# Studies in Systems, Decision and Control

Volume 433

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Elena Lysenko · Alexander Rogachev · Oldřich Starý Editors

# Recent Developments in the Field of Non-Destructive Testing, Safety and Materials Science



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### Preface

With technological advances, the modern world is on the verge of a new industrial revolution, being in the stage of digital transformation, when innovations from different industries interpenetrate and complement each other. The School of Non-Destructive Testing, Tomsk Polytechnic University, Russia, promotes scientific research and industrial application of non-destructive testing and materials science technologies and related tests, as well as methods, to ensure safe manufacturing processes.

Today, research and technology advancement is driven by innovations, and there is a need for publications to stimulate the formation and continuous training of specialists in non-destructive testing, materials science and safety. This book can be used as a complementary technical document to upgrade the skills of specialists in non-destructive testing, materials science and safety, and as a primary resource for training managers and decision makers in various industries.

The current timely book presents the latest advances and emerging trends in research and industrial applications in non-destructive testing, manufacturing and process safety, and diagnostics and materials science.

Innovations in the fields of non-destructive testing, production and process safety, diagnostics and materials science and books that highlight the best and instructive are central to our technological world.

I am pleased to see this comprehensive book taking shape and advancing this field to the next generation of scientists seeking for new research opportunities.

Tomsk, Russia Gomel, Belarus Prague, Czech Republic Elena Lysenko Alexander Rogachev Oldřich Starý

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