Recent Advances in Green Chemistry New Avenues with Sustainable Approach in Science and Technology

Dr. Puneet Kumar Dr. Ravi Prakash Ojha Dr. Pushyamitra Mishra



Surya Multidisciplinary Publication 407, Ramlila Maidan Malviya Nagar, Gonda, U.P

© Surya Multidisciplinary Publication

Authors/contributors are solely responsible for the originality/ authenticity/ accuracy of the ideas/ information/ views/ content/ data produced in their respective papers. Publisher and the Editor shall not be responsible for any liability arising on account of any civil or criminal proceeding(s) in any court/tribunal judicial body under any law for the time being in force.

All rights including copyrights of translation etc are reserved and vested exclusively with the Surya Multidisciplinary Publication. No part of this publication shall be reproduced or transmitted in any form or by any means, including electronic, mechanical, photocopying, recording or otherwise or stored in any retrieval system of any nature without the express permission of the Surya Multidisciplinary Publication.

Editor : Dr. Puneet Kumar, Dr. Ravi Prakash Ojha &

Dr. Pushyamitra Mishra

Publisher : Surya Multidisciplinary Publication

407, Ramlila Maidan Malviya Nagar, Gonda, U.P

Phone : 9415093911

E-mail : info@suryampublication.com

Book : Recent Advances in Green Chemistry: New

Avenues wih Sustainable Approach in Science

and Technology

Edition : 2024

ISBN : <u>978-81-972279-1-2</u>

<u>Price</u> : <u>799/-</u>

Printed By : Global Printing Service, Delhi-92

Contents

	Preface	vii
1.	Origin of Green Chemistry—Dr. Puneet Kumar; Dr. Pushyamitra Mishra	1
2.	Twelve Principles of Green Chemistry —Dr. Puneet Kumar; Dr. Ravi Prakash Ojha	12
3.	Green Solvents—Dr. Reetu Sangwan	35
4.	Green Chemistry in Organic Synthesis —Dr. Ajay K. Yadav; Dr. Neelima Shukla	46
5.	Emerging Green Techniques—Dr. Hariom Kumar; Dr. Preeti Gupta	57
6.	Understanding the Aspects of Sustainable Synthesis: The "click" Perspective—Dr. Manoj Dhameja1, Dr. Prashant Mishra and Dr. Shashi Kala Mishra	75
7.	Green Synthesis and Sustainability —Dr. Kijay Bahadur Singh, Dr. Gajanan Pandey	95
8.	Role of Green Chemistry in Nanotechnology —Nisha Gangwar, Dr. Joy Sarkar, Dr. Ashish Soni, Dr. Chinky Gangwar,	112
9.	Biofuels as Renewable and Sustainable Source of Gree Energy—Brijendra Bahadur Vishwakarma;	
		127
10.		140
11.	Introduction of Green Chemistry in Education — Dr. Prashant Mishra, Dr. Manoj Dhameja,	
		150
12.	Scope of Green Chemistry in the Pharmaceutical Industry—Mohd Faheem, Vaibhav Pandey, Dr. Mani Dixit ^{1*} , Dr. Manisha Prasad ^{2*}	sh 164
13.	Green Chemistry Applications in Nanocatalysis —Dr. Vineet Kumar Mall	191