Program 2017

International Rights Catalog
VDE Publishing House – competence in technical books!

Dear Colleagues,

It is my pleasure to present to you the International Rights Catalog 2017 of the VDE VERLAG, the leading publishing house for technical books and dictionaries. We have compiled relevant titles of both catalogs, Spring and Autumn into a years catalog for the international readers. It offers a wide range on specialist books with international appeal on the subjects: Electrical Installation, Building Technology, Building Services and Facility Management, Building Law Practice and Construction Management, Energy Efficient Construction, Construction Engineering, Climate and Ventilation Engineering, Refrigeration Engineering, Management – Soft Skills, Automation Engineering, Measurement and Test, Electronic Engineering, Electrical Engineering, Engineering History, Geoinformation – GIS, Geodesy and Photogrammetry – Remote Sensing.

Highlights in this year are:

- VDE 0100 and the Practice
- KNX Systems – Error Prevention during Planning and Installation
- Legal Security in the Planning and Installation of Photovoltaic (PV) Systems
- Ecological Renovation of Old Buildings
- Refrigerated Warehouses and Freezer Storage Houses
- The Sales Engineer
- Industry 4.0 in an International Context
- Guideline Industrial Security
- Software Development in C for Microprocessors and Microcontrollers
- Exercises on Electrical Power Engineering
- ArcGIS 10.5
- Digital Image Processing and Geoinformation

Our book program addresses to End Users in practice, Students and Professionals. For further information please visit: www.vde-verlag.de/foreign-rights

We control world rights on all new and backlist titles and I would be happy to provide you with reading samples.

I wish you an enjoyable browse through our catalog 2017!

Maria Pinto-Peuckmann
Literary Agent for VDE VERLAG
World Copyright Promotion
E-Mail: maria@pinto-peuckmann.de

Frankfurt Book Fair 2017!
I cordially invite you to visit me in Hall 6.3/Rights & Scouts Centre/Table 28M. Please come across and have a look!
Kiefer, Gerhard/Schmolke, Herbert

VDE 0100 and the Practice
Guide for beginners and professionals

- A guide for all questions concerning the planning, installation and testing of electrical low-voltage systems!
- New topic: Energy efficiency
- Updated standards
- Practice-relevant examples facilitate the understanding of the theoretical foundations and the requirements of the standards
- A must for every electric engineer

Target Audience: Electrical engineers, experts, craftsmen, university teachers, engineers, master students and students

Fields of Expertise: Electrical planning and electrical installation

Prof. Dipl.-Ing. (FH) Gerhard Kiefer (†) was an active member in numerous boards and committees of the DKE as well as lecturers at the University of Applied Sciences Karlsruhe in the Department of Energy Technology. He was author of numerous publications.

Dipl.-Ing. Herbert Schmolke is an electrical engineer at the VdS Schadenverhütung GmbH and responsible for the recognition of experts of Electrical engineering and Thermography, he also works as a consultant. He is a staff member in numerous DKE committees, e.g. K 224 (operation of electrical systems), UK 221.1 (protection against electrical strike), as well in committees for the preparation of VdS guidelines.

The guide for all questions concerning planning, installation and testing of electrical low-voltage systems offers now again updated standards. The practical examples facilitate the understanding of the theoretical foundations and the requirements from the standards.

An indispensable companion in all everyday and special questions around the DIN VDE 0100!

16th new updated and extended Edition, 2017
1056 Pages
€ 44.00

ISBN 978-3-8007-4344-5
Already published

Recommendations on the subject

€ 46.00
ISBN 978-3-8007-3896-0

€ 46.00

€ 38.00
ISBN 978-3-8007-3668-3
Schauer, Karl/Aicher, Wolfgang

**Planning of electrical installations**

*Calculations, formulas and tables according to HOAI*

- Unique systematic help and orientation for the planning of electrical systems according to the German Fee Structure for Architects and Engineers (HOAI)
- Excitation of the necessary calculations with examples and calculation tasks for all calculation forms
- Including new examples from the planning practice
- Introduction to the elaboration of fee quotations and cost estimates

**Target Audience**
Electrical planners, electromechanical engineers and planning engineers

**Fields of Expertise**
Electric installation and electrical planning

Wolfgang Aicher is the managing director of eloplan GmbH in Rosenheim. He revised the new edition.

