

Conference Report

«Wanted: Innovative Chemistry of Today, 2030 and Beyond»

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Discovered! Innovative Chemistry by Companies and Students in Basel

What happens when BaselArea.swiss, the Swiss Chemical Society and the two universities invite to a 5-hour event named «Wanted: Innovative Chemistry of Today, 2030 and Beyond»? A lot! About 90 people attended, 4 companies presented, 8 researchers pitched their projects within 3 minutes, 36 key topics and ideas were collected, and intense discussions continued even during the extended aperitif.

“We have many solutions, but don’t know the problems”, a PhD student said during the discussions. Despite that, two researchers from the University of Applied Sciences, Christian Berchtold and Johan Stenqvist, are already very close to transferring their ideas into new products. One uses catalysts to remove H₂O₂, the other developed an innovative method for dry blood sampling. Their ideas have been triggered by companies and are already – at least partly – implemented. Naturally, researchers of the University of Basel focus strongly on basic research, but they revealed the potential of breakthrough innovations like new cell-derived microcapsules – which are already filed for patent – or a light-induced immobilization for biochips.



Successful implementations of new chemistry were demonstrated by speakers of the four companies Spirochem, Synphabase, Idemitsu and Novartis. The fundamentals of success are manifold, but they always based on excellent chemical expertise. Proof to that rule: new cyclic compounds (Spirochem), process optimisation for demanding reactions like the Suzuki-Miyaura cross-coupling (Synphabase), novel molecules for organic light emitting diodes (Idemitsu) or identifying many new natural products to expand the idea range (Novartis). Innovative chemistry in Basel? Discovered!

How can the chemistry cluster in the Basel region become stronger and more visible and what could be done to realize innovative ideas faster and better? Those were the guiding questions of the interactive part. The very engaged discussions provided mainly one answer: increase exchange between universities and industry! But two directions are required: provide the universities with more relevant problems as well as show the industry better the capabilities and ideas of academia. Practical ideas ranged from mentoring programs, informal platforms and research funds to chemical co-working spaces.

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The chemical industry made Basel the innovative and rich region it is today. Many things have changed, but chemical skills and expertise seem to be still an important fundament of the region, even though we call it Life Sciences, Agro, Nano or Material Science. The time seems right to talk about molecules, reactions and novel products – in short: about chemistry. This event gave a first taste of what to expect in the future.

Titles and Speakers of the Presentations

Stories of inspiring «chemistry» in Basel by startups and companies

- «A successful startup with novel building blocks»
Thomas Fessard, CEO Spirochem
- «Innovative Chemistry – with SynphaBase»
Arthur Bodenmüller, CEO Synphabase
- «Novartis, Natural Products as shuttles to a new target...»
Frank Petersen, Executive Director Natural Products
- «A pirate in Switzerland»
Mathieu Turbiez, R&D Managing Director, Idemitsu

Titles and Speakers of the Pitches

- «From text book example to enzyme catalysis»
Sebastian Brickel, University of Basel
- «Personalized lifestyle monitoring»
Christian Berchtold, University of Applied Sciences HLS
- «Cell-derived materials – Closing the gap»
Tomaz Einfalt and **Martina Garni**, University of Basel
- «Water-Soluble Organic Fluorophores with unique Electrochemical and Photophysical Properties»
Christian Fischer, University of Basel
- «Making Biodegradable Plastic!»
Jens Gäitsch, University of Basel
- «Photocatalytic preparation of chiral sulfoxides»
Angelo Lanzilotti,
- «A Visible Light Enabled Immobilization Technique for Biochips»
Xingwei Guo, University of Basel
- «High Efficiency – Low Pressure Drop Catalyst»
Johan Stenqvist, University of Applied Sciences HLS



BaselArea.swiss is the office for promoting innovation and investment for the northwest cantons of Basel-Stadt, Basel-Landschaft and Jura. More information and their program on <https://www.baselarea.swiss>.