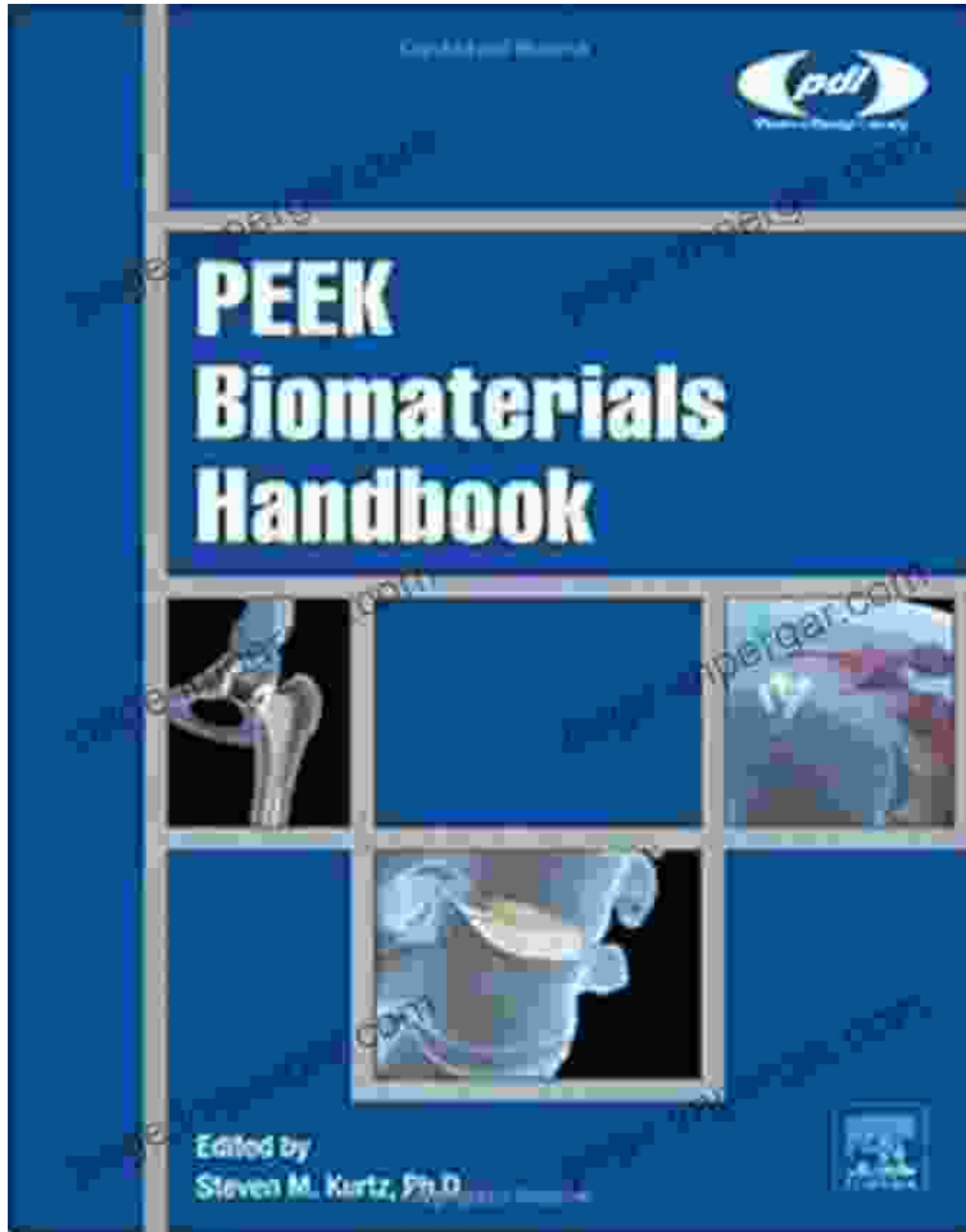
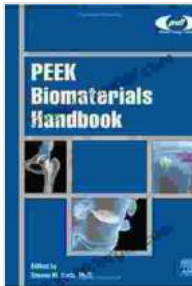


# PEEK Biomaterials Handbook: An Essential Guide for Plastics Design Engineers



Polyetheretherketone (PEEK) is a high-performance thermoplastic that is widely used in demanding applications in the aerospace, medical, and automotive industries. Its excellent mechanical properties, chemical

resistance, and biocompatibility make it an ideal material for a wide range of applications, from medical implants to aircraft components.



