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Nota di contenuto	Cover -- Practical Skills in Chemistry -- Contents -- List of boxes -- Preface to the second edition -- Guided tour -- For the student -- Acknowledgements -- List of abbreviations -- Study and examination skills -- The importance of transferable skills -- Managing your time -- Working with others -- Taking notes from lectures and texts -- Learning and revising -- Curriculum options, assessments and exams -- Preparing your curriculum vitae -- Information technology and library resources -- Finding and citing published information -- Evaluating information -- Using online resources -- Internet resources for chemistry -- Using spreadsheets -- Word processors, databases and other packages -- Communicating information -- Organising a poster display -- Giving a spoken presentation -- General aspects of scientific writing -- Writing essays -- Reporting practical and project work -- Writing literature surveys and reviews -- Fundamental laboratory techniques -- Your approach to practical work -- Health and safety -- Working with liquids -- Basic laboratory procedures I -- Basic

laboratory procedures II -- pH and buffer solutions -- The investigative approach -- Making and recording measurements -- SI units and their use -- Scientific method and design of experiments -- Project work -- Laboratory techniques -- Melting points -- Recrystallisation -- Solvent extraction -- Distillation -- Reflux -- Evaporation -- Inert atmosphere methods -- Combinatorial chemistry -- Classical techniques -- Qualitative techniques for inorganic analysis -- Gravimetry -- Procedures in volumetric analysis -- Acid-base titrations -- Complexometric titrations -- Redox titrations -- Precipitation titrations -- Instrumental techniques -- Fundamental principles of quantitative chemical analysis -- Calibration and quantitative analysis -- Basic spectroscopy -- Atomic spectroscopy -- X-ray fluorescence spectroscopy -- Chromatography - basic principles -- Gas and liquid chromatography -- Electrophoresis -- Electroanalytical techniques -- Radioactive isotopes and their uses -- Infrared spectroscopy -- Nuclear magnetic resonance spectroscopy -- Mass spectrometry -- Thermal analysis -- Analysis and presentation of data -- Using graphs -- Presenting data in tables -- Hints for solving numerical problems -- Descriptive statistics -- Choosing and using statistical tests -- Drawing chemical structures -- Chemometrics -- Computational chemistry -- Answers to study exercises -- Index.

Sommario/riassunto

If you are studying chemistry, or a related course such as forensic chemistry or biochemistry, then this book will be an indispensable companion throughout your entire degree programme. This 'one-stop' text will guide you through the wide range of practical, analytical and data handling skills that you will need during your studies. It will also give you a solid grounding in the wider transferable skills such as teamwork and study skills.
