Record Nr. UNINA9910778277203321 Autore Hibbert D. B (D. Brynn), <1951-> **Titolo** Quality assurance for the analytical chemistry laboratory [[electronic resource] /] / D. Brynn Hibbert Oxford;; New York,: Oxford University Press, 2007 Pubbl/distr/stampa **ISBN** 0-19-756209-4 0-19-028994-5 1-281-15633-7 0-19-803672-8 9786611156336 1-4356-1419-4 1 online resource (321 p.) Descrizione fisica Collana Oxford scholarship online Disciplina 542 Soggetti Chemical laboratories - Quality control Chemistry, Analytic - Quality control Chemistry, Analytic - Technique Chemometrics Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Note generali Previously issued in print: 2007. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Contents; 1 Introduction to Quality in the Analytical Chemistry Laboratory; 2 Statistics for the Quality Control Laboratory; 3 Modeling and Optimizing Analytical Methods; 4 Quality Control Tools; 5 Interlaboratory Studies: 6 Measurement Uncertainty: 7 Metrological Traceability; 8 Method Validation; 9 Accreditation; 10 Conclusions: Bringing It All Together; Glossary of Acronyms, Terms, and Abbreviations; Index Sommario/riassunto The customer of the analytical services relies on the quality assurance and quality control procedures adopted by the laboratory. It is the totality of the QA effort that gives the customer confidence in the result. QA in the Analytical Chemistry Laboratory takes the reader through all aspects of QA, from the statistical basics and quality control tools to becoming accredited to international standards. Concepts such as measurement uncertainty and metrological traceability are explained for a working chemist or her client. How to design experiments to optimise an analytical process is included, together with the necessary statistics to analyse the results. All numerical manipulation and examples are given as Microsoft Excel spreadsheets. Different kinds of interlaboratory studies are explained, and how a laboratory is judged in proficiency testing schemes is described.