

Preface

Over the recent decade, advancements and applications have progressed exponentially. This has led to the increased interest in this field and projects are being conducted to enhance knowledge. The main objective of this book is to present some of the critical challenges and provide insights into possible solutions. This book will answer the varied questions that arise in the field and also provide an increased scope for furthering studies.

The process of growing cells outside their natural environment is called cell culture. After isolating them from the living tissue, the cells are grown under controlled conditions. They can be grown using an artificial substrate or in a free floating culture medium. Cell culture finds extensive applications in the fields of tissue engineering, molecular biology, cellular agriculture, nanomaterials assessment, drug discovery, regenerative medicines and vaccines. From theories to research to practical applications, case studies related to all contemporary topics of relevance to this field have been included in this book. The various studies that are constantly contributing towards advancing technologies and evolution of this field are examined in detail. This book is a vital tool for all researching or studying techniques and applications of cell culture as it gives incredible insights into emerging trends and concepts.

I hope that this book, with its visionary approach, will be a valuable addition and will promote interest among readers. Each of the authors has provided their extraordinary competence in their specific fields by providing different perspectives as they come from diverse nations and regions. I thank them for their contributions.

Editor