

Nano-Brain Revolution in Alzheimer's disease

A New Era of Brain Drug Delivery

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Preface

It is with immense pride and gratitude that I present this edited volume, *“Nano-Brain Revolution in Alzheimer’s Disease: A New Era of Brain Drug Delivery.”* Alzheimer’s disease (AD), one of the most challenging neurodegenerative disorders, continues to demand innovative solutions that transcend conventional therapeutic approaches. This book brings together insights from researchers, clinicians, and academicians, focusing on the integration of nanotechnology with neurotherapeutics to advance brain-targeted drug delivery and open new horizons in Alzheimer’s management.

The vision behind this work is to highlight how nanocarrier systems can revolutionize treatment strategies for AD by enabling precise, targeted, and efficient drug delivery across the blood–brain barrier. By bridging traditional wisdom with modern nanomedicine, this volume aims to inspire novel therapeutic avenues that are patient-centric and clinically meaningful.

I wish to express my sincere appreciation to my esteemed colleagues, **Dr. Akashdeep Singh and Dr. Binita Ghosh**, whose expertise, vision, and thoughtful contributions have greatly enriched this work. Their involvement has been instrumental in shaping this book into a comprehensive and meaningful resource for researchers, clinicians, and students alike.

I also extend my heartfelt gratitude to the **Department of Pharmacy, Jagannath University, Jaipur, Rajasthan**, for their continuous support, academic encouragement, and for nurturing an environment that fosters innovation and research. The department’s commitment to excellence in pharmaceutical sciences has been a source of great inspiration throughout the preparation of this book.

Finally, I acknowledge with deep appreciation all the contributors whose scholarly efforts made this volume possible. It is my hope that this book not only serves as a valuable reference in advancing nanotechnology-based strategies for Alzheimer’s therapy but also sparks future innovations that carry the promise of transforming lives affected by this devastating disease.

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Mr. Rahul Pal (Young Scientist)
Mr. Shivang Shukla
Ms. Anjali Rai
Prof. (Dr.) Amit Sharma

September, 2025

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