



# Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry)

From Brand: Wiley-VCH

[Download now](#)

[Read Online](#) 

## Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) From Brand: Wiley-VCH

The rational, structure-based approach has become standard in present-day drug design. As a consequence, the availability of high-resolution structures of target proteins is more often than not the basis for an entire drug development program. Protein structures suited for rational drug design are almost exclusively derived from crystallographic studies, and drug developers are relying heavily on the power of this method. Here, researchers from leading pharmaceutical companies present valuable first-hand information, much of it published for the first time. They discuss strategies to derive high-resolution structures for such important target protein classes as kinases or proteases, as well as selected examples of successful protein crystallographic studies. A special section on recent methodological developments, such as for high-throughput crystallography and microcrystallization, is also included. A valuable companion for crystallographers involved in protein structure determination as well as drug developers pursuing the structure-based approach for use in their daily work.

 [Download Protein Crystallography in Drug Discovery, Volume ...pdf](#)

 [Read Online Protein Crystallography in Drug Discovery, Volum ...pdf](#)

# **Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry)**

*From Brand: Wiley-VCH*

## **Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry)** From Brand: Wiley-VCH

The rational, structure-based approach has become standard in present-day drug design. As a consequence, the availability of high-resolution structures of target proteins is more often than not the basis for an entire drug development program. Protein structures suited for rational drug design are almost exclusively derived from crystallographic studies, and drug developers are relying heavily on the power of this method. Here, researchers from leading pharmaceutical companies present valuable first-hand information, much of it published for the first time. They discuss strategies to derive high-resolution structures for such important target protein classes as kinases or proteases, as well as selected examples of successful protein crystallographic studies. A special section on recent methodological developments, such as for high-throughput crystallography and microcrystallization, is also included. A valuable companion for crystallographers involved in protein structure determination as well as drug developers pursuing the structure-based approach for use in their daily work.

## **Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry)** From Brand: Wiley-VCH Bibliography

- Rank: #6851100 in Books
- Brand: Brand: Wiley-VCH
- Published on: 2004-02-13
- Original language: English
- Number of items: 1
- Dimensions: 9.61" h x .74" w x 6.99" l, .0 pounds
- Binding: Hardcover
- 278 pages

 [Download Protein Crystallography in Drug Discovery, Volume ...pdf](#)

 [Read Online Protein Crystallography in Drug Discovery, Volum ...pdf](#)

---

**Download and Read Free Online Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) From Brand: Wiley-VCH**

---

## **Editorial Review**

### **Review**

"Medicinal chemists will find the book invaluable whether they are working in an area of one of the chapters or wish to apply the methods described to other projects. Structural and computational biologists should also find it useful and thought-provoking."

ChemBioChem August

Lars-Oliver Essen, Fachbereich Chemie, Philipps-Universität Marburg, Angewandte Chemie, 3. Dezemberheft 2004-116/47 und Angewandte Chemie International Edition, 3rd December Issue 2004-43/47

"The quality of the individual chapters of this volume is high, and each of the contributors is to be commended for their efforts."

Steven W. Muchmore, Department of Structural Biology, Global Pharmaceutical Research Division, Abbott Laboratories, Abbott Park, Illinois, Journal of Medicinal Chemistry, Vol. 47, No. 26, 2004

"... an important contribution to pharmaceutical research and development."  
American Journal of Therapeutics

### **From the Back Cover**

The rational, structure-based approach has become standard in present-day drug design. As a consequence, the availability of high-resolution structures of target proteins often forms the basis for an entire drug development program. Protein structures suited for rational drug design are almost exclusively derived from crystallographic studies, and drug developers are relying heavily on the power of this method.

Here, researchers from academia and from leading pharmaceutical companies present valuable first-hand information on how to obtain the desired protein structures and how to exploit crystallographic data for the drug discovery process.

