

Editorial



On August 6th, 1901, that is exactly 125 years ago by the time you have this issue of *CHIMIA* in your hands, five distinguished gentlemen (Profs. Alfred Werner, Eugen Bamberger, Otto Billeter, and Amé Pictet) met in Zofingen and founded the Swiss Chemical Society. The very first sentences in the bylaws expressed clearly their wishes to foster excellence in all areas of chemistry (article 1: *Die Schweizerische Chemische Gesellschaft stellt sich zur Aufgabe: a. die Pflege der Forschung auf allen Gebieten der Chemie*). I will leave it to you, to read the collection of articles from last year's awards laureates, to decide whether the aim of our founders is being respected.

And of course, there is no better way to honour their memory than by opening the symphony with the laureate of the **Alfred Werner Prize 2025**, Prof. Dmitry Katayev, who shows how to trap carbon-centered radicals with metal complexes to create new carbon-heteroatom bonds.

The team of *Stephan Bachmann* from F. Hoffmann-La Roche received the **Sandmeyer Prize 2025**, for the development of a production-scale route to Divarasib, an inhibitor of RAS GTPase involved in several forms of cancer, currently in late-stage clinical development. The challenge here is the occurrence of two centres, as well as an axis, of chirality. To circumvent a chiral-phase SFC separation, they developed an asymmetric Negishi coupling to install an atropisomeric aromatic moiety. Overall, their route represents a reduction of 95% of PMI with respect to the first generation.

Laureate of the **Grammaticakis-Neumann Prize 2025**, *Julian G. West* leads us through his work in photocatalysis, emphasizing that while understanding the excited state processes remains important, the study of the ensuing dark radical processes is the key for developing new reactions, such as the iron-catalysed hydrogenation of alkenes or the decarboxylative reduction of carboxylic acids using thiols or silanes as stoichiometric reductants.

Henrik Möbitz received the **Senior Industrial Science Award 2025**, for his outstanding work in medicinal chemistry. His account transcribes his adventures in the chemical space, observing, *inter alia*, that increasing the size of molecules would not necessarily lead to a reduction of oral bioavailability ('beyond the rule of five'), and that the computation of physico-chemical properties should take into account solvation and multiple conformations ('chameleonicity of molecules').

Another industrial award, the **Industrial Science Award 2025** was given to *Myriem El Qacemi*. Isothiazoles are bioisosteres of isoxazoles and are interesting heterocycles for agrochemical and pharmaceutical uses. They are however more challenging to prepare, and a new general route to convert propargylic sulfonamides into isothiazoles using a gold-catalysed reaction was designed.

The **Green & Sustainable Chemistry Award 2025** was awarded to *Jeremy Luterbacher*. In his article, he shows how to go beyond the conversion of biomass into fuels, e.g. by preserving the native structure of lignin to obtain higher added-value structures, such as bisphenol derivatives, vanillin, or bioactive molecules.

Recipient of the **Simon-Widmer Award 2025**, *Róbert Gyurcsányi* shares with us new ways of detecting viruses. Indeed, classical virus detection methods, such as PCR or immunologic assays rely on the identification of fragments and not the whole entity. A new approach would be the use of electrochemical sensors, coupled to microfluidics, whose current signature can be exploited for identification.

The contribution of *Philippe Dupau*, recipient of the **DIAC Fellowship Award 2025**, shows how to hydrogenate ketones using a ruthenium complex bearing an aminophosphine ligand (DPPAE). This catalyst is active in solventless reactions with exceedingly low loading (down to 0.0005 mol%)! Similar complexes, with different ligands represent an attractive alternative to sodium borohydride and lithium aluminium hydrides in the reduction of esters and lactones.

And finally, the **RGCC Cancer Drug Discovery Award 2025** was awarded to two laureates: *Zuzanna Kozicka*, who shows the multiple modes of action (beyond the classical inhibition of the active site) of kinases, ranging from allosteric binding to conformational changes, preventing chaperone protein binding or degradation; and to *Lukas Schneider* who discusses the topic of his PhD thesis, on Porphyrin-based photodynamic therapy based on the light-induced generation of singlet oxygen. A promising evolution of PDT is the photothermal therapy as it doesn't require oxygen; locally-generated heat by the light also leads to cell-death.

As you can see, the breadth of outstanding research carried out by our laureates is indeed extensive, going from catalysis to chemical biology, passing by computational chemistry and electrochemistry. Yes, we are definitely in line with 'article 1a' of our original 1901 bylaws!

Prof. Christian G. Bochet

President of the Swiss Chemical Society

The CHIMIA Editorial Board is grateful to *Prof. Christian G. Bochet* for his efforts in organising the *Swiss Chemistry Science Awards* issue and bringing together the prize winners from 2025.

Front Cover shows the prize winners of the Swiss Chemistry Science Awards 2025, ©SCS. Photographer, André Maurer Photography, Steffisburg, <https://www.andremaurer.ch>, E-mail: photo@andremaurer.ch