Karl Schauer was managing director for long years ago. He is the founder and author of the title and supported the editing of the new edition.

Electrical engineers are the link between the owner and electrician – they plan the equipment and are also responsible for the necessary calculations. The well-known standard work explains to electric contractors the elaboration of fee offers, the estimation of cost estimates as well as the planning work according to HOAI. Any questions that arise will be answered in a practical and comprehensible manner. The systematic help and orientation for the planning of electrical systems!

5th revised and extended Edition, 2017
324 Pages
€ 39.00
ISBN 978-3-8007-4254-7
Already published
Geyer, Klaus

**KNX Systems – Error Prevention during Planning and Installation**

- The overview of planning and installation errors for KNX systems for the practitioner on site
- Presentation of often recurring planning and installation errors of KNX systems
- Explanation to avoid or correct these errors
- Numerous information for a good planning and for a facilitated fault isolation and fault repair

**Target Audience**
Electricians, planners and system integrators

**Fields of Expertise**
Electrical installation, electrical planning, facility management, building services, KNX, technical building equipment and TGA

Klaus Geyer is an independent electrical master and system integrator. For more than 20 years, he has been working with the network and building technology. His focus lies today on the conception, planning, programming and installation of KNX and building automation systems. He already received several awards for his work, including the Energy Efficiency Award 2016 Residential Construction, from the ZVEH and ZVEI.

This book supports the practitioner on site to avoid planning and installation errors from the start. Based on his long experience as a plant planner and system integrator, the author presents concrete, recurring planning and installation errors, especially of KNX systems and descriptive he demonstrates how these errors can be avoided by a strict planning.

Practitioners find here a lot of information which makes the planning as well as the fault prevention and fault repair easier.

2017. Approx. 300 Pages
approx. € 42.00

ISBN 978-3-8007-4349-0
To be published in October 2017

**Recommendations on the subject**

<table>
<thead>
<tr>
<th>Price</th>
<th>ISBN</th>
<th>Title</th>
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<tr>
<td>€ 42.00</td>
<td>ISBN 978-3-8007-4033-8</td>
<td><strong>KNX</strong> für die Elektroinstallation in Wohn- und Bürogebäuden</td>
</tr>
<tr>
<td>€ 34.00</td>
<td>ISBN 978-3-8007-4057-4</td>
<td><strong>SMART HOME FÜR ALTERRÄUMÉN WÖNNEN</strong></td>
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<tr>
<td>€ 58.00</td>
<td>ISBN 978-3-8007-3494-8</td>
<td><strong>BAURO-LOGISCHE MÄHTECHNIK</strong></td>
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Operation of PV Plants and Storage Batteries

Maintenance – Optimization – Error Detection

- Currently more than 1.5 million photovoltaic systems in operation in Germany
- Practical notes for the maintenance, cleaning, fault detection and inspection of PV systems
- Depicting the possibilities of system optimization
- Including the topics of theft protection and protection from animal caused damages

Target Audience: Plant operators, facility managers, experts, service technicians and solarteurs

Fields of Expertise: Facility management, building services, photovoltaic, technical facility equipment

Dipl.-Ing. Heiko Schwarzburger M. A. is publicist and engineer for mechanical engineering. He has been writing about energy and technology for 20 years. He is working as editor and publisher mainly for trade journals of the energy sector. He is the author of several specialist books. His areas of expertise are renewable energies, energy efficiency in building refurbishment and electricity networks.

Dipl.-Pol. Sven Ullrich is a freelance specialist journalist in Berlin. Since 2011, he has been reporting mainly about the current technological and economic developments in the solar sector and energy efficiency of buildings for the magazines “Renewable Energies” and “Photovoltaic”.

The number of active PV plants in Germany has grown to over 1.5 million. The systems must be maintained and optimized regularly to stay economically viable. This book gives practical instructions for maintenance, cleaning and fault detection of technical installations. Additional topics are protection against theft and protection against animal caused damages, monitoring and remote maintenance, as well as thermography and electroluminescence. Informations about repowering and refitting complete the explanations.

