

---

# Contents

Preface.....	vii
Editors.....	ix
Contributors.....	xi
<b>Chapter 1</b> Introduction.....	1
<i>Suresh C. Ameta</i>	
<b>Chapter 2</b> Photochemical Solar Energy Conversion.....	7
<i>Rakshit Ameta, Chetna Ameta, and Poonam Kumawat</i>	
<b>Chapter 3</b> Basic Photoelectrochemistry.....	17
<i>Purnima Dashora, Meenakshi Joshi, and Suresh C. Ameta</i>	
<b>Chapter 4</b> Photoelectrochemical Cells.....	29
<i>Dipti Soni, Priya Parsoya, Basant K. Menariya, Ritu Vyas, and Rakshit Ameta</i>	
<b>Chapter 5</b> Organic Photovoltaic Cells.....	55
<i>Meenakshi Singh Solanki, Taruna Dangi, Paras Tak, Sanyogita Sharma, and Rakshit Ameta</i>	
<b>Chapter 6</b> Dye-Sensitized Solar Cells.....	85
<i>Rakshit Ameta, Surbhi Benjamin, Shweta Sharma, and Monika Trivedi</i>	
<b>Chapter 7</b> Photogalvanic Cells.....	115
<i>Yasmin, Abhilasha Jain, Pinki B. Punjabi, and Suresh C. Ameta</i>	
<b>Chapter 8</b> Hydrogen: An Alternative Fuel.....	139
<i>Neelu Chouhan, Rajesh Kumar Meena, and Ru-Shi Liu</i>	
<b>Chapter 9</b> Photocatalytic Reduction of Carbon Dioxide.....	173
<i>Guoqing Guan, Xiaogang Hao, and Abuliti Abudula</i>	
<b>Chapter 10</b> Artificial Photosynthesis.....	187
<i>Neelam Kunwar, Sanyogita Sharma, Surbhi Benjamin, and Dmitry Polyansky</i>	
<b>Chapter 11</b> Nanomaterials for Solar Energy.....	219
<i>Mohammad Azad Malik, Sajid Nawaz Malik, and Asma Alenad</i>	
<b>Chapter 12</b> Other Solar Cells.....	253
<i>Rakshit Ameta</i>	
<b>Index</b> .....	265