### **From the contents:**

- \* Crystallography of important target classes such as kinases and proteases
- \* Structure-based design of protease inhibitors
- \* Structure-based design of kinase inhibitors
- \* The ribosome and the proteasome as drug targets
- \* Recent methodological advances in high-throughput crystallography and microcrystallization

An indispensable companion for crystallographers involved in protein structure determination as well as drug developers following the structure-based approach.

### **About the Author**

Robert E. Babine has diverse drug discovery experience over the past 20 years and is presently the Director of Structural & Computational Chemistry at SPRL in Cambridge, Massachusetts. After receiving his Ph.D. in synthetic organic chemistry at Brown University he joined the medicinal chemistry group at Lederle Laboratories. During his 10 years at Lederle his research evolved into structure-based drug design, culminating in a project that discovered hydroxylaminepentanamide HIV protease inhibitors. Thereafter, he

was in the medicinal chemistry group at Agouron Pharmaceuticals where he was involved in the early phase discovery of rhinovirus 3C protease inhibitors. After a 2-year stay at Eli Lilly he joined the new startup company SPRL in 2000.

\*\*\*\*\*

Sherin S. Abdel-Meguid is Chief Scientific Officer and Founder of Suntory Pharmaceutical Research Laboratories (SPRL), a structure-based drug discovery company located in Cambridge, Massachusetts. He joined SPRL from SmithKline Beecham (SB) where he was Director of Macromolecular Sciences and Structural Biology, and director of the IL18, Herpes virus protease and CD28 programs. Prior to his work for SB, he was Head of Biophysical Sciences and Protein Engineering at Monsanto. At Monsanto, he built one of the first macromolecular crystallography groups in the pharmaceutical industry. He holds a Ph.D. in Physical Chemistry and M.S. and B.S. degrees in Biochemistry.

## **Users Review**

### **From reader reviews:**

#### **Maria Macdonald:**

Often the book Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) will bring you to definitely the new experience of reading some sort of book. The author style to explain the idea is very unique. Should you try to find new book you just read, this book very ideal to you. The book Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) is much recommended to you to read. You can also get the e-book from your official web site, so you can more easily to read the book.

#### **Kathryn Cannon:**

Typically the book Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) has a lot info on it. So when you make sure to read this book you can get a lot of advantage. The book was written by the very famous author. This articles author makes some research prior to write this book. This kind of book very easy to read you can get the point easily after scanning this book.

#### **Ismael Black:**

Playing with family in a park, coming to see the marine world or hanging out with close friends is thing that usually you may have done when you have spare time, then why you don't try matter that really opposite from that. One activity that make you not experience tired but still relaxing, trilling like on roller coaster you already been ride on and with addition info. Even you love Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry), it is possible to enjoy both. It is very good combination right, you still desire to miss it? What kind of hang-out type is it? Oh can occur its mind hangout people. What? Still don't have it, oh come on its referred to as reading friends.

#### **Frances Fortier:**

Beside this kind of Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in

Medicinal Chemistry) in your phone, it might give you a way to get closer to the new knowledge or info. The information and the knowledge you may got here is fresh from oven so don't possibly be worry if you feel like an previous people live in narrow commune. It is good thing to have Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) because this book offers to you personally readable information. Do you often have book but you do not get what it's interesting features of. Oh come on, that will not end up to happen if you have this with your hand. The Enjoyable option here cannot be questionable, similar to treasuring beautiful island. So do you still want to miss that? Find this book and also read it from today!

**Download and Read Online Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) From Brand: Wiley-VCH #DKCZFVQLWE5**

## **Read Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) From Brand: Wiley-VCH for online ebook**

Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) From Brand: Wiley-VCH Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) From Brand: Wiley-VCH books to read online.

### **Online Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) From Brand: Wiley-VCH ebook PDF download**

**Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) From Brand: Wiley-VCH Doc**

**Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) From Brand: Wiley-VCH MobiPocket**

**Protein Crystallography in Drug Discovery, Volume 20 (Methods and Principles in Medicinal Chemistry) From Brand: Wiley-VCH EPub**