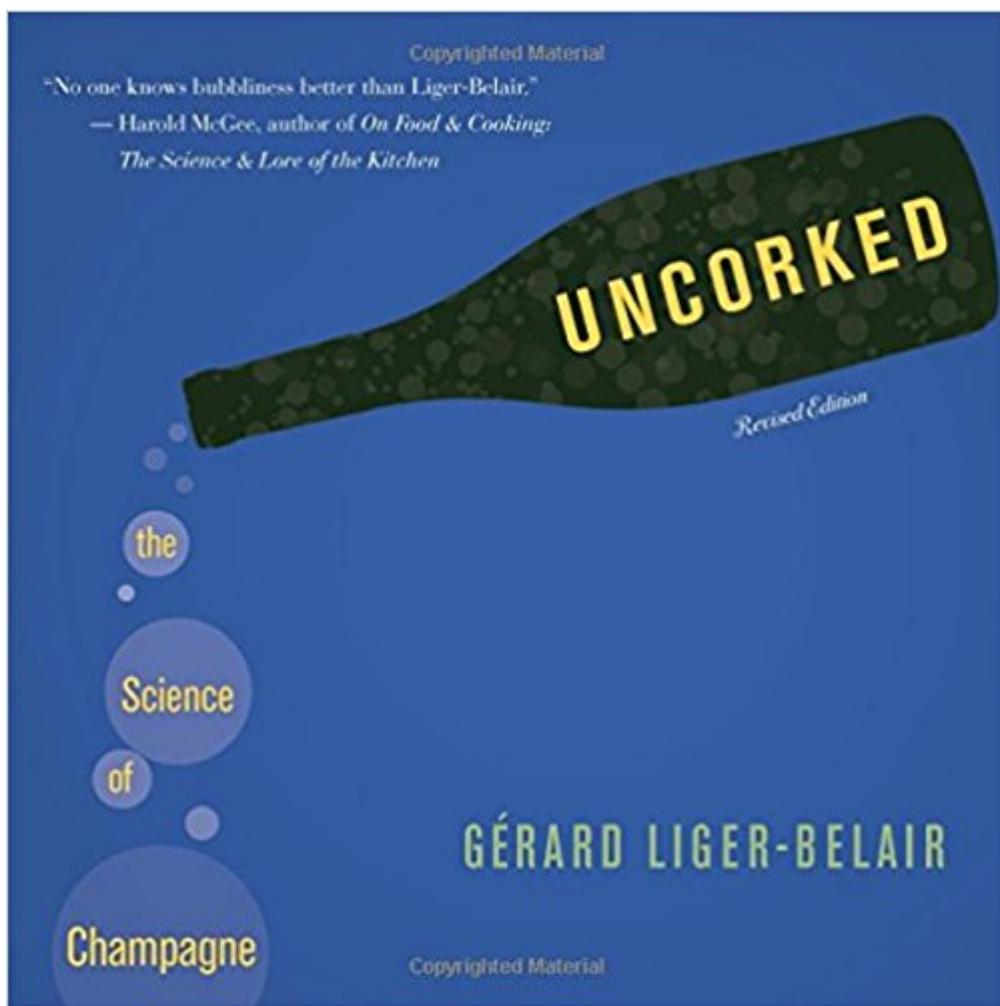


The book was found

# Uncorked: The Science Of Champagne



## Synopsis

Uncorked quenches our curiosity about the inner workings of one of the world's most prized beverages. Esteemed for its freshness, vitality, and sensuality, champagne is a wine of great complexity. Mysteries aplenty gush forth with the popping of that cork. Just what is that fizz? Can you judge champagne quality by how big the bubbles are, how long they last, or how they behave before they fade? And why does serving champagne in a long-stemmed flute prolong its chill and effervescence? Through lively prose and a wealth of state-of-the-art photos, this revised edition of Uncorked unlocks the door to what champagne is all about. Providing an unprecedented close-up view of the beauty in the bubbles, Gérard Liger-Belair presents images that look surprisingly like lovely flowers, geometric patterns, even galaxies as the bubbles rise through the glass and burst forth on the surface. He illustrates how bubbles form not on the glass itself but are "born" out of debris stuck on the glass wall, how they rise, and how they pop. Offering a colorful history of champagne, Liger-Belair tells us how it is made and he asks if global warming could spell champagne's demise. In a brand-new afterword, he updates the reader on new developments in the world of bubble science and delves even more deeply into the processes that give champagne its unique and beautiful character. Bubbly may tickle the nose, but Uncorked tackles what the nose and the naked eye cannot--the spectacular science that gives champagne its charm and champagne drinkers immeasurable pleasure.

## Book Information

Hardcover: 216 pages

Publisher: Princeton University Press; Revised edition with a New foreword by Hervé This edition (June 2, 2013)

Language: English

ISBN-10: 069115872X

ISBN-13: 978-0691158723

Product Dimensions: 7.8 x 0.7 x 7.8 inches

Shipping Weight: 1.3 pounds (View shipping rates and policies)

Average Customer Review: 4.4 out of 5 stars 12 customer reviews

Best Sellers Rank: #506,751 in Books (See Top 100 in Books) #9 in Books > Cookbooks, Food & Wine > Beverages & Wine > Wine & Spirits > Champagne #457 in Books > Cookbooks, Food & Wine > Beverages & Wine > Wine & Spirits > Wine #6096 in Books > Science & Math > Physics

