Days**”. Due to the sanitary situation, the event will be held at distance, via the Zoom interface (<https://unige.zoom.us/j/92682442652> + code **G CBD2021**) or directly <https://bit.ly/2KTSpEU>; see tips on page iii), but we are convinced that the spirit of the event will not be impaired by this mishap.

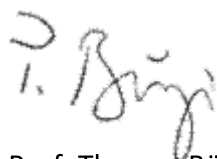
The vocation of the event is to give our students who are close to finishing their PhD studies the opportunity to present their research as attractive speed talks to an audience from academia and industry, and the steering committee is glad to welcome you in this context.

Four distinguished lecturers further enrich the programme. Our four departments have invited them, and they will illustrate the extent and the quality of top-level fundamental research in chemistry and biochemistry today.

Our BSc and MSc students are welcome to smell the very flavour of the research held in our School and abroad, and to learn a bit more about how to present punchy results to a scientific audience.

We expect that the event will catalyse fruitful discussions between young and advanced researchers, and give our students an opportunity to get ready for their professional career, yet offering our guests an overview of the quality of the fundamental research performed in our School.

Looking forward to welcoming you at this event, we hope that you will enjoy the lectures and interactions!



Prof. Thomas Bürgi  
*Président de la Section de chimie et biochimie*

## Steering and organising committee

<b>Prof. Thomas Bürgi</b>	thomas.buergi@unige.ch <i>Président de la Section de chimie et biochimie</i>
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<b>Dr Didier Perret</b>	didier.perret@unige.ch <i>Responsable communication – Section de chimie et biochimie</i>

**PROGRAMME – THURSDAY, 14 JANUARY** <https://bit.ly/2KTSpEU>

Chair: **Prof. Karsten Kruse** (Senior Speaker)  
**Dr Huayan Yang** (Junior Speakers)

09:00- -09:05	<b>Prof. Thomas Bürgi</b>	Welcome message
09:05- -09:55	<b>Prof. Yves Barral</b> Eidgenössische Technische Hochschule Zürich	Ageing: Insights from a good old fungal friend
09:55- -10:10	<b>Lluc Farrera Soler</b>	Immunological epitope mapping of the SARS-CoV-2 spike protein
10:10- -10:25	<b>Jafar Afshani Aghajari</b>	Synthesis and luminescence properties of strontium aluminate nanospheres as long persistent phosphors
10:25- -10:40	<b>Mireia Andreu-Carbó</b>	Walking kinesins stabilize their microtubule tracks along the shaft
10:40- -11:00	Break	2 Discussion Rooms available from within the main Conference Room
11:00- -11:15	<b>Michele Garbo</b>	Access to optically active 7-membered rings by a 2-step catalytic sequence
11:15- -11:30	<b>Ewa Banach</b>	Photoswitchable Au <sub>25</sub> nanocluster assemblies
11:30- -11:45	<b>Canwei Mao</b>	Separating boundary potential changes at thin solid contact ion transfer voltammetric membrane electrodes
11:45- -12:00	<b>Rémi Martinent</b>	Oligomers of cyclic oligochalcogenides for enhanced cellular uptake
12:00- -13:30	Lunch break	2 Discussion Rooms available from within the main Conference Room

Chair: **Prof. Stefan Matile** (Senior Speaker)  
**Dr Luca Barberi** (Junior Speakers)

13:30- -13:45	<b>Johann Nuck</b>	Polydiacetylene-peptide interaction mechanism in mixed lipid systems
13:45- -14:00	<b>Daniel Hummel</b>	SH3 domains regulate spatio-temporal assembly of actin nucleation promoting factors in endocytosis
14:00- -14:15	<b>Pavol Ondrisek</b>	Modular synthesis of substituted cationic phenyl- and dicationic pyridinium- [4]helicenes
14:15- -14:30	<b>Niccolo Ricardi</b>	Frozen Density Embedding Theory: What densities can one use? What errors can one expect?
14:30- -14:45	Break	2 Discussion Rooms available from within the main Conference Room
14:45- -15:00	<b>Pitchnaree Kraikaew</b>	Ultra-sensitive pH measurements with a coulometric principle
15:00- -15:15	<b>Rémi Patouret</b>	Total synthesis of goyazensolide and identification of the first importin-5 inhibitor
15:15- -15:30	<b>Yanan Wang</b>	Amplification of enantiomeric excess by dynamic inversion of enantiomers in deracemization of Au <sub>38</sub> clusters
15:30- -16:20	<b>Prof. Jonathan Clayden</b> University of Bristol	Exploiting molecular conformation for biomimetic function and reactivity
16:20-	Evening break	2 Discussion Rooms available from within the main Conference Room

## PROGRAMME – FRIDAY, 15 JANUARY <https://bit.ly/2KTSpEU>

Chair: **Prof. Claude Piguet** (Senior Speaker)  
**Dr Elena Zdrachek** (Junior Speakers)  
**Prof. Tomasz Wesolowski** (Senior Speaker)

09:00- -09:50	<b>Prof. Oliver Wenger</b> Universität Basel	Photoactive coordination compounds based on Earth-abundant metals
09:50- -10:05	<b>Manon Mottet</b>	Single cell analysis unravels a perturbation of the cell cycle of the host <i>D. discoideum</i> during infection by <i>M. marinum</i>
10:05- -10:20	<b>Anh-Tuan Pham</b>	Peptide stapling with Anion- $\pi$ Catalysts
10:20- -10:35	Break	2 Discussion Rooms available from within the main Conference Room
10:35- -10:50	<b>Ryo Asakura</b>	4 V room-temperature all-solid-state sodium battery enabled by a passivating cathode/electrolyte interface
10:50- -11:40	<b>Dr Ivano Tavernelli</b> IBM Research Zürich	Quantum computing and its applications in chemistry and physics
11:40- -11:45	<b>Prof. Stefan Matile</b>	Awards for the best oral Junior presentations
11:45- -11:50	<b>Prof. Thomas Bürgi</b>	Concluding remark

### TIPS FOR A SMOOTH ZOOM EXPERIENCE

The event will be held at distance, via the Zoom interface. During the whole event, the main Conference Room will be <https://bit.ly/2KTSpEU>

From the main Conference Room, two parallel Discussion Rooms will be available; these Discussion Rooms can be accessed anytime during the event.

On Wednesday, 13 January, from 8:30 to 17:30, Junior Speakers and Senior Speakers are invited to **test connexion and screen sharing capabilities** in the conference room with the event administrator; please feel free to join!

On Thursday, 14 January, and Friday, 15 January, the Conference Room and the parallel Discussion Rooms will be open to the public from 8:30 to 17:30 (Thursday) and from 8:30 to 13:00 (Friday). Participants are invited to create additional parallel Discussion Rooms for their private use.

You can enter the Conference Room or the Discussion Rooms directly via your browser, but the quality of the broadcast may be limited under certain circumstances; for a better experience, it is recommended to download the autonomous Zoom engine via the Zoom Download Centre at <https://zoom.us/download>.

To guarantee a clear voice connexion, it is advised to use an external microphone or headset (e.g. USB-connected) instead of the built-in microphone/speaker mounted in your computer.

When reaching the Conference Room as a participant, please make sure that your microphone is switched to OFF. If you have a slow- or medium-speed connexion, you can increase the bandwidth by switching your camera to OFF.

The chairwomen, chairmen, and speakers will be granted administrator rights, to take over the screen-sharing option of Zoom at the beginning of their talk.