## PEEK Biomaterials Handbook (Plastics Design Library)

by Steven M. Kurtz

★★★★★ 5 out of 5

Language : English

File size : 11192 KB

Text-to-Speech : Enabled

Enhanced typesetting : Enabled

Print length : 306 pages



The Peek Biomaterials Handbook is a comprehensive guide to the properties and applications of PEEK. Written by a team of experts from the University of Leeds, this book provides a detailed overview of the material's structure, properties, and processing techniques. It also includes a wealth of case studies and examples of PEEK applications in the biomedical and aerospace industries.

### What's Inside the Peek Biomaterials Handbook?

The Peek Biomaterials Handbook is divided into 10 chapters, each of which covers a different aspect of the material's properties and applications. The chapters are as follows:

- **Chapter 1: to PEEK**

This chapter provides a general overview of PEEK, including its history, structure, and properties.

- **Chapter 2: Mechanical Properties of PEEK**

This chapter discusses the mechanical properties of PEEK, including its strength, stiffness, toughness, and fatigue resistance.

- **Chapter 3: Thermal Properties of PEEK**

This chapter discusses the thermal properties of PEEK, including its melting point, glass transition temperature, and thermal conductivity.

- **Chapter 4: Chemical Properties of PEEK**

This chapter discusses the chemical properties of PEEK, including its resistance to acids, bases, and solvents.

- **Chapter 5: Biological Properties of PEEK**

This chapter discusses the biological properties of PEEK, including its biocompatibility and cytotoxicity.

- **Chapter 6: Processing Techniques for PEEK**

This chapter discusses the processing techniques for PEEK, including injection molding, extrusion, and machining.

- **Chapter 7: Applications of PEEK in the Biomedical Industry**

This chapter discusses the applications of PEEK in the biomedical industry, including its use in medical implants, surgical instruments, and drug delivery devices.

- **Chapter 8: Applications of PEEK in the Aerospace Industry**

This chapter discusses the applications of PEEK in the aerospace industry, including its use in aircraft components, satellites, and space probes.

- **Chapter 9: Case Studies**

This chapter provides a number of case studies that illustrate the use of PEEK in a variety of applications.

- **Chapter 10: Future Directions for PEEK**

This chapter discusses the future directions for PEEK, including the development of new grades of PEEK and the expansion of its applications.

## **Who Should Read the Peek Biomaterials Handbook?**

The Peek Biomaterials Handbook is an essential resource for anyone who works with PEEK, including:

- Plastics engineers
- Materials scientists
- Medical device designers
- Aerospace engineers
- Researchers
- Students

## Benefits of Reading the Peek Biomaterials Handbook

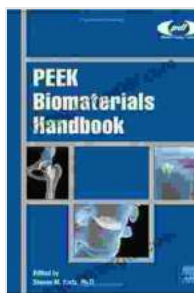
Reading the Peek Biomaterials Handbook provides a number of benefits, including:

- A comprehensive understanding of the properties and applications of PEEK
- The ability to select the right grade of PEEK for a specific application
- The ability to design and process PEEK components
- The ability to stay up-to-date on the latest developments in PEEK technology

## Free Download Your Copy Today!

The Peek Biomaterials Handbook is available now from the Plastics Design Library. Free Download your copy today to learn more about this versatile and high-performance material.

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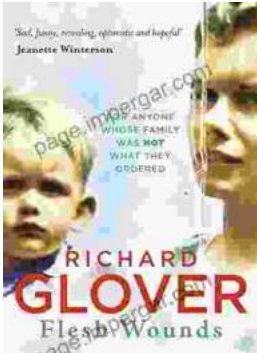
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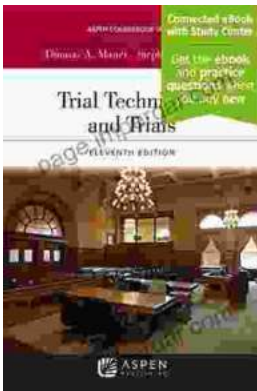
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