2017. 224 Pages
€ 42.00
ISBN 978-3-8007-4126-7

Already published

Recommendations on the subject
Schnitzler, Joseph

Legal Security in the Planning and Installation of Photovoltaic (PV) Systems

- Presentation of the most important information on the conclusion of the contract and the handling of the contracts in the planning, development and maintenance of PV systems
- Explanation of warranty claims and prescription issues
- Statements to the maintenance contract and public service regulations
- With remarks to often occurring errors in practice
- Includes checklists to facilitate your daily routine

Target Audience: Solar tradesman, installer, electrical tradesman, specialist planner, service technician and roofer
Fields of Expertise: Electrical installation, electrical planning, renewable energy, building services and photovoltaic

Since 1984, Joseph Schnitzler has been an attorney in his own law firm. His main focus is on construction and architectural law.

This book is intended for all professionals involved in the design, construction and maintenance of PV systems. The most important information on the conclusion of the contract and the handling of the contracts, as well as on warranty claims, statute of limitations problems and public regulations are explained in a clear and comprehensible manner. The author provides – with many checklists – the practitioner a useful work tool that makes the daily work much easier!

2017. Approx. 120 Pages
approx. € 29.00
ISBN 978-3-8007-4352-0
To be published in October 2017

Recommendations on the subject

€ 39.00
ISBN 978-3-8007-4325-4

€ 39.00
ISBN 978-3-8007-3263-0

€ 59.00
ISBN 978-3-8007-3338-5
**The Handbook for the Execution of Construction Projects**

- The manual for persons in charge for planning, implementation and control of construction projects
- New: additional information on personnel and negotiation management
- New: checklists and flow charts
- Includes editable sample letters, checklists and forms
- Contents were adapted to the current standards, up to date topics were supplemented
- For project managers of construction projects, architects, planners and civil engineers

**Target Audience**
- Architects, bank employees, building authorities, builders, civil engineers, consultants, lecturers, engineers, investors, planners, project managers of building projects, project controllers, test organizations, students and entrepreneurs

**Fields of Expertise**
- Architecture, civil engineering, construction management, construction engineering, building equipment and appliances

Dipl.-Ing. Konrad Micksch is a specialist author on the topics of construction and energy. He was owner of the engineering office bebecon in Berlin, gave lectures about renewable energy in industry and agriculture and trained construction and project managers. Beforehand he worked many years as project coordinator and project manager for the construction of power plants and substations, railway and bridge constructions in Germany and abroad, and was most recently active as a construction manager for sports and corporate buildings.

This manual provides practical support for planning, implementation and control of construction projects. With its abundance of checklists, tables and surveys it addresses building project managers, architects, planners and civil engineers. In its brief form the book gives fast access to the respective task solution. The extensive appendix includes editable sample letters and forms which can be flexibly adapted to the own requirements.

3rd revised and extended Edition, 2017
274 Pages. With CD-ROM
€ 39.00
ISBN 978-3-8007-4270-7
Already published

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**Recommendations on the subject**

- **DIE BAULEITERPRAXIS**
  - 3rd revised and extended Edition, 2017
  - 274 Pages. With CD-ROM
  - € 39.00
  - ISBN 978-3-8007-4270-7

- **GEMEINSAM BAUEN**
  - € 24.80
  - ISBN 978-3-8007-3609-6

- **DIE VOR-ORTE-ERNEUGUNG BERATUNG**
  - € 24.90
  - ISBN 978-3-8007-3951-6
Recommendations on the subject

Kaiser, Christian

**Ecological Renovation of Old Buildings**

Healthy and sustainable construction and renovation

- Description of typical features of old buildings by means of concrete projects and buildings
- **New:** Explanations to old buildings constructed after 1949, new project examples and updating of all information concerning standards, guideline values and laws
- Presentation of historic buildings conservation and energy planning approaches
- With valuable notes for a sustainable and ecological approach on building refurbishment
- Also suitable for planning professionals and builders
- More than 340 color illustrations

**Target Audience**
Architects, building biologists, builders, civil engineers, conservationists, planners

**Fields of Expertise**
Energy-efficient construction

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**Dipl.-Ing. Christian Kaiser**, SIA architect, opened his own architecture office in Lottstetten in 2005 after several years of employed activity. Besides his employment, he was trained as a building biologist. He teaches the subjects of “Ecological Restoration of Old Buildings” and “Energetic Restoration of Old Buildings” at the University of Applied Sciences Konstanz, as well as “Building Biology” at the Baukaderschule St. Gallen.

