

Challenges for trace element analysis in BABE studies

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Elemental detection has always been an integral part in analytical sciences. Since the discovery of spectroscopy, various milestones have been achieved by going for more accurate and precise techniques. Gradually, better resolution has become indispensable for every analysis where lower concentration values are measured. Toxicity in pharmaceutical products has always been a great concern as the direct influence on the human anatomy. Besides, it decreases the shelf life of the products also. USP 231 methods had been extensively followed in QA, QC, R&D for the heavy metals. This method has been recognized as a method that could be improved for a number of years due to many issues. In late 2008 a stimuli article was present by the Metals Impurities Advisory Panel of the USP General Chapters Expert Committee. After numerous meetings, suggestions in 2010, two proposed chapters published such as 232 (Elemental Impurities – Limits) and 233 (Elemental Impurities – Procedures for comment). In October 2010, revision of these chapters were published. The undergoing process is to bring the chapters to a level of maximum optimisation and effectiveness.

Biography

Dr. Biswajayee Airaraj Patra (Dr. B. A. Patra) is an alumni of IIT Roorkee & IIT Mumbai. He is a technocrat and holds a Ph.D. Degree in the field of study of Toxic Metals in environmental sciences. He also earned an Executive MBA Degree from IIM Calcutta.

He started his carrier in IIT Roorkee as a Research Scientist in the field of Radioactivity studies of Rb -Sr & Sm-Nd. During that period, besides TIMS, he worked explicitly on different instruments involving solid state technology such as XRD, SEM etc. Then, after a brief stint on ONGC, he started working on Antibiotics; Pesticides on LC/MS/MS & GC/MS. He joined Auriga Research and worked on inorganic spectroscopy comprehensively on pharmaceutical products.

During his entire 11 years of inorganic career, he has worked on inorganic spectroscopy in different fields like Pharma, Ayurveda, Environmental, Clinical, Geology etc. He is currently working as a National Product Manager for Elemental products (AAS, ICPOES, QICPMS, and SFICPMS) in Thermo Fisher Scientific India.

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