

ABOUT NIRWAN UNIVERSITY JAIPUR

Nirwan University, Jaipur was established by the Govt. of Rajasthan vide ACT No. 2 of 2017 and recognized U/s 2 (f) of UGC ACT 1956. The University has been empowered to award degrees under section 22 of UGC Act. NUJ has thirteen different faculties with seventeen schools. The University provides guidance and knowledge to the students in more than seventy programs ensuring high quality traditional and modern education. The University is situated in Jaipur, the capital of Rajasthan. NUJ is a successful venture of "NIRWAN CHARITABLE TRUST" and is one of the prominent choices for higher education among the students.

ABOUT THE BOOK

This book provides a comprehensive exploration of the integration of intelligent systems and AI, with a focus on its applications in education, logistics and supply chain management. It highlights the crucial role played by advanced sensor technologies, machine learning algorithms, and communication systems in enhancing adaptability and precision in these settings. The narrative extends to the adoption of solar energy in India, offering insights into its environmental benefits. Additionally, the book examines the effectiveness of yoga in managing postnatal complications, traces the evolution of the Goods and Services Tax (GST) system, and emphasizes the pivotal role of education and empowerment in promoting overall health and resilience.

ABOUT THE EDITOR

Prof. (Dr.) Nakuleshwar Dut Jasuja, Dean & Joint Registrar at Nirwan University Jaipur has a brilliant academic career & over 12 years of diverse experience in teaching, research, academic administration and industry. He has also been associated with several reputed institutes like Indian Institute of Integrative Medicine (IIIM), University of Rajasthan etc. He has been taken on various roles, serving as the NAAC Coordinator, Convenor of the NEP Committee, and a member of the Institutional Development Committee. Prof. Jasuja has also been awarded several Patents and published 80 International articles in various journals of repute. He has been awarded with Young Scientist Award (2013) for his research work on environmental issues, toxicology and exposure science. Prof. Jasuja has also been felicitated by Hon'ble Chief Minister of U.P. with Gold Medal during All India Congress of Zoology at B.B.A. Central University, Lucknow for his immense contribution in the field of Animal Science and Microbiology.



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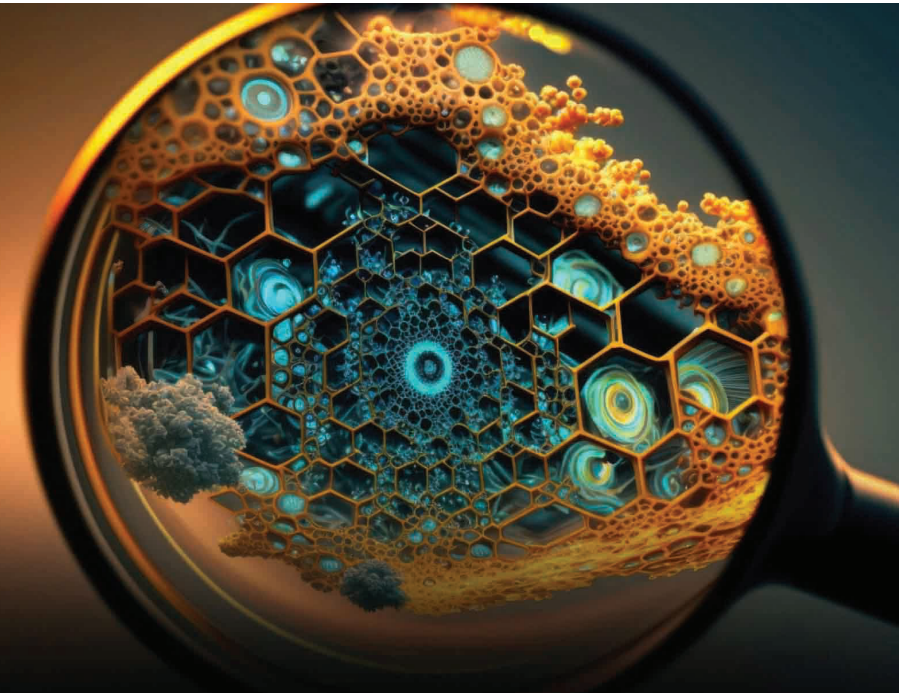
N.D. Jasuja



