Modified Electrodes with Nanostructured Carbon and/or Metallic Composites for Applications in Electroanalysis

Orlando FATIBELLO-FILHO
Department of Chemistry, Federal University of São Carlos, São Carlos, SP, Brazil
bello@ufscar.br

This webinar will focus on modified electrodes with nanostructured carbon and/or metallic composites for applications in electroanalysis. The production, characterization and electrochemical properties of carbon and/or metallic materials will be discussed, following by a brief comparison with several carbon electrode materials. Nanocomposites present interesting properties, and these are improved with the incorporation of several nanomaterials in the forms of nanofilms, nanocoatings, nanofibers and, nanoparticles. Specially, carbon-based nanocomposites are extremely attractive materials for the development of electrochemical sensors and biosensors considering their features such as biocompatibility, fast electron transfer, and high specific surface area. Their importance in the preparation of (bio)sensors, and significant improvements in the analytical performance will be then addressed. Conclusions and perspectives of the use of those (bio)electrodes in electroanalytical will also be discussed.

Acknowledgments: INCT Nanovida (CNPq/proc. 406079/2022-6) e CNPq 401681/2023-8.

References

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