Chemistry of Pyrotechnics: Basic Principles and Theory, Second Edition

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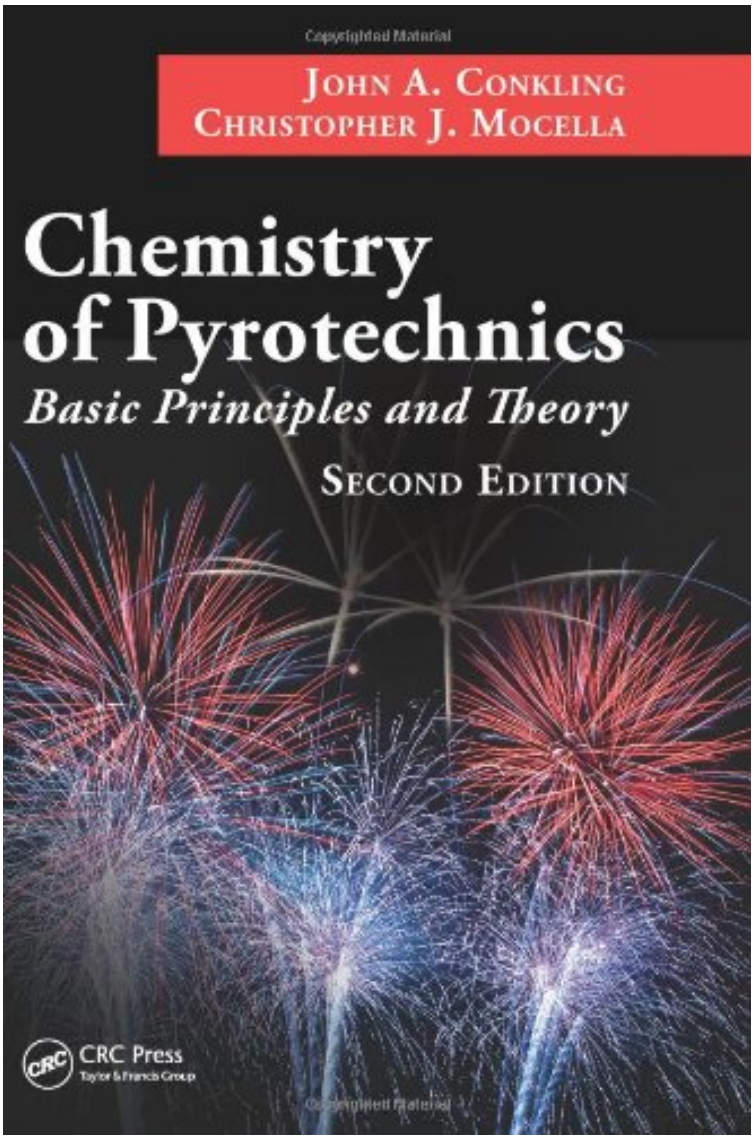

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John A. Conkling, Chris Mocella : Chemistry of Pyrotechnics: Basic Principles and Theory, Second Edition before purchasing it in order to gage whether or not it would be worth my time, and all praised Chemistry of Pyrotechnics: Basic Principles and Theory, Second Edition:

3 of 3 people found the following review helpful. One of the BEST books on the subject by far.By GarbunkleThis is one of those essential books that every professional or licensed hobbyist involved with fireworking should own. This

really is a great book that takes you deeply into the chemistry and physics of what goes on with these compositions as the are put into use. Knowing what is in this book will help you tweak your formulae so that they do exactly what you want them to do when you use them. Highly recommended for anyone interested in Pyrotechnics though none of the experiments should be attempted without the proper training and licensing.4 of 4 people found the following review helpful. Chemistry of PyrotechnicsBy Larry MarantzWell written, covers the chemistry, how ingredients work with each other, their properties and problems. This book is not a do it yourself manual and I did not purchase it for that use. If you are interested in how pyrotechnics work, this is the book for you.0 of 0 people found the following review helpful. An Excellent Book on Pyrotechnic ChemistryBy Paul C KlaraDr. Conkling and Chris Mocella wrote an excellent book on application of chemistry to pyrotechnic materials. Anyone in the industry must own this book!

Primarily driven by advancing technology and concerns for safety, advancement in the world of pyrotechnics and high-energy materials has exploded in the past 25 years. The promulgation of new government regulations places new and more stringent restrictions on the materials that may be used in energetic mixtures. These regulations now mandate numerous training programs, and initiate other actions, such as OSHAs Process Safety Management standard, intended to eliminate accidents and incidents. Unfortunately, the US lacks an organized, broad-range academic program to cover the science and use of energetic materials and educate the next generation of pyrotechnicians.Designed as a bridge to allow a smooth and confident transition for personnel coming from a chemistry background into the practical world of explosives, Chemistry of Pyrotechnics: Basic Principles and Theory, Second Edition emphasizes basic chemical principles alongside practical, hands-on knowledge in the preparation of energetic mixtures. It examines the interactions between and adaptations of pyrotechnics to changing technology in areas such as obscuration science and low-signature flame emission.Much more than a simple how-to guide, the book discusses chemical and pyrotechnic principles, components of high-energy mixtures, and elements of ignition, propagation, and sensitivity. It offers heat compositions, including ignition mixes, delays, thermites, and propellants and investigates the production of smoke and sound as well as light and color. Promoting the growth and expansion of pyrotechnics as a science, Chemistry of Pyrotechnics: Basic Principles and Theory, Second Edition provides practitioners with the ability to apply chemical principles and logic to energetic materials and thereby make the field as productive, useful, and safe as possible.

I think that the time has come to modernize the design and production of pyrotechnics and I actually plan to see whether these local companies are interested in learning the chemical principles behind their successful business. I certainly plan to use Chemistry of Pyrotechnics: Basic Principles and Theory for any such class. I would highly recommend this book for anyone who is fascinated by pyrotechnic displays. You will learn a great deal by reading it.Peter M. Smith, in Journal of Chemical Education, April 2012This is a fascinating book that should be of interest to all those involved in the application of chemistry to the more artistically rewarding aspects of the subject.Chromaographia, 2012About the AuthorChestertown, Maryland, USA