## Customer Reviews

"Come quickly, brothers, I am drinking stars!" said 17th-century monk and cellar master Dom Pérignon upon tasting the effervescent wine that would come to be known as champagne. Indeed, the experience of drinking champagne is mildly exhilarating in any setting, and University of Reims physics professor Liger-Belair, a Moët & Chandon consultant and self-proclaimed "bubbles addict," reveals the scientific reasons for the behavior and taste of the intoxicant in terms even a science novice can absorb. Though the romance of sipping a flute of champagne is somewhat dispelled by knowing that right after it is poured "the surfactant molecules interlock with each other and with the surrounding liquid molecules, strengthening the surface of the bubble and reducing the velocity of the liquid flows in the films of bubble caps," Liger-Belair is mindful to relate these complex physical and chemical processes to the perceptions of the drinker; he reminds readers that "bubbles bursting at the surface play a major role in flavor release." The bulk of the book is devoted to describing what happens to these bubbles, and Liger-Belair's patient discussions are accompanied by appealing photographs of bubbles at various points in their frenetic dance to the top of the glass. A short glossary, as well as Liger-Belair's unadorned prose, aid readers unfamiliar with fluid dynamics but delighted by the effervescence of champagne, making this book ideal for any champagne aficionado. 32 halftonesCopyright © Reed Business Information, a division of Reed Elsevier Inc. All rights reserved. --This text refers to an out of print or unavailable edition of this title.

Winner of the 2005 Best Book in the World on French Wine, Gourmand World Cookbook Awards  
Winner of the 2004 Award for Best Professional/Scholarly Book in Physics and Astronomy, Association of American Publishers  
Praise for the previous edition: "[This] jewel-of-a-book makes the perfect companion gift to a bottle of bubbly. . . . Written by a passionate, wine-loving physicist with just the proper level of jargon for non-scientists, the birth, rise and bursting of a Champagne bubble is scrutinized, rhapsodized, diagrammed, photographed and, finally, demystified. . . . Knowing more about a bubble's lowly birth (formed from debris on the side of the glass) and ephemeral rise to fame will only serve to make you love it more."--Claudia Conlon, Wine News  
Praise for the previous edition: "This book presents the birth, life and death of a champagne bubble with such gusto, good humor and clarity that you will devour its delicious contents in one gulp. Whereas good champagne is to be sipped, this book is not. You will never experience the sensual elegance of champagne in quite the same way again once you have read this entertaining account of its history and 'fizzics.'"--Richard N. Zare, Nature  
Praise for the previous edition: "A highly entertaining introduction to the science of champagne bubbles. . . . Uncorked is very readable, and Liger-Belair's clear and simple descriptions of the physics are superbly suitable for a general audience. The book is also

