

Turning five

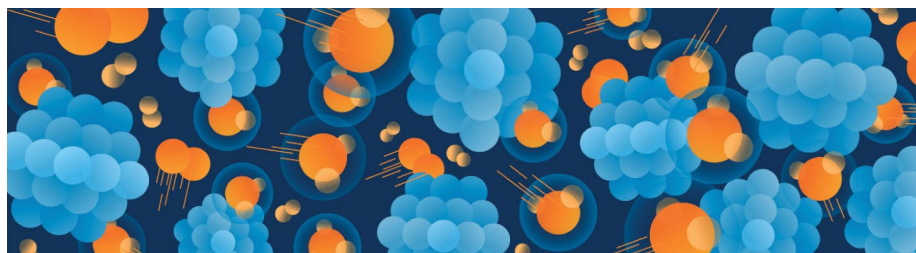
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As *Nature Catalysis* celebrates its fifth anniversary we reflect on some of the salient features of the journal up to this point.

January is traditionally the time of the year when we as a journal linger on the highlights from the previous months while preparing for the challenges ahead. This year, however, on the occasion of our fifth anniversary, we would like to reflect on the past years and take stock of those aspects that characterize what our journal has become today.

Perhaps the best place to start with is our first Editorial ‘Catalysis by nature’, which defined the ambitions and the early aims of the journal. Back then we highlighted the relevance of catalysis as a discipline with a large impact on society. In fact, when it comes to the production of materials, pharmaceuticals or energy vectors, catalysis plays a crucial role. As a logical extension, the editorial stated: “Owing to this extraordinary range of applications, *Nature Catalysis* will not only cover the basic sciences, but also accordingly provide coverage of advances of an applied nature.”

Nature Portfolio has a strong tradition in the coverage of basic research. Accordingly, the 474 Articles, 36 Reviews and 22 Perspectives featured in the first 60 issues of *Nature Catalysis* straddle a large spectrum of catalysis subdisciplines and address questions of immediate academic interest, which range from the mechanistic elucidation of enzymatic reactions to the structural characterization of single atom species in thermal and electrochemical catalysis, to name a few. However, we also covered areas beyond fundamental knowledge in catalysts, publishing articles dealing with progress in the application or engineering side of catalysis research. Clearly, defining the practical relevance of a scientific paper is not always straightforward and eventually even fundamental research may have direct implications for applied catalysis. Nonetheless, we are proud to note that 10% of the articles published in our first five years have been co-authored by a scientist affiliated with an industrial laboratory – an environment with appreciable interest in applications.



The 2018 Editorial continued, saying “*Nature Catalysis* aims to publish papers of broad interest that will not just interest researchers in that specific field – though they will of course remain the primary audience – but also be informative for people in nominally different areas of catalysis.” Over the years, we have remained aligned to our goal, making a constant effort to thrive more and more to be an outlet representative of the entire field. As we have already [stated in previous Editorials](#), the yearly proportion of articles published in a specific area generally correlates closely to the breakdown of the subjects of all submitted papers, confirming that the editorial office does not bias article selection based on specific research areas, but instead focuses on the specific advances of a study in the context of its subfield.

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Certainly, as editors we have not been completely agnostic but have tried instead to bring under the spotlight topics that we considered to be of pressing and general interest. To this end, we have been regularly curating special issues and collections focused on specific thematic areas, which we would like to briefly recall here, as they provide a taste of the variety of topics represented in the journal.

In 2019, our July issue focused exclusively on [catalysis for transportation](#), covering topics such as emissions control as well as the

production of renewable hydrocarbon fuels and fuel-cell-powered engines. Such topics are at the heart of [recent policies](#) that aim at transforming the transportation sector worldwide with a focus on sustainability. As further technological development is paramount to reach such goals, this will likely remain a vibrant area of research in the years to come.

The following year, we turned our attention to [artificial biocatalytic systems](#), presenting an Insight dedicated to approaches for the engineering of enzymes and microbes, with the aim of broadening their performance and range of applications and tackling important challenges such as the sustainable production of chemicals. Due to the advancements in synthetic biology, biocatalytic systems can now be programmed with ease and equipped with functions that are new to nature, enabling approaches that can impact food production, fixation of CO₂ and valorization of waste materials such as plastics.

More recently, we featured a [selection of articles](#) on catalytic processes for the conversion of CO₂-to-fuels with a particular focus on identifying some of the roadblocks to practical application, with potential to advance the climate goals of the Paris Agreement.

While our attention is constantly directed to scientific developments capable of impacting our future, we are also conscious that there is much to learn looking at the historical developments of catalysis. In this spirit, we recently initiated our [retro News & Views](#) project. This features a collection of short articles highlighting historical milestones in the field of catalysis, which is going to be regularly updated with further contributions.

Certainly, what *Nature Catalysis* has been able to cover in the past five years represents only a small portion of the exciting developments that the field at large has been able

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to produce. And yet we hope our contribution has been important for the community. We would like to conclude by thanking all our readers, authors and reviewers for their

support of our journal and for recognizing its value for the catalysis community. As a team we very much look forward to working with you in the coming years and continue to

witness the transformative impact of catalysis on society.

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