



**An Introduction to Green Chemistry by V. Kumar, Vishal Publishing Co., Jalandhar, 2015. Pages: 123 + iv. ISBN: 81-88646-47-4. Price: Rs. 120/125 (India) / 350 (International).**

Environmental pollution is steadily rising across the globe. Awareness of the people on the causes of pollution and on the ways to abate it is important, if not essential, for the sustenance of life on earth. It is in this context that the common people at large and the students in particular need to become conversant with Green Chemistry (GC), whose pursuit is the only way out from a polluted life.

Kumar's book on this topic is a welcome addition to the plethora of books that are already available in the market in this subject. No doubt, authoritative books are needed at libraries for consultation by teachers and students alike. But the latter community certainly needs cheap, handy yet useful books. Kumar's book meets this requirement.

In the first Chapter (Introduction) of this book, the arena of GC has been explained, the incidences leading to

its genesis have been stated and its goal, limitations and progress made so far have been outlined. The twelve principles of GC and the designing of chemical synthesis (Ch. 2), examples of green synthesis / reactions (Ch. 3), future trends in GC (Ch. 4) and a discussion on GC *versus* environment (Ch. 5) are the contents of the book. The author is largely successful in accomplishing his goal.

Nevertheless, the book lacks certain essential information that is briefly stated below. In Unit 1.2, the name of Rachel Carson, indisputably the pioneer in the domain of GC, and reference to her universally acclaimed book 'Silent Spring' have not been mentioned at all – a serious lack indeed! In Unit 1.5, the names of other awards and journals on GC should have been stated. Only one matrix of GC, viz. Atom Economy has been dealt with in Unit 2.2.2.1; few other matrices should have been discussed as well. In dealing with green solvents (Unit 2.2.2.5), fluorosolvents have not been mentioned, supercritical state has not been amply explained and it has even been wrongly written as liquid carbon dioxide here and there, the structures of ionic liquids (ILs) and examples of reactions in ILs, specially RTILs, should have been there, and solvent-free reactions on montmorillonite K10 and KSF clays, zeolites and heteropoly acids should have been referred to with examples. In Unit 2.2.2.6 dealing with alternative sources of energy, examples of photochemical reactions should be included.

Apart from these flaws, the book may be deemed to cater quite usefully to the needs of the student community. One more important suggestion – a future edition of this book should include the experimental details of some GC reactions that can be carried out at the undergraduate and the postgraduate levels by the students of chemistry and environment. Since low-priced, handy and useful too as well as approved by the U.G.C., this book on Green Chemistry by V. Kumar is highly recommended to the students and for the libraries as well. □

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