The ecological renovation and modernization of old buildings is one of the most important future tasks in the construction sector. Thereby, in addition to the classical planning skills, a special sensitivity in dealing with old building substances, old building details and factors of building physics is needed. Using tangible projects and buildings the typological characteristics of old buildings, as well as conservation and energetic planning approaches, are illustrated and explained.

2nd revised and extended Edition, 2017

220 Pages

€ 49.00

ISBN 978-3-8007-4144-1

Already published

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**Recommendations on the subject**

- **€ 36.00**
  ISBN 978-3-8007-3932-5

- **€ 48.00**
  ISBN 978-3-8007-3570-9

- **€ 32.00**
  ISBN 978-3-8007-3518-1
Linden, Wolfgang/Marquardt, Iris

Encyclopedia of Ecological Building Materials


The unique reference book showing ecological characteristics, description of chemicals, guidelines and safety values of construction products and materials of interior furnishing

- Completely revised and extended
- Listing of legal regulations
- Including data on health and environmental impacts, to occupational health and safety measures, energy aspects and disposal practices

Target Audience
Architects, building biologists, building engineers, building authorities, health authorities, manufacturers of building materials, environmental consultants, environmental institutes, environmental offices

Fields of Expertise
Building materials science, construction technology

Prof. Dr. rer. nat. Wolfgang Linden is a chemist and teaches in the Faculty of Construction at the Lübeck University of Applied Sciences. His area of expertise is the examination of ecologically compatible construction materials.

Prof. Dr. -Ing. Iris Marquardt is a civil engineer and professor for building materials and concrete technology at the University of Applied Sciences Lübeck. She is also head of the material testing institute Schleswig-Holstein.

This indispensable reference book has been completely reworked and expanded. With more than 2300 keywords, it offers a quick and reliable overview of construction products and materials for interior furnishings. It contains important ecological characteristics, describes the chemicals, gives standard and limit values as well as legal regulations. Furthermore, it contains data on health and environmental impacts, work safety measures, energetic aspects and disposal practices.

4th new revised and extended Edition, 2017
approx. 500 Pages
approx. € 68.00

ISBN 978-3-8007-3232-6
To be published in November 2017
**Humidity – h,x-Diagram**

**Practical applications and work aids**

- Description of climatic processes of humid air in buildings and the technical processes as well as visualization using the Mollier-h,x-diagram
- An application-relevant knowledge compilation with numerous practical examples
- Detailed representation in a Freeware-Excel-Program to deepen the understanding of the processes in the h,x-diagram

**Target Audience**
Architects, construction and technical facility equipment experts, construction engineers, employees of exporting companies, planners of technical facility equipment and students

**Fields of Expertise**
Climatology, ventilation technology and technical facility equipment

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**Prof. Dr.-Ing. Achim Trogisch** taught technical facility equipment for 15 years at the University of Technology and Economy (HTW) in Dresden. His longtime practical experiences at the Institute of Air and Refrigeration Technology (ILK) and HL-Technik AG have been incorporated in many publications on climate and ventilation technology.

**Prof. Dr.-Ing. Uwe Franzke** studied refrigeration and drying technology at the Chemnitz University of Technology where he also promoted. Since 1991 he works at the Institute of Air and Refrigeration Technology (ILK) in Dresden as registered manager and head of the air and climatology department.

The authors explain the climatic processes of humid air in buildings and technical processes, simple and well understandable for students and practitioners. Processes and changes of the state are visualized by means of the Mollier-h,x-diagrams. The understanding of the h,x-diagram is exemplified by a detailed presentation of a Freeware-Excel-Program.