RECENT TRENDS IN RESEARCH

Editor

N.D. Jasuja



Recent Trends in Research

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Foreword



It is with great pleasure and anticipation that I introduce this compelling compilation of scholarly works, "Recent Trends in Research," which spans diverse realms of knowledge and inquiry. This volume brings together an array of thought-provoking chapters that reflect the dynamic landscape of contemporary research across various fields. It focuses on the transformative potential of technology in education, the integration of intelligent systems into industrial robots, and the environmental, economic, and social impacts of solar energy initiatives in India. The volume also explores the evolution of the Goods and Services Tax system, women empowerment through education, and the impact of health insurance schemes in rural areas. The authors also analyze the "Impact of 'Mukhya Mantri Chiranjeevi Swasthya Bima Yojana' on Rural Households" and the intricate relationship between local communities and the region's fauna.

This book presents a diverse and insightful collection that reflects the current landscape of scholarly inquiry across various disciplines. The compilation

explores cutting-edge research topics, providing a panoramic view of recent advancements that shape our understanding of the world we inhabit. The authors delve into the challenges and opportunities associated with AI integration in both developed and developing countries, emphasizing the need for continuous professional development among educators. The study also brings a nuanced perspective by considering generational and geographical backgrounds, enriching the discourse surrounding AI in education.

The integration of intelligent systems into industrial robots takes center stage, revealing the profound impact of advanced sensor technologies, machine learning algorithms, and collaborative human-robot interactions on the efficiency and agility of industrial processes. This exploration not only deepens our understanding of technological advancements but also underscores their pivotal role in shaping the future of industrial automation.

Addressing the imperative of sustainable development, the volume dedicates the remarkable strides made in harnessing solar energy in India. The authors shed light on the environmental, economic, and social impacts of solar energy initiatives, providing a comprehensive perspective on their role in achieving sustainable development goals and contributing to the ongoing discourse on transitioning towards greener and more inclusive energy practices.

The breadth and depth of research endeavors are evident throughout the volume, from the botanical wonders of hornworts to the holistic exploration of yoga's efficacy in managing postnatal complications. The interdisciplinary

nature of contemporary research is exemplified in chapters on the evolution of the Goods and Services Tax system, women empowerment through education, and the impact of health insurance schemes in rural areas, seamlessly blending economic, social, and public health perspectives.

A meticulous analysis of the "Impact of 'Mukhya Mantri Chiranjeevi Swasthya Bima Yojana' on Rural Households" in the eighth chapter offers valuable insights into the effectiveness and impact of a health insurance scheme in rural areas. Finally, an ethnozoological study in North-East Rajasthan unravels the intricate relationship between local communities and the region's fauna, contributing to a deeper understanding of the coexistence of humans and wildlife.

"Recent Trends in Research" serves as a testament to the tireless dedication of researchers worldwide, pushing the boundaries of knowledge and contributing to the collective wisdom of our global community. This compilation is an invaluable resource for scholars, practitioners, and enthusiasts, inspiring continued exploration and fostering a spirit of curiosity and collaboration in the ever-evolving landscape of research and discovery.

Dr. S.L. Sihag

Chairperson

Nirwan University Jaipur

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Acknowledgement

I would like to take this opportunity to thank you and the whole Nirwan University Jaipur family for your tremendous support and efforts that went into accomplishing the book "Recent Trends in Research." Your unwavering commitment to academic excellence and research has been a cornerstone in the successful completion of this endeavor. The guidance and encouragement provided by the Hon'ble Chairperson, have been instrumental in shaping the direction and quality of the content within the book.

