

<<环境技术基础>>

图书基本信息

书名：<<环境技术基础>>

13位ISBN编号：9787302244295

10位ISBN编号：7302244294

出版时间：2011-1

出版时间：纳桑森(Jerry A.Nathanson) 清华大学出版社 (2011-01出版)

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页数：534

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## 前言

在21世纪初，面临各种环境问题，人类清醒地认识到要走可持续发展之路。

而发展环境教育是解决环境问题和实施可持续发展战略的根本。

高等学校的环境教育，是提高新世纪建设者的环境意识，并向社会输送环境保护专门人才的重要途径。

为了反映国外环境类教材的最新内容和编写风格，同时也为了提高学生阅读专业文献和获取信息的能力，我们精选了一些国外优秀的环境类教材，组成大学环境教育丛书影印版和翻译版，本书即为其中的一册。

所选教材均在国外被广泛采用，多数已再版，书中不仅介绍了有关概念、原理及技术方法，给出了丰富的数据，还反映了作者不同的学术观点。

我们希望这套丛书能对高等院校师生和广大科技人员有所帮助，同时为我国环境教育的发展作出贡献。

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### 内容概要

《环境技术基础：供水、废物管理与污染控制（第5版）（影印版）》为环境技术概论课程的教材。书中涉及了广泛的环境题材，重点内容为水和废水、固体和危险废物、空气和噪声污染控制。书中有较多实际案例，并配有大量例题、大量的图表和照片，各章后有复习思考题、练习题和相关网站介绍。

《环境技术基础：供水、废物管理与污染控制（第5版）（影印版）》注重基本概念和实际应用，内容精炼而丰富，易于阅读。没有先修过生物学、化学、地质学及水力学等课程的学生可理解教材的内容，适合教师在较少的学时里介绍比较广泛的内容。

《环境技术基础：供水、废物管理与污染控制（第5版）（影印版）》适合作为高等学校环境类专业、市政工程专业的教材，并供有关科技人员参考。

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## 章节摘录

Agriculture is the most widespread source of pollutants entering streams and rivers: It is estimated to be responsible for about 70% of surface water pollution. Farming is a source of the silt, as well as nutrients, pesticides, and organic matter. (Livestock feeding operations, for example, confine thousands of animals in a small space and produce huge amounts of waste.) Municipal sewage treatment plants also continue to pollute rivers and streams by discharging bacteria, nutrients, and organic matter that deplete oxygen. Fish consumption is the most frequently impaired use in ponds, lakes, and reservoirs; aquatic life and swimming are also harmed. Nutrients and metals are the most significant pollutants in these bodies of water, followed by siltation and organic matter. Lakes are most sensitive to excessive nutrients and other pollutants, because they retain their contents for long periods of time. Nutrient pollution leads to algal blooms, low DO levels, fish kills, foul odors, and aquatic weed overgrowth, which interfere with recreational activities. Farm fertilizers and manure from animals are a major source of nutrients. In estuaries (bodies of coastal water where rivers meet the oceans), nutrients are the most widespread pollutants, followed by bacteria, toxic chemicals, and organic material. Excessive nutrients in estuaries lead to many of the same problems seen in lakes. High bacteria levels make the water unfit for swimming or harvesting shellfish, such as oysters and clams, which accumulate the bacteria. Storm runoff and industrial point sources are the primary sources of pollutants impairing estuaries, followed by municipal sewage and agriculture. The EPA now participates in a National Estuary Program with the states to manage estuarine water quality. Loss of wetlands (see page 4) has decreased from as much as half a million acres per year between 1950 and 1970 to less than 100,000 acres per year between 1982 and 1992. Wetland losses result from commercial and residential development, agriculture, filling and draining, and road construction. Many activities degrade the remaining wetlands with pollutants such as sediment and nutrients. Although loss rates are decreasing, progress is still needed to stop the losses and increase the quality of the nation's wetlands.

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编辑推荐

《环境技术基础:供水、废物管理与污染控制(第5版)(影印版)》：大学环境教育丛书。

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