Recent advances in analytical methodologies for the determination of impurities in drugs

M V Narendra Kumar Talluri
Department of Pharmaceutical Analysis, National Institute of Pharmaceutical Education and Research, India

Pharmaceutical industry has great concern towards impurities due to their adverse effects. Regulations alarmed the control of drug substances at lower level based on the threshold of toxicological concern and daily dose. Advances in analytical technology have improved capability for drug impurity profiling in terms of faster analysis time, better separations and faster method development. This article briefly explores developments in HPLC - new stationary phases, method development, selected detectors and quality by design (QbD) approach for control of related impurities in drugs and pharmaceuticals. Orthogonal chromatographic systems provide trace level impurity identification and stability testing for drug substance. This article explores the details of various analytical determination strategies concern towards impurities.

Biography
M.V.N. Kumar Talluri is a Faculty at NIPER, Hyderabad. Previous positions held by him include Associate Scientific Manager at Biocon. He received PhD degree (pharmaceutical analysis) from IICT. He has published 30 research articles. He is recipient of CSIR-Research fellowship, Institution of Chemists Associateship awards. He has been in the Editorial Advisory Board of J. Pharmaceutical Science-clinical practice and serves as a reviewer for international journals. Science direct declared 4 times his 2007 publication was among “Top 25 hottest articles. The Indian Drug Manufacturer’s Association conferred prestigious “Young Pharmaceutical Analyst Award 2011” for his outstanding research contribution in the field of Pharmaceutical Analysis.

narendra@niperhyd.ac.in