2nd revised Edition, 2016. 185 Pages
€ 39.00

ISBN 978-3-8007-3665-2

Already published

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**Recommendations on the subject**

- **€ 69.00 (Volume 1)**
  ISBN 978-3-8007-3636-2

- **€ 69.00 (Volume 2)**
  ISBN 978-3-8007-3554-9

- **€ 42.00 (Volume 3)**
  ISBN 978-3-8007-3349-1
Ossevoort, Henri

Refrigerated Warehouses and Freezer Storage Houses
Planning – Implementation – Operation

- Handbook for the efficient design of refrigerated warehouses and freezer storage houses
- From the basic principles of technology and design to administration and operation
- Focus: maximum energy efficiency and sustainability in the construction, management and operation of refrigerated warehouses and freezer storage houses

**Target Audience**
Architects, apprentices, owners of refrigerated warehouses, owner of freezer storage houses, engineering office, installers, logistics managers and planners

**Fields of Expertise**
Refrigeration engineering

Henri Ossevoort is a planner for refrigerated warehouses.

The new manual presents the basic principles of refrigeration and freezer technology. It also explains the technical aspects such as architecture, insulation, energy issues and the generation and distribution of cooling. From this are derived requirements on the quality, organization and responsibilities in the design of the ideal refrigerated warehouses and freezer storage houses. The interesting topic is rounded off by the comments on the administration and operation, planning costs, investment and investment as well as an overview of the current cold store market.

2017. Approx. 160 Pages
approx. € 46.00

ISBN 978-3-8007-4384-1

To be published in December 2017
Schädlich, Sylvia (ed.)

Pocketbook
Cooling · Heating · Air Conditioning 2018

- The combination of work calendars and pocketbook for professionals in the refrigeration, air conditioning and heating technology
- With articles on current issues and innovations
- With formulas, physical properties and conversion tables
- Including the event calendar 2018 and branch addresses

Target Audience
Apprentices, heating equipment manufacturer, engineers, plumbers and refrigeration technicians

Fields of Expertise
Air conditioning, refrigeration, ventilation engineering, technical building equipment, HVAC technology

Prof. Sylvia Schädlich teaches thermodynamics and project management at the Institute of Energy Systems and Energy Business of the Ruhr West University and is the director of the InEKK Institute for Energy, Refrigeration and Air Conditioning GmbH. She is the editor and author of many well-known publications and contributed to the creation of relevant standards and regulations. She also gives courses on the topics of energy efficiency and energetic inspection.

The pocketbook Cooling Heating Air Conditioning is a reference for the daily work of professionals on refrigeration and air conditioning – since 51 years! The yearly new updated pocketbook contains an extensive part with important and constantly required formulas and tables from the refrigeration and air conditioning in addition to a practical design work calendar with a current overview of congresses, fairs and exhibitions in 2018. The handy counselor concentrates on relevant topics of the subject area. Very useful is also a comprehensive overview of the most important formulas and tables of refrigeration and air conditioning.

2017. Approx. 300 Pages
approx. € 26.00

ISBN 978-3-8007-4272-1
To be published in October 2017

Recommendations on the subject

€ 39.00
ISBN 978-3-8007-4098-7

€ 32.00
ISBN 978-3-8007-4096-3

€ 49.00
ISBN 978-3-8007-3652-2
Hüffmann, Peter

The Sales Engineer
Practical principles and rules for the sale of technical services

- Introduction into the sale of technical products for students, graduates and engineers of technical disciplines
- Brainstorming on specific methods and procedures in daily sales routine
- From the foundations of the personality formation and communication technology to the methods for the professional trade fair appearance up to customer orientation in sales marketing
- With instructions, checklists and illustrations

Target Audience: Students, sales engineers and sales staff
Fields of Expertise: Business economics, business administration, engineering sciences and management

Dr. oec. Dipl.-Ing. Peter Hüffmann is a partner and managing director of a company for sales and information technology and he manages the international distribution there. Before he completed a technical study and subsequently promoted in business sciences in marketing and sales.

More and more engineers with technical background decide for an activity in sales. Here is required a special sales knowledge, the knowledge acquired in the course of studies cannot be fulfill it. The book provides brainstorming for targeted methods and procedures in sales daily routine. The basics for personality formation and communication technology as well as methods for professional trade fair appearance and customer orientation in sales are here treated. With well understandable instructions, checklists and illustrations!