The words are inadequate to extend my gratitude to the Hon'ble Vice Chancellor and Hon'ble Vice Chairperson. Their guidance and unwavering support have been instrumental throughout this academic journey.

I extend my sincere appreciation to the Office of the Chairperson and specifically the esteemed OSD for their support throughout the project. Their assistance has been pivotal in ensuring the smooth coordination and execution of various aspects related to the book.

A special acknowledgment is reserved for the esteemed Registrar, COE and authors whose dedication and expertise have enriched the chapters with profound insights and knowledge. Their commitment to advancing research has significantly contributed to the book's overall merit. I

would also like to express gratitude to the Deans, Directors, and Faculty Members whose support and engagement have been crucial in shaping the interdisciplinary nature of the content. Their expertise and collaboration have truly elevated the quality of the research presented. Lastly, a heartfelt thanks to the Social Media Team members who played a vital role in disseminating information about the book and ensuring its outreach to a wider audience. Their efforts have been instrumental in fostering engagement and interest in the research topics covered.

The collective efforts of the Nirwan University Jaipur community have made "Recent Trends in Research" a meaningful and collaborative venture. It stands as a testament to the university's commitment to fostering a culture of research and academic excellence.

Once again, thank you for your unwavering support and encouragement throughout this journey. I am truly grateful for the collaborative spirit that defines Nirwan University Jaipur. I would fail in my duty if I do not acknowledge very timely and efficient support provided by Prof. (Dr.) Ravi Kant Modi, Member Secretary, Publication Board, Nirwan University Jaipur.

I am also thankful to the Inspira publications for carrying out this job professionally.

Sincerely,
Prof. (Dr.) N.D. Jasuja

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foundation, Mr. Bakliwal earned his B.E. degree from Maharana Pratap University of Agriculture and Technology, Udaipur, reflecting his dedication to academic excellence. His diverse educational background serves as the bedrock for his multifaceted career. Specializing in areas such as Network Security, Artificial Intelligence, Machine Learning, Data Science, and Software Engineering, Mr. Bakliwal demonstrates a keen interest in cutting-edge technologies that shape the IT landscape. His passion for staying at the forefront of technological advancements has driven him to excel in these dynamic and rapidly evolving fields.

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Preface

This book delves into the complexities of our contemporary world. Addressing topics like artificial intelligence, education, and sustainable development, the author seeks to contribute to ongoing dialogues and collaborates with experts to enrich the content. Rather than exhaustive treatises, the chapters serve as invitations for further exploration. The interdisciplinary nature of the topics underscores global challenges and the necessity for holistic perspectives. The author openly acknowledges the limitations of knowledge, encouraging readers to approach the pages with curiosity.

The aim of this book was to explore subjects that resonate with the complexities of the contemporary world. Each chapter, from the intricate dance between artificial intelligence and education to the delicate balance required for sustainable development, weaves a thread into the broader tapestry of understanding the evolving society.

The inspiration for this book emerged from a desire to contribute to the ongoing dialogue in various fields, addressing issues that are both pressing and perennial. Throughout the process, I have been fortunate to collaborate with experts and scholars whose insights have enriched the content within these pages.

I extend my heartfelt thanks to those who have supported and guided me throughout this endeavor, from

mentors who offered invaluable insights to colleagues. I hope this book sparks curiosity, prompts reflection, and contributes in some small way to the ongoing quest for knowledge.

- Prof. (Dr.) N.D. Jasuja

Professor & DSW

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Recent Trends in Research



Welcome to "Recent Trends in Research" a comprehensive exploration of diverse fields and cutting-edge developments in academia. This compilation of chapters delves into a range of topics, offering insights into the latest advancements and significant contributions across various disciplines. The following summary provides a glimpse into the rich tapestry of research endeavors presented in this volume.

