Natural Products: Source of Innovation



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Natural Products play a central role in Life Science for chemical innovation. Sources of natural products are as diverse as extraction from cells, tissues, and secretions of microorganisms, plants and animals. Nature provides a unique chemical diversity and complexity leading often to novel chemical compounds that stimulate chemical synthetic challenges and interest in academia and industry.

Life science is interested in the natural product itself, or a semi-synthetic derivative, or to use it as inspiration for synthesis, or to validate a new mode of action. Today, natural product research is increasingly going beyond synthetic chemistry expertise and includes investigation of biosynthetic pathways, isolation and structure elucidation and synthetic biology as a powerful new tool for the discovery and production of novel bioactive natural products.



Sarah Sulzai

Syngenta Crop Protection Research Center in Stein had the opportunity to host a fantastic and emulating symposium on Natural Products in collaboration with Swiss Chemical Society (SCS) on Oct. 5, 2017 (https://www.syngenta.ch/symposium-2017). It was a full day of cutting-edge lectures from internationally renowned speakers from academia and industries, discussing various aspects of natural products. To follow-up the SCS-Syngenta symposium, this CHIMIA special issue on 'Natural Products: Source of Innovation' aims to show some aspects of this research area such as total synthesis, synthetic biology and applications in different industries (Pharma, fragrance and crop protection).

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