very aesthetically pleasing, making it an ideal present for wine lovers and bores alike."--Stuart West, *SciencePraise* for the previous edition: "Uncorked is an interesting, enjoyable read for anyone who has gazed too long upon a champagne-filled flute."--Gregory Mone, *Popular SciencePraise* for the previous edition: "Liger-Belair, a physicist inspired to study bubbles by a brainstorm over a beer, delves into a champagne flute with a curiosity as strong as his microscope. The result is a book as informative as it is engaging, boosted by the gorgeous, up-close photos of bubbles in motion."--Tara Q. Thomas, *Denver PostPraise* for the previous edition: "A delightfully readable little book."--Joanna Simon, *Sunday Times--LondonPraise* for the previous edition: "[A] convivial examination of the party season's favorite tipple."--Paul Nettleton, *GuardianPraise* for the previous edition: "The ultimate guide to the 'fizzics' of sparkling wine."--Deborah Scoblionkov, *Philadelphia Inquirer*

The subtitle of this book is "the Science of Champagne", and this is a book of science. It starts with an historical introduction to sparkling wine (the real history, not the myths). But then it gets into science. Real science. As you go through this book you'll encounter Henry's law and Van der Waals forces. You'll learn the difference between the fluid sphere limit and the rigid sphere limit. On one page you'll encounter wake instabilities and hydrodynamic instability. You'll learn about nucleation and laser tomography. None of which is bad. I'm a physicist by training, and I eat this stuff up. If you are interested in both science and bubbly, you should enjoy this book. But if the preceding paragraph put you off, this probably isn't the book for you. This is a fairly technical book with figures, photos, and references. As technical works go, it's a quick read. But if technical stuff turns you off, you won't enjoy it. As a warning, there is a section on what global warming might do to the Champagne region. If you refuse to accept that warming is occurring, this might annoy you. Overall, I enjoyed this book. But it's not for everyone.

When I ordered this book I was hoping for more about science around Champagne as a whole, but this book is very focused on the bubbles and the science behind them. Literally how the bubbles form, move, etc not much on which yeasts will get better results, nor how various grapes or styles of rose will impact the bubbles. There's definitely some useful information in here, but I would buy this book only if you're really into Champagne or liquid/bubble physics.

The problem with Champagne, at least for me, is that it tends to disappear too fast. That was also the problem with this book. It reads too fast. Before I knew it the pleasure was behind me. Uncorked starts with the history of this famous drink, including the revelation that Dom Pierre Perignon was

originally told by the Pope and other powers to get those lousy bubbles out of the white wine. Then the members of the Royal Court at Versailles under Louis XIV began to appreciate the bubbles. So, after years of fruitless labor trying to get the bubbles out of the wine, at the end of the seventeenth century, Dom was ordered to reverse his efforts and devise methods to increase the bubbling in the wine, which, incidentally, he did. After history, we have a chapter on making Champagne: pretty standard stuff. But if you don't know it yet, learn it here so at the next dinner you can talk with authority. Next comes the most informative chapter: A Flute or Goblet? Which is better? Those of you who know Champagne know the answer. And those of you who don't know Champagne can find the correct answer here. The amazing thing for me is that I knew the answer, but I didn't understand the scientific reasons why flute was better. Science is always right and here we find no exception. The last few chapters then talk in extenso about bubbles and as this is the essence of Champagne, the discussion is well worth the effort expended in studying the science of Champagne bubbles and the photographs that illustrate that science. Just as a book has a beginning, a middle, and an end, a bubble has a birth, a rise, and a burst. This book didn't make me want to go out and read more about Champagne, but it did make me want to go out and drink some more and while drinking I shall appreciate the remarkable history and science that goes into this fine drink.

