

Fluorine

A Paradoxical Element

Progress in Fluorine Science Series

Edited by Alain Tressaud

An overview of fluorine and fluorinated products from discovery of the element, major milestones in chemistry and applications, environmental and health impacts, and future potential for fluorine science

- Describes background and contextual information regarding the history, development of understanding, and applications of this important element
- Explores the impacts of fluorine, both positive and negative, in the environment and in biological systems
- Includes applied, real-world information from agencies such as the Centre National de la Recherche Scientifique (CNRS), National Aeronautics and Space Administration (NASA), HHS and Department of Health (DOH), World Health Organization (WHO), Intergovernmental Panel on Climate Change (IPCC), U.S. Geological Survey (USGS), and the United Nations Framework Convention on Climate Change (UNFCCC)

Fluorine: A Paradoxical Element deals with the complex links between fluorine, humanity, and the environment. This unique resource is divided into three main sections which explore the history of the element fluorine and stages of the development of fluorinated products; awareness of the importance of this element in our environment (both in the atmosphere and lithosphere) and the issues surrounding it; and finally, recent applications of fluoride products in medicine, pharmacology, and in our daily lives.

Engaging the reader with interesting figures and accessible language, *Fluorine: A Paradoxical Element* serves as a valuable reference for chemists and related scientists working in materials, photonics, medicine, pharmacy, biotechnologies, toxicology, and environmental science. Written by a leading expert in the field, Professor Alain Tressaud, this book is the latest volume in the Progress in Fluorine Science series, which includes the work of highly-respected volume editors and contributors from both academia and industry, bringing valuable and varied content to this active field.

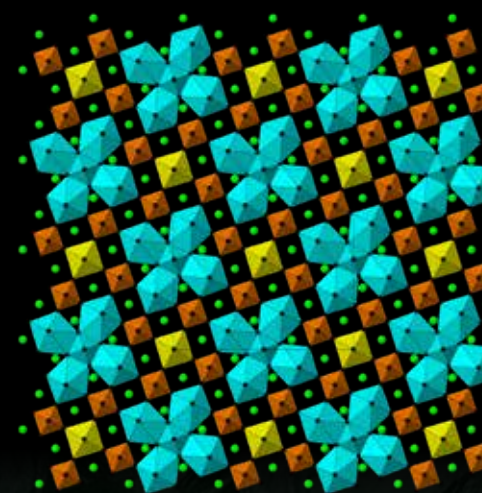
Alain Tressaud is the Emeritus Research Director at ICMCB-CNRS, Bordeaux University. He is president of the European Academy of Science in Brussels and member of several European academies. He founded and chaired the French Network on Fluorine Chemistry, sponsored by CNRS, until 2008. He has received several awards, including the CEA Award of French Academy of Sciences (2008), the Fluorine Award of the American Chemical Society (2011), and the International Henri Moissan Prize (2012). His scientific interest covers various fields, including synthesis, physical chemical characterizations, applications in fluorine chemistry, solid state chemistry, and materials sciences. His work also deals with surface modification of materials and intercalation chemistry. Professor Tressaud's scientific production includes more than 360 papers in international journals, 20 book chapter contributions, and 12 internationalized patents. He has also edited several books in his role as editor-in-chief of the series *Advances in Fluorine Science* (2006) and *Progress in Fluorine Science* (2016) with Elsevier.

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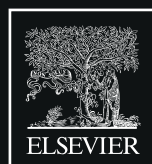
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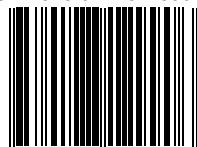
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ISBN 978-0-12-812990-6



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