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# Metal Matrix Syntactic Foams

*Processing, Microstructure,  
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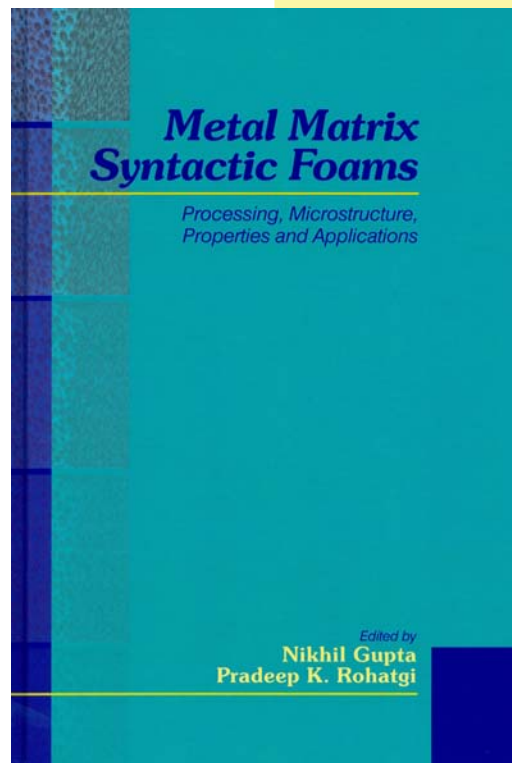
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- **Complete guide for materials, engineering, modeling and processing of novel syntactic material**
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Focused on a new type of material, the book investigates the elements, synthesis and practical applications of metal matrix syntactic foams, which share properties of foams and metal matrix composites. The text reviews how syntactic foams are synthesized from different types of hollow particles and metal matrixes. Part one explains processing techniques such as solidification and powder metallurgy and discusses foams made from a variety of matrix metals. Part two compares different syntactic foams based on density and strain rate. Original experimental data and modeling information are provided that show how metal matrix syntactic foams can be used for lighter weight components in vehicles, as well as for sensors and biomaterials.

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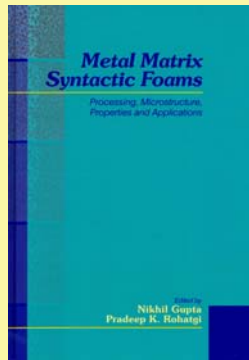
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**TABLE OF CONTENTS**  
*Each chapter ends with a References section.*



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Preface ■ Acknowledgments ■ Editors ■ Contributors

**Chapter 1. Introduction to Foams**

NIKHIL GUPTA  
 1.1. Lightweight Materials  
 1.2. Foams  
 1.3. Syntactic Foams  
 1.4. Outline of the Book  
 1.5. Acknowledgments

**Chapter 2. Hollow Particles**

OLIVER M. STRBIK III, P.E.  
 2.1. Structure  
 2.2. Manufacturing Methods

**Chapter 3. Synthesis of Metal Matrix Syntactic Foams**

BENJAMIN F. SCHULTZ and PRADEEP K. ROHATGI  
 3.1. Solidification Processing of Metal Matrix Syntactic Foams  
 3.2. Powder Metallurgy Processing of Metal Matrix Syntactic Foams  
 3.3. Concluding Remarks  
 3.4. Acknowledgments

**Chapter 4. Aluminum Matrix Syntactic Foams**

D. P. MONDAL and NIDHI JHA  
 4.1. Aluminum Syntactic Foams  
 4.2. Possible Applications  
 4.3. Hollow Particles  
 4.4. Methods of Preparations  
 4.5. Microstructure  
 4.6. Compressive Deformation  
 4.7. Tribological Behavior  
 4.8. Corrosion Behavior  
 4.9. Techno- and Socio-economic Analysis  
 4.10. Conclusions

**Chapter 5. Magnesium Matrix Syntactic Foams**

TOMOKO SANO, VINCENT HAMMOND and KYU CHO  
 5.1. Introduction  
 5.2. Processing and Microstructure  
 5.3. Concluding Remarks

**Chapter 6. Zinc Matrix Syntactic and Composite Foams**

A. DAOUD  
 6.1. Introduction  
 6.2. Hollow Particles  
 6.3. Zn Matrix Alloys  
 6.4. Processing Methods of Syntactic Foams  
 6.5. Structures of Syntactic Metal Matrix Composite Foams  
 6.6. Properties of Interest to the Syntactic Foam Application Designers  
 6.7. Suggested Applications of Syntactic Metal Matrix Composite Foams  
 6.8. Research Imperatives

**Chapter 7. Titanium Matrix Syntactic Foams**

XUE XIAOBING and ZHAO YUYUAN

7.1. Introduction  
 7.2. Manufacture  
 7.3. Structure and Mechanical Properties  
 7.4. Conclusions

**Chapter 8. Iron Matrix Syntactic Foams**

DIRK LEHMHUS, JÖRG WEISE and JOACHIM BAUMEISTER  
 8.1. Introduction  
 8.2. Production Processes  
 8.3. Pore and Microstructure  
 8.4. Mechanical Properties  
 8.5. Thermal and other Properties  
 8.6. Conclusion, Outlook and Application Potential

**Chapter 9. Modeling and Simulations**

DUNG D. LUONG and NIKHIL GUPTA  
 9.1. Introduction  
 9.2. Density and Porosity  
 9.3. Elastic Properties  
 9.4. Strength  
 9.5. Effect of Strain Rate on Stress-Strain Curves  
 9.6. Finite Element Analysis  
 9.7. Acknowledgments

**Chapter 10. Modeling Unconstrained Compression of Metal Matrix Syntactic Foams**

J. B. FERGUSON, JOSEPH A. SANTA MARIA, BENJAMIN F. SCHULTZ and PRADEEP K. ROHATGI  
 10.1. Modeling of Metal Matrix Syntactic Foams  
 10.2. Case Study—Modeling the Mechanical Properties of Al-Alloy/AI2O3 Hollow Particle Metal Matrix Syntactic Foams  
 10.3. Concluding Remarks  
 10.4. Acknowledgments  
 10.5. Nomenclature

**Chapter 11. Weight Saving Potential of Metal Matrix Syntactic Foams**

NIKHIL GUPTA, DUNG D. LUONG and DINESH PINISETTY  
 11.1. Material Selection for Component Design  
 11.2. Relations between Density and Mechanical Properties  
 11.3. Acknowledgments

**Chapter 12. Applications of Metal Matrix Syntactic Foams**

GONZALO A. ROCHA RIVERO, BENJAMIN F. SCHULTZ and PRADEEP K. ROHATGI  
 12.1. Ground Transportation  
 12.2. Electronic Packaging  
 12.3. Aerospace  
 12.4. Defense  
 12.5. Biomedical  
 12.6. Building Applications  
 12.7. Summary Remarks  
 12.8. Acknowledgments

*Index*

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