Thanks

Fabulous book with a fresh approach to the subject.

It is very technical, but a little outdated

This book is well written and concise making it a great way to expand knowledge of bubbly. I have been drinking champagne for many years now and read much about it. Still managed to learn something from this book though.Great.

I happened across this book by accident and the title interested me. It was not at all what I was expecting, not a history of making champagne but a scientific investigation of the bubbles in champagne. That may sound like dull stuff, but it's written in a lively style (the author is a scientist) and I had always wondered about those bubbles...Champagne started bubbling in the 1400s but was seen as something of a problem for a couple of hundred years. The story of how it became a desired drink is interesting, and one detail is that glass for a long time was not strong enough to

always contain the liquid under pressure, so buyers had to wear face masks when walking through a cellar, because up to half the bottles might explode. Chapter 2 gives the wine's overall history. Chapter 3 discusses making champagne, quite fascinating. Champagne is a blend of wines (all from a designated area). A base wine mix is fermented, and then it undergoes a second fermentation after about 24 g of sugar is added per liter, and sealed in heavy glass bottles. Each bottle is turned a quarter turn per day, to get the sediment from dead yeast to settle, a process once by hand now mechanized. There's a bit more a bit difficult to describe in a short space, but the book does so well. Chapter 4 looks at whether to use a goblet or flute shaped glass, and the author prefers a long stemmed flute shape because the bubbles are best appreciated that way. Chapter 5 describes how bubbles begin. In a glass there are tiny particles of debris contaminating the surface, perhaps dust or particles remaining from the glass after being wiped dry--these are essentially nucleation sites. An absolutely clean glass will not bubble much. Much of this chapter is in photos. Chapter 6 is about the chemistry (or is it physics?) of bubbles rising. They get bigger as they rise, a 10cm trip in which they may grow a million times in size to 1 mm. This chapter deals with things like surfactants, bubble surfaces, and more, explained rather well. Chapter 8 describes the bubbles bursting (which has to do with the sound and the feel of the bubbly in the mouth, among other things). This is vastly more complex than it sounds. Chapter 8 considers the future of champagne wine.

[Download to continue reading...](#)

Uncorked: The Science of Champagne Champagne, Uncorked: The House of Krug and the Timeless Allure of the World's Most Celebrated Drink Champagne Uncorked The Champagne Guide 2016-2017: The Definitive Guide to Champagne Champagne Cocktails: 60 Classic & Contemporary Champagne Cocktails Destination Champagne: The Individual Traveller's Guide to Champagne - The Region and Its Wines Finger Lakes Uncorked: Day Trips and Weekend Getaways in Upstate New York Wine Country (2017 Edition) Uncorked! Wine & Words - Primitives by Kathy 2017 Wall Calendar Uncorked: The Novice's Guide to Wine Uncorked: My year in Provence studying PÃ©tanque, discovering Chagall, drinking Pastis, and mangling French Lake Ontario Uncorked: Wine Country Road Trips from Niagara Peninsula to Prince Edward County (2017 Edition) Lake Ontario Uncorked: Wine Country Road Trips from Niagara Peninsula to Prince Edward County When Champagne Became French: Wine and the Making of a National Identity (The Johns Hopkins University Studies in Historical and Political Science) Freezing Colloids: Observations, Principles, Control, and Use: Applications in Materials Science, Life Science, Earth Science, Food Science, and Engineering (Engineering Materials and Processes) A Scent of Champagne: 8,000 Champagnes Tested and Rated Champagne Supernovas: Kate Moss, Marc

Jacobs, Alexander McQueen, and the '90s Renegades Who Remade Fashion The Widow Clicquot: The Story of a Champagne Empire and the Woman Who Ruled It (P.S.) The Widow Clicquot: The Story of a Champagne Empire and the Woman Who Ruled It No More Champagne: Churchill and His Money Champagne [Boxed Book & Map Set]: The Essential Guide to the Wines, Producers, and Terroirs of the Iconic Region

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)