

विवेक भसीन  
Vivek Bhasin



निदेशक, भाभा परमाणु अनुसंधान केंद्र  
Director, Bhabha Atomic Research Centre  
सदस्य, परमाणु ऊर्जा आयोग  
Member, Atomic Energy Commission



## FOREWORD

From the inception of Atomic Energy Commission in 1948, Dr. Homi Bhabha recognized the need for establishing Chemistry research in Atomic Energy programme. Dr. Bhabha's vision to attain self-reliance in all aspects of nuclear science and technology led to the initiation of Chemistry activities way back in 1949, primarily in the area of analytical sciences and mineral processing. Analysis of uranium and thorium in various ores and minerals, process development for separation of zirconium and hafnium, solid state chemistry, development of high purity materials, catalysis, radiation chemistry of coolants in nuclear reactors, database on structural and thermophysical properties of nuclear materials are some of the notable contributions made during the formative years of the department that were driven by chemistry.

The Chemistry programmes were further strengthened with the advent of pulse radiolysis facility and ultrafast spectroscopic techniques. Setting up of the LINAC facility in Chemistry Group made it possible to study various transient intermediates formed during radiolysis process. Contribution of Chemistry Group in nuclear safety research, reactor water chemistry, water purification, healthcare materials etc. are also commendable.

I am delighted to know that Chemistry Group is celebrating 75 years of its R&D activities during this year and it is all the more fascinating to note that this book entitled "75 Years of Chemistry in Indian Atomic Energy Programme: Rich Legacy and Way Forward" is being published on this occasion. I am happy that the book includes different chapters that portray all significant areas of research in Chemistry that has made an indelible mark in the history of Atomic Energy Programme. This brings together a wealth of valuable information in Chemical Sciences relevant to the nuclear energy programme. I am sure that this collection will be highly useful for young and senior colleagues alike and will serve as a valuable archive. I compliment the editors as well as the contributing authors for their painstaking efforts in collecting and presenting the information in a lucid manner.

I wish everyone an enriching experience from this book.

*Vivek Bhasin*  
(Vivek Bhasin)