The first chapter "AI-Enhanced Education for Next Generation" describes comprehensive exploration of the integration of intelligent systems and AI, with a focus on its applications in education, logistics and supply chain management. It highlights the crucial role played by advanced sensor technologies, machine learning algorithms, and communication systems in enhancing adaptability and precision in these settings. The narrative extends to the adoption of solar energy in India, offering insights into its environmental benefits. Additionally, the book examines the effectiveness of yoga in managing postnatal complications, traces the evolution of the Goods and Services Tax (GST) system, and emphasizes the pivotal role of education and empowerment in promoting overall health and resilience.

The second chapter "Influence of Social Media on Tourist Destination Perception and Decision-Making" is about the world of the internet is not only replete with a vast quantity of material that is constantly evolving (text, images, audio, and video sequences), but it is also quite easy to access. People now have more power than ever before to receive and distribute information, to positively or negatively influence the opinions of others regarding brands, goods, services, locations, the environment, and political, economic, and social events.

Moving towards sustainable development, the third chapter, "Empowering Sustainable Development: The Impact of Harnessing Solar Energy in India" sheds light on the burgeoning adoption of solar energy technologies in India. The chapter examines the environmental, economic, and social impacts of solar energy initiatives, emphasizing their role in achieving sustainable development goals and fostering a greener, more inclusive future.

The fourth chapter "Library Automation" involves using technology to streamline and manage various library tasks, including cataloging, circulation, and patron management. It employs integrated library systems (ILS) or library management software to enhance efficiency, organize collections, track borrowing, and facilitate access to information. Automation reduces manual workload, improves accuracy, and enhances overall library services, making resources more accessible to patrons.

The fifth chapter, "Education and Women Empowerment" addresses the critical role of education in empowering women in India. It emphasizes the transformative potential of education in challenging

traditional roles, reducing inequalities, and fostering women's participation in society.

Turning to healthcare, the sixth chapter, "Efficacy of Yoga to Manage Postnatal Complications" offers a holistic exploration of yoga as an effective approach in managing postnatal challenges. Drawing upon existing research, the chapter underscores the multifaceted benefits of yoga for new mothers, positioning it as a valuable tool for promoting physical and mental well-being during the postpartum period.

Shifting focus to public health, the seventh chapter, "Impact of 'Mukhya Mantri Chiranjeevi Swasthya Bima Yojana' on Rural Households: A Study Jaipur District of Rajasthan" presents an analytical and empirical study examining the awareness and perception of a health insurance scheme in rural areas, providing valuable insights into its effectiveness and impact.

In the realm of economics and taxation, the eighth chapter, "The Evolution of GST - A Transformative Tax Reform" provides an overview of the Goods and Services Tax (GST) system, tracing its historical development and transformative effects on the economic landscape. The chapter highlights how GST has streamlined taxation processes, fostering economic growth and efficiency.

The ninth chapter, "The Morphology, Development, and Evolution of the Hornworts" takes us into the fascinating realm of botany, exploring the unique characteristics of hornworts, a group of bryophytes. The study delves into the challenges of constructing an evolutionary tree for hornworts, considering the limited

availability of fossil records. Despite these challenges, the chapter provides a comprehensive overview of the morphology, development, and evolution of these intriguing plants.

The tenth chapter, "Intelligent Systems for Industrial Robots in Logistics and Supply Chain Applications" investigates the integration of intelligent systems into industrial robots, emphasizing their role in enhancing adaptability and precision in logistics and supply chain operations. From advanced sensor technologies to machine learning algorithms and collaborative human-robot interactions, the chapter explores the transformative impact of intelligent technologies on the efficiency and agility of industrial robots.

Finally, the eleventh chapter, "An Ethnozoological Study in North-East Rajasthan" explores the intricate relationship between local communities and the region's fauna. This ethnozoological study uncovers traditional knowledge, practices, and cultural beliefs surrounding animals, contributing to a deeper understanding of the coexistence of humans and wildlife in North-East Rajasthan.

- Prof. (Dr.) N.D. Jasuja

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