Spectroscopy: Between Modeling, Simulation and Practical Investigation

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Dear Editor,

Spectral Analysis Review is an international journal dedicated to the latest advancement of all areas of spectroscopy. The primary goal of this journal is to provide a platform for scientists and academicians all over the world to provide, share and discuss various new issues and developments in different aspects of spectroscopy. It aims to determine the state-of-the-art and advances progress in the field of spectroscopy and get through its developments.

I have reviewed the literature regarding spectroscopy. Most of the scientific reports recommend that more spectroscopic investigation should be on modeling and simulation, in addition to the spectroscopic properties of nanomaterials [1-4]. I would like to stress that modeling and simulation related work would not only promote understanding the spectroscopic properties of materials and nanomaterials but also enhance more bringing their applications to life. In the same way, coupling modeling and computational studies with nanotechnology will help to develop the designing of nanomaterials with required spectroscopic properties. More interesting is the research related to real applications or models. Examples are; spectroscopic characterization of vibrational modes in artificially designed DNA [5], nonlinear optical spectroscopy for biomolecular structure at solid-liquid interfaces [6], modeling and spectroscopic evidence of antimony adsorption on iron-oxide-rich red earth soils [7], single-molecule studies of intrinsically disordered proteins [8], spectroscopic study of model amyloid β-peptide oligomers [9] and other directions [10-13].

The editors will always be pleased to receive the following types of inputs or submissions, among others: 1) Research Highlight articles—generally substantial, current review articles that can be expected to be of interest to the spectroscopy community, 2) Research Notes—research announcements, 3) News and Views, and “In Brief” items—announcements and news items, and 4) Meeting announcements, meeting reports and book reviews.

On the side of education, as a community, we need to assess our strategy for teaching and maintaining interest in the field of spectroscopy. Spectroscopic research is rapidly changing and evolving, and it presents many opportunities. Many education innovators may embrace the advancements and examine the rebooting of the academy through a collection of essays. These may explore how to implement new approaches to teaching and research with the use of digital tools; ensure access to lessons and lectures; and take the class time to the high level of interactivity.

Happy Reading.

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