Special Issue

Advanced Analytical Techniques for Pigment and Binder Characterization

Message from the Guest Editor

High-resolution, multimodal, and non-destructive methods currently make it possible to probe pigments, binders, and additives with unprecedented precision, revealing not only their intrinsic chemical and structural nature, but also the subtle interactions that govern their stability, performance, and appearance. These approaches illuminate the degradation pathways that were previously inaccessible, offering essential insights for both the design of next-generation formulations and the preservation of cultural heritage. Topics include, but are not limited to, the following:

- High-resolution spectroscopic, chromatographic, and microscopic methods for structural and compositional analysis.
- Multimodal and correlative techniques enabling deeper insights into pigment–binder interactions.
- Correlative approaches to pigment–binder interactions.
- Micro and non-destructive approaches for monitoring chemical, physical, and aging processes.
- Data-driven and computational strategies for the interpretation of complex analytical datasets.
- Applications in industrial materials science, cultural heritage conservation, environmental monitoring, and sustainable formulation design.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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