



FOREWORD

Foreword

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It is with great pleasure and enthusiasm that I write this foreword for the special issue by Indian National Young Academy of Science (INYAS), entitled “*Emerging Trends in Scientific Research: India-Centric Perspectives*.” INYAS was founded by Indian National Science Academy (INSA) in December 2014, with twenty young and enthusiastic scientists from across the country. I feel immensely proud today to see INYAS standing strong with 119 dedicated members and nearly 100 alumni committed to its mission. Over the past decade, INYAS has consistently upheld its vision of empowering young scientists, advancing science education, and leading outreach and interdisciplinary networking across the nation. It is encouraging to see the multitude of ideas coming from researchers who are right in the midst of India’s changing scientific landscape.

While grounded in a clear theme, this special issue stands out due to the variety of work presented. It reflects the true essence of our country, where science is no longer confined to the ivory towers of a few elite institutions and research centres. This issue highlights the diverse and dynamic landscape of scientific innovation across the nation. In the field of physical and engineering sciences, it covers topics ranging from electric mobility for more accessible transport, engineering for safer and smarter systems to new materials that are both useful and environment-friendly—these contributions show that we pushing steadily toward practical progress.

Equally important are the articles from chemical sciences that look at problems almost all of us recognise—polluted

water, industrial waste, the search for cleaner energy. There is also a strong presence of mathematical thinking throughout this issue, sometimes in the foreground and sometimes quietly embedded in solutions, whether it is about protecting data, predicting crops, or preserving art.

The articles in area of biological sciences section cover a wide span—mental health, traditional and modern medicine, coastal livelihoods, soil health, cancer research. These topics may seem unrelated at first glance, but together they remind us that science touches every aspect of life. They also show how Indian biosciences are engaging not just with laboratory-based questions but with real human concerns and future opportunities.

I wish to congratulate INYAS and all the contributing authors for their vision and dedication to scholarly work. I also express my sincere gratitude to the editors, reviewers, and the editorial team of Proceedings of the Indian National Science Academy for their hard work in making this issue possible. I am confident that the ideas and discoveries in this volume will inspire deeper scientific exploration, encourage collaboration across different fields, and strengthen India’s journey toward a future that is technologically empowered and self-sufficient leading to *Viksit Bharat @2047*.

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