ECOLOGICAL INNOVATION FOR GREEN ENVIRONMENT

Volume II

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ECOLOGICAL, INNOVATION FOR
GREEN ENVIRONMENT

(Volume II)

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Kripa-Drishti Publications, Pune.

Book Title: **Ecological, Innovation for Green Environment**

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Volume II

Price: ₹599

ISBN: **978-81-968830-8-9**

9 788196 883089

Published: **Jan 2024**

Publisher:

Kripa-Drishti Publications

A/ 503, Poorva Height, SNO 148/1A/1/1A,
Sus Road, Pashan- 411021, Pune, Maharashtra, India.
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PREFACE

This book entitled "**Ecological Innovation for Green Environment**" deals with the ever-evolving landscape of technological advancements, which are imperative to harmonize progress with ecological integrity. As we stand at the crossroads of innovation and environmental stewardship, the urgency to forge a sustainable future has propelled the emergence of Green Technology to the forefront of global discourse.

This preface serves as a gateway into the realm of ecological innovations, where the synergy between human ingenuity and environmental responsibility unfolds. The pages that follow delve into the transformative power of technology harnessed to mitigate ecological impact, preserve biodiversity, and usher in a new era of sustainability. The unprecedented rate of industrialization and urbanization in recent decades has brought forth ecological challenges that demand innovative solutions. The specter of climate change, resource depletion, and pollution casts a shadow over the conventional pathways of progress. In response, a wave of conscientious innovators, engineers, and scientists has risen to confront these challenges head-on, catalyzing a paradigm shift towards eco-friendly alternatives and practices.

This book provides a wide range of applications that covers the current innovations and novel approaches for the conservation of energy to meet global desires. With the impacts of environmental degradation and climate change becoming evident, it has become an imperative to take decisive action towards a more environmentally friendly future. By consciously making choices and adopting sustainable practices, we can ensure a brighter tomorrow for ourselves and future generations. Sustainability not only enhances our quality of life but also safeguards our ecosystems and preserves natural resources. The primary objective of publishing this book, centered on environmental protection and sustainable development. We wish to express my deep appreciation to all the authors who have enriched the significance of this book with their illuminating research chapters.

We believe that this book shall undoubtedly contribute to the advancement and preservation of the environment. We would also like to express our heartfelt gratitude to our publisher **Mrs. Rajani Adam** for her immense love and moral support in bringing out the book in a nice form.

We hope this book will inspire thought, provoke conversation and bring about change. Preserving the earth for better future generations requires our combined commitment to sustainable solutions. Let this book be a guide, a source of inspiration and a call to action for building a more resilient green world. We assure that, this book will provide a valuable platform to Academicians, Researchers, Industrialists, Scholars and Students to enlighten their knowledge with all around the multiple of diverse fields.

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CONTENT

ABOUT THE AUTHORS

Dr. Jyoti Rajput *received her Ph.D. degree from NIT Jalandhar, Punjab, India in 2019. She is currently an Associate professor of Physics at Lovely Professional University, Punjab, India. Her research focused areas deal with laser induced electron acceleration in vacuum and plasma (DLA, LBWA, PBWA), harmonic generation and THz radiation. She has published around 35 research articles in various international SCI journals and presented her research work at various international conferences/workshops. She is also a member of different renowned associations/societies e.g., PSSI, ISCA etc. She has been an active reviewer of esteemed international journals like Modern Physics Letters B., waves in random and complex media, Optics Communications, IEEE Trans. in Plasma Science etc. She has delivered many international invited speakers research talks at eminent conferences. At present, she has accomplished one PhD supervision and is supervising around 5 PhD research scholars.*

Dr. Pallavi Dixit *is well renowned in the field of Science and Literature. She is working as Associate Professor in the Department of Botany at Mahila Vidyalaya Degree College, Lucknow. She has authored 03 books and edited 06 books, 01 is under publication, Published 04 Book Chapters more than 80 articles and 17 Research Papers in various journals of National and International repute. She has also presented more than 32 research papers in various National and International Seminar/Conferences, received many prestigious awards and honours in the field of Science and Literature.*

Dr. S. Ravichandran *is currently working as Professor in the Department of Chemistry at Lovely Professional University, Jalandhar, Punjab (INDIA). He completed his Ph.D. in 2006 from Madurai Kamaraj University, Madurai (Tamilnadu) and M.Sc. from Pondicherry University, Pondicherry. He has qualified in GATE with a score of 95 percentile conducted by Ministry of Human Research and Development in the year 1998. He has 17 years of Teaching and Research experiences and published 160 International papers. He has published 9 patents and 7 Textbooks and 20 book chapters. He has guided two Ph.D. scholars. He has received Bharat Shiksha Ratna award and Lifetime achievement award from Global society in 2012, 2013 from New Delhi. He has also received the award of Academic Excellence by Arab Translators Association, Bahrain on 24th November 2021 in recognition of research publications achievement. Received the Life Time Achievement award with medal from Blue Bird Welfare Association, Prayagraj in a National Conference on Recent Trends in Science, Technology and Management conducted by Madhu Vachaspati Institute of Engineering and Technology, Kaushambi (UP) on 13th February 2022. Received the Life Time Achievement Award with medal from Sansnow's Nobel Professional Foundation, Kanyakumari, (Tamilnadu) approved by Ministry of Corporate Affairs, Government of India on 4th th June 2022. Very recently he has received the Incredible Researcher of India Award with medal from Record Owner, Government of India, Ahmedabad on 30th August 2022. He has delivered many international invited speakers research talks at eminent conferences. He has been serving as Editor-in Chief in many International journals. His current interest is to focus on the development of novel greener methodology for a Sustainable Development.*

KRIPA DRISHTI PUBLICATIONS

Price: ₹599

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Pune – 411021, Maharashtra, India.
Mob: +91 8007068686
Email: editor@kdpublications.in
Web: https://www.kdpublications.in

ISBN: 978-81-968830-8-9