

<<有机反应机理的书写艺术>>

图书基本信息

书名：<<有机反应机理的书写艺术>>

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作者：格罗斯曼

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内容概要

每一个满怀抱负的有机化学家都尝试写出合理的有机反应机理，然而市面上的有关机理正确书写的书籍却寥寥无几。

《有机反应机理的书写艺术(原著第2版)》将帮助学生和科研人员提高这一重要技能。

《有机反应机理的书写艺术(原著第2版)》的突出特点体现在：正确的书写形式，“常见错误提示”，配以大量的难度适宜的问题。

其另一个特色是包含过渡金属参与或催化的反应章节。

相对新的课题，例如，烯炔复分解反应、芳香环化反应等在《有机反应机理的书写艺术(原著第2版)》中均有所涉及。

全新修订的第2版精彩呈现：更新的反应机理，芳香性的讨论，酸性，立体化学的拓展，重新组织了自由基反应和金属参与或催化的反应等内容，增加了新的问题。

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作者简介

作者：(美国) 格罗斯曼 (Robert B. Grossman)

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版权页：插图：The C and N atoms in CH_3^+ and NH_4^+ both have formal positive charges, but the C atom is electron-deficient, and the N atom is not. The C and B atoms in CH_3 and BF_3 are both electron-deficient, but neither is formally charged. B is electropositive and N is electronegative, but BH_4^- and NH_4^+ are both stable ions, as the central atoms are electron-sufficient. The C atoms in CH_3^+ , CH_3I , and $\text{H}_2\text{C}=\text{O}$ are all electrophilic, but only the C in CH_3^+ is electron-deficient. The O atom in $\text{Me}_2\text{C}=\text{O}$, has a formal positive charge, but the C atoms are electrophilic, not for each bonding pattern. There are often several ways in which lone and non-bonding electrons can be distributed. These different ways are called resonance structures. Resonance structures are alternative descriptions of a single compound. Each resonance structure has some contribution to the real structure of the compound, but no one resonance structure is the true picture. Letters, lines, and dots are words in a language that has been developed to describe molecules, and, as in any language, sometimes one word is inadequate, and several different words must be used to give a complete picture of the structure of a molecule. The fact that resonance structures have to be used at all is an artifact of the language used to describe chemical compounds. The true electronic picture of a compound is a weighted average of the different resonance structures that can be drawn (resonance hybrid).

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媒体关注与评论

“这是一部优秀并完美表达的作品……作者……成功地将反应活性和选择性的核，小观点视为一个有机整体详尽表述 简洁的文风，精选的实例……每一章末对要点简明的概括，使得读者很容易巩固学到的知识……这本书不失为一个小小的艺术品。

” ——Jens Hartung ,Angewandte Chemie International Edition “我使用该书教授学分课程已经三年时间了，学生们一致对本书的透彻叙述和书中试题的覆盖面给予高度赞誉……正如本书的宗旨：教会学生准确写出陌生的有机反应的机理” ——Amy Howell,Synthesis

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编辑推荐

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