

# Neutrosophic and Plithogenic Inventory Models for Applied Mathematics

Part of the Advances in Chemical and Materials Engineering Book Series

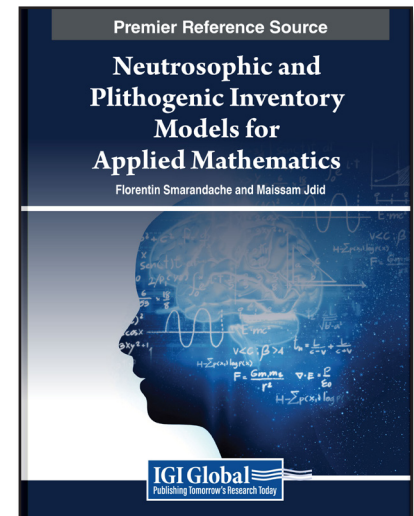
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Syria)

## Description:

As professionals navigate the evolving landscapes shaped by the advent of artificial intelligence, a critical void emerges in the optimization paradigms of applied mathematics. The dynamism of our interconnected world demands a collective research effort that transcends traditional boundaries. In response to this pressing need, **Neutrosophic and Plithogenic Inventory Models for Applied Mathematics** proposes a groundbreaking exploration within the frameworks of neutrosophic and plithogenic theories. This work not only seeks to address the profound impact of artificial intelligence on our lives but also aims to redefine the very foundations of optimization.

At the heart of this work lies the aspiration to pioneer a new development in both linear and non-linear programming, specifically tailored for inventory models. The meticulously crafted methodologies extend beyond the theoretical realm, presenting applications that span diverse areas of life, including medical, industrial, technical, business, and commercial sectors. By delving into the intricacies of linear programming, nonlinear programming, and dynamic programming, this book introduces a fresh perspective to operations research methods. **Neutrosophic and Plithogenic Inventory Models for Applied Mathematics** is poised to become a catalyst for academic advancement, tailored for students, faculty, researchers, engineers, and technicians, as well as those shaping the educational processes in schools and universities.

Embark on a profound journey through the unexplored territories of neutrosophic and plithogenic concepts. Discover the transformative potential of neutrosophic set, logic, probability, and statistics, as well as plithogenic set, logic, probability, and statistics. Explore the synergy between artificial intelligence and responsive optimization, and navigate the intricacies of plithogenic cognitive maps. This work further explores the structural designs within neutrosophic optimization, offering an invaluable resource for scholars seeking to incorporate these advanced concepts into static, dynamic, and probabilistic inventory models and their myriad applications.



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## Topics Covered:

- Artificial Intelligence and Responsive Optimization
- Neutrosophic and Plithogenic Optimization
- Neutrosophic Cognitive Maps
- Neutrosophic Logic
- Neutrosophic Probability
- Neutrosophic Sets
- Neutrosophic Statistics
- Plithogenic Logic
- Plithogenic Probability
- Plithogenic Sets
- Plithogenic Statistics

**Subject:** Science and Engineering

**Classification:** Edited Reference

**Readership Level:** Advanced-Academic Level  
(Research Recommended)

**Research Suitable for:** Advanced Undergraduate  
Students; Graduate Students; Researchers;  
Academicians; Professionals; Practitioners

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