Exploiting Chemical Diversity for Drug Discovery: RSC (RSC Biomolecular Sciences)

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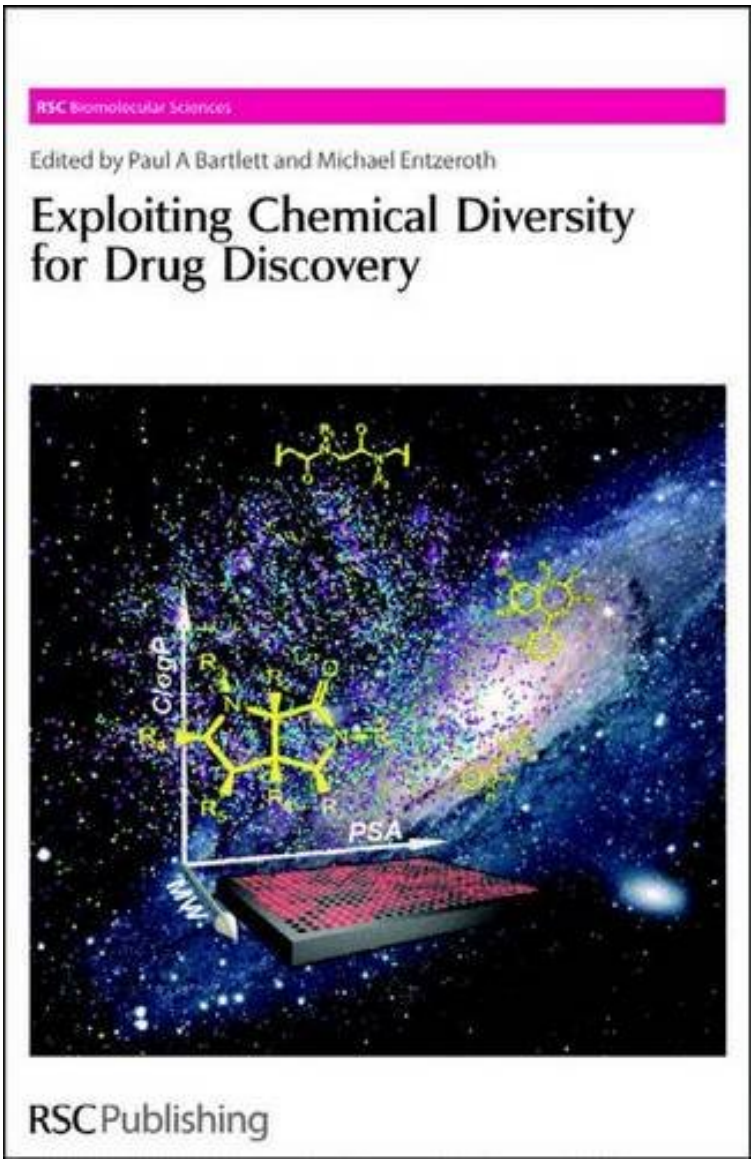

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From Brand: Royal Society of Chemistry : Exploiting Chemical Diversity for Drug Discovery: RSC (RSC Biomolecular Sciences) before purchasing it in order to gage whether or not it would be worth my time, and all praised Exploiting Chemical Diversity for Drug Discovery: RSC (RSC Biomolecular Sciences):

Conceptual and technological advances in chemistry and biology have transformed the drug discovery process. Evolutionary pressure among the diverse scientific and engineering disciplines that contribute to the identification of biologically active compounds has resulted in synergistic improvements at every step in the process. Exploiting Chemical Diversity for Drug Discovery encompasses the many components of this transformation and presents the current state-of-the-art of this critical endeavour. From the theoretical and operational considerations in generating a collection of compounds to screen, to the design and implementation of high-capacity and high-quality assays that provide the most useful biological information, this book provides a comprehensive overview of modern approaches to lead identification. Beginning with an introductory overview, subsequent chapters address topics that include the design of chemical libraries and methods for optimizing their diversity; automated and accelerated chemistry; high throughput assay design and detection techniques; and strategies for data analysis and property optimization. Written by experts in the field, both academic and industrial, and illustrated in full colour, this book provides an excellent overview for current practitioners and will also serve as a stimulating resource for future generations. Researchers in organic and medicinal chemistry, the biological and pharmacological sciences, as well as those interested in allied computational and engineering disciplines will value the comprehensive and up-to-date coverage.

....a timely and comprehensive overview of state-of-the-art developments in the diverse scientific and engineering disciplines...thoughtful preface.....helpful and refreshing.Is an excellent and astonishingly complete compilation on this broad and demanding topic for current practitioners. Researchers in organic and medicinal chemistry, and in biological and pharmacological sciences, as well as those interested in allied computational and engineering disciplines, will benefit from the up-to-date coverage. High quality of the individual chapters. (Angewandte Chemie, International Edition, 2007, 46, 22 (Andreas Link))Excellent review articles covering advances in synthesis and screening, while providing a roadmap for how science meets technology to generate unique and diverse starting points for projects in drug discovery.Well organised and balanced between a high-level overview of lead identification and detailed descriptions of technologies.....a strong framework for understanding how all of the pieces can fit together in the modern pharmaceutical endeavor.....are written clearly and with a sufficient level of detail so that those working in technology-focused groups will find them meaningful.The book reduces a very complex area of drug discovery into meaningful categories and provides orientation to scientists confronted by the broad range of options in lead discovery. (Journal of the American Chemical Society, Vol.128, No.51, 2006 (Terence A Kelly))Each chapter contains a comprehensive and up-to-date list of references as recent as 2005.An excellent introduction to evolving methodologies in the drug discovery process.....excellent overview for medicinal chemists and all others involved in the drug discovery process. (Journal of Medicinal Chemistry, 2007, Vol.50, No.2 (Carl Kaiser))