Synthesis and Antiprotozoal Profile of 3,4,5-Trisubstituted Isoxazoles

Invited for this month’s cover picture is the group of Prof. Fernanda Andreia Rosa at the State University of Maringá (Brazil). The cover picture shows the contribution of the SINTHET research group to the synthesis and discovery of new antiprotozoal compounds. The synthetic methodology allowed the construction of 60 new isoxazole derivatives with structural variations on the 3-, 4-, and 5-positions. The authors acknowledge Ms. Jeniffer do Nascimento Ascencio Camargo and Ms. Julia Caroline Manzano Willig for the Cover picture creation. Read the full text of their Full Paper at 10.1002/open.202100141.

What was the inspiration for this cover design?
Our inspiration was based on the concept of diversity, showing, e.g., the importance of gender diversity for the continuous progress of science. We also wanted to show that collaborations in research are fundamental to achieve a common goal: contributing new scientific knowledge.

What other topics are you working on at the moment?
The research in our group is focused on developing methodologies for the regioselective synthesis of aza-heterocycles, generating a compound library with wide structural diversity and potential pharmacological application. For instance, we have performed the regioselective highly synthesis of N-methyl pyrazole regioisomers and evaluated their antileishmanial activity.

How did the collaboration on this project start?
From the aza-heterocyclic compounds library generated by our group, we have been collaborating with Prof. Nakamura on the studies of antiprotozoal properties, aiming to corroborate with the advancement of research related to neglected tropical diseases.