

Quantum Chemistry *by* Ira N. Levine



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An introduction to quantum chemistry which covers quantum mechanics, atomic structure and molecular electronic structure. All the necessary mathematics is presented alongside the physics and chemistry, and is given sufficient detail to be accessible to those with little mathematical background.



Reviews of the *Quantum Chemistry* *by* Ira N. Levine

Knights from Bernin

It was with great sadness that I learned of the passing of Professor Ira N. Levine last month (December 2015). I was among the first students in his debut class in quantum chemistry back in the late 1960's. We used the zeroth edition of this book as it was being written, delivered to the students - in mimeograph form - one chapter at a time by Prof. Levine. As a hobby, I've purchased and read subsequent editions over the years even though my professional career took me into engineering rather than theoretical chemistry.

The book has remained at the pinnacle of QC texts for advanced undergraduate, graduate, and self-

study use. This 7th edition is no exception. Here's why: (1) it covers the necessary background mathematics in an integrated, as-needed manner, (2) all topics are treated with an appropriate "goldilocks" degree of rigor, neither overly formalized nor overly simplified, (3) the text is supplemented by excellent - sometimes quite challenging - problem sets, (4) numerous footnotes to the literature are given throughout the book for students who want to chase down subtle points, and (5) modern topics in QC, such as computational electron-correlation and molecular dynamics methods, are fully discussed. Overall, the text is written with great clarity and precision.

This is not a textbook of quantum physics generally, but of quantum chemistry specifically. There are the obligatory explanations about the counter-intuitive nature of quantum mechanics along with various historical digressions about the development of non-classical physics. But this is a chemistry book. And it's among the best.

Skilkancar

Great price, but page 1 of chapter 1 is just ... not there. I'm worried there will be more missing pages. Get the hardcover if you can.

GoodLike

Levine's Quantum Chemistry is one of the best books to understand quantum chemistry. It provides a rigorous foundation for students pursuing a career in theoretical chemistry. Once a student finishes reading this book, he or she can quickly go to the more specialized books like Szabo and Ostlund's Modern Quantum Chemistry.

Bralore

Book itself is excellent but when it arrived there was some pages wrinkled. Quality of the India Pearson printing is good but something happened during the delivery I believe, but because the price was amazingly low I'll endure. The other choice did cost over \$200 which a bit too much for me.

salivan

I have gone through many books on quantum and this one is by far my favorite. The explanations are clear, derivations are concise, easy to follow and straightforward.

Fordrelis

It uses quantum mechanics to explain the basis of chemistry. The math is typical of a book on this topic but it is explained one step at a time.

Malhala

I wouldn't have been able to pass my P-chem class without this book, it was a life saver.

Terrific book for sophomore students in chemistry who are interested in theoretical work. Easy to catch up with and tons of fundamental knowledge to dig up.

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