Chapter 1 INTRODUCTION TO FERROCEMENT
Ferrocement: Definition and Historical Background / Introduction / Definition by ACI Committee 549 / Suggested Revised Definition / Applications of Ferrocement - Marine - Terrestrial - Repair and Rehabilitation / Constituent Materials of Ferrocement - Cement Based Matrix: Composition and Compressive Strength - Skeletal Steel - Mesh Reinforcement / Distinct Characteristics of Ferrocement
versus Reinforced Concrete - Physical - Mechanical - Processing / Manufacturing - Maintenance and Repair / Similarities Between Ferrocement and Reinforced Concrete/ Volume Fraction of Reinforcement - Square or Rectangular Meshes - Example: Square Mesh - Any Mesh - Example: Expanded Metal Mesh - FRP Meshes - Example: FRP Mesh / Specific Surface of Reinforcement - Example: Reinforced Concrete versus Ferrocement / Distinctive Behavior of Ferrocement in Tension - Cracking and Multiple Cracking Behavior - Maximum Elongation at Failure - Stress at First Cracking - Influence of Specific Surface of Reinforcement / Apparent Modulus of the Mesh System / Ferrocement: a Composite and a Member of the Structural Concrete Family / Ferrocement versus Fiber Reinforced Polymeric Composites / Ferrocement as a Laminated Composite / Advantages of Ferrocement as a Construction Material.

Chapter 2 MECHANICAL PROPERTIES OF FERROCEMENT AS OBSERVED FROM TESTS

Chapter 3 MODELING THE TENSILE RESPONSE OF FERROCEMENT AND OTHER BRITTLE MATRIX COMPOSITES WITH CONTINUOUS FIBERS

Chapter 4 ANALYSIS AND DESIGN OF FERROCEMENT IN BENDING
Concluding Remarks.

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Chapter 10 ADVANCED MATERIALS AND CONCEPTS
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APPENDIX A: NOTATION
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APPENDIX C: REFERENCES
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REVIEWS:

"I have read almost everything written about ferrocement in the English language and can truthfully say: this book is the most comprehensive and authoritative treatment of ferrocement in existence."

Martin E. Iorns, Industrial Engineer, Member Editorial Board of the Journal of Ferrocement.

"Ferrocement and Laminated Cementitious Composites is a comprehensive source of information. The author has used his considerable expertise in giving a modern treatment to ferrocement. His emphasis on understanding the relationship between behavior, analysis and design is unique....The book offers perspectives and insights unparalleled in the existing literature on thin reinforced concrete products, and is an invaluable addition to the library of any professional involved in structural concrete."

Surendra P. Shah, Water P. Murphy Professor of Civil Engineering, Northwestern University, and Director NSF Center for Advanced Cement Based Materials.

"Indispensable book for engineers, architects, researchers, students and contractors interested in ferrocement and thin reinforced concrete products. The author has provided a much needed single source textbook that consolidates a broad coverage of information, whether on state-of-the-art, design, construction, cost, applications or future potential of ferrocement and hybrid composites."

Gordon B. Batson, Emeritus Professor of Civil Engineering, Clarkson University, former Chairman ACI Committee on Ferrocement.

"A unique and comprehensive treatise of laminated cement composites covering materials, fabrication techniques, analysis and design of structural components and systems, and including the
latest developments on high performance composites."

**P.N. Balaguru**, *Professor of Civil Engineering, Rutgers University, Former Chairman of ACI Committee 549 on Ferrocement.*

"It must certainly be the most comprehensive work in its field. Even sculptors, who may not understand the mathematics, can derive sculptural applications from the many excellent illustrations and verbal explanations and can learn the basics about how and where to place the steel."

**Lynn Olson**, *Sculptor, Clausen Lane, Valparaiso, Indiana.*

"This detailed and comprehensive book enables an appreciation to be made of ferrocement from theoretical and practical considerations. The many good examples of ferrocement are brought together indicating the undoubted range and breadth of the material and its potential uses which good design and implementation can bring about. It is an indispensable ferrocement companion."

**Patrick J. Jennings**, *Director of Engineering, NCL Stewart Scott Ltd., London, U.K.*

"This book is indeed the finest and most comprehensive book on the subject that I know of. Professor Naaman has pulled together his 25+ years of experience and research in the ferrocement field and come up with a textbook of ferrocement. This book will most likely become the standard textbook for the teaching field when it comes to ferrocement."


"I have been collecting books on ferrocement for five years. I recently read "Ferrocement and Laminated Cementitious Composites. I'm certain that it is the best book yet on ferrocement.""

**David B. Smith**, *Spartanburg, S.C.*

"This book is the first to bring together the wealth of information currently available and presents it in a digestible format. Written in an extremely readable style, the book provides a historical and early technical background to the method with abundant worked examples. More practical information on design and construction is then presented with further detail on the specific costing and housing. A final section on advanced materials and construction sneak preview into a possible future."

**Paul Nedwell**, *University of Manchester Institute of Science and Technology, Manchester, U.K.*