2nd updated and extended Edition, 2017
192 Pages
€ 29.00
ISBN 978-3-8007-4367-4
Already published
Recommendations on the subject

**Industry 4.0 in an International Context**

**Core Concepts, Results and Trends**

- Overview of industry 4.0 and similar international activities
- With new aspects and updated contributions
- Execute the main components and key aspects of the overall concept "computerization of the value chain"
- What is the impact of the "computerization of the value chain" on companies, processes and supply chain?
- Which additional potentials are produced by the massive use of the internet, the integration of technical and business processes, the digital representation of the real world and virtual reality?
- How can "intelligent" products be produced?

**Target Audience**
Decision maker, manufacturer, management, production management, responsible production IT

**Fields of Expertise**
Automation engineering and Industry 4.0

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**Christian Manzei** is after a variety of management tasks at automation manufacturers now sales and marketing manager at Uticor Automation.

**Prof. Dr.-Ing. Linus Schleupner** is a professor of market-orientated management at the University of Applied Sciences in Cologne. A focus of his work lies in the area of industry 4.0.

**Ronald Heinze** is editor in chief of the VDE Publishing specialist media “etz Electrical Engineering & Automation” as well as “Open Automation” and member of the board of MES D.A.CH Association e.V.

Industry 4.0 will change the entire value chain decisively! Worldwide initiatives are forming to revolutionize production methods by global networking and increasing efficiency and are paving the way for the “intelligent factory”. The book presents the key components and essential aspects of the overall concept and answers the question on how “intelligent products” can be produced.

2nd new updated and extended Edition, 2017
302 Pages
€ 59.00
ISBN 978-3-8007-4336-0
Already published

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**Recommendations on the subject**

- **Grundlagen der Robotersteuerung**
  - € 29.80
  - ISBN 978-3-8007-3944-8

- **Regelungstechnik**
  - € 49.90
  - ISBN 978-3-8007-4201-1

- **Crackurs Regelungstechnik**
  - € 42.00
  - ISBN 978-3-8007-3642-3
Riegelmayer, Wolfgang P.

Industry 4.0 – Networking for the Digital Factory
Basics – New Possibilities – Media Technology (Copper Conductor, Glass Fiber, Wireless) – Features – Interfaces – Design and Design Principles

- The tool for decision-makers in planning, innovative design and implementation
- Infrastructural approach to the digital networked factory, to prepare for industry 4.0
- Explanation and illustration of core parameters, their meaning and parameterization

Target Audience: Decision maker, manufacturer, management and IT responsible
Fields of Expertise: Automation technology, Industry 4.0 and information technology

Dr.-Ing. Dipl.-Inform. Wolfgang Riegelmayer is since 1987 a self-employed consultant, expert and lecturer.

The digital factory is the epitome for a comprehensive innovative network of digital models, methods and tools, integrated by a permeable data management. Aim of the digital factory is the holistic planning, evaluation and continuous improvement of all essential structures and processes in conjunction with the product. This book is a useful aid for decision-makers in planning, design and implementation. It is suitable as a reference book and also as an introductory textbook.

2017. Approx. 600 Pages
approx. € 82.00
ISBN 978-3-8007-4330-8
To be published in October 2017

Recommendations on the subject

€ 34.00
ISBN 978-3-8007-4066-6

€ 64.90 (Volume 1)
ISBN 978-3-8007-3594-5

€ 64.90 (Volume 2)
ISBN 978-3-8007-3474-0
Kobes, Pierre

**Guideline Industrial Security**

**IEC 62443 simply explained**

- The Guide to Industrial Security – from the explanation of the ideas to the presentation of the possibilities for implementation
- Description of the protection concepts and measures
- With an outlook on new challenges in the course of Industry 4.0

**Target Audience**
Engineers, students and technicians

**Fields of Expertise**
Automation technology, industrial networks, IT and safety

Dr. Pierre Kobes is Product and Solution Security Officer at the Siemens AG. He is responsible for standards, regulations and certifications for the division Digital Factory and for the division Process Industries and Drives. He actively participated in the development of the standard IEC 62443 and is member of various german and international standardisation committees.

The series of standards IEC 62443 is focused on the support of holistic solutions for the protection of industrial systems and addresses all involved stakeholders. Correspondingly IEC 62443 is perceived as complex. This guideline has the aim to simplify the approach to the deployment of protection concepts by giving an overview about IEC 62443, summarizing the ideas and concepts, and illustrating practical solutions.

2017. 114 Pages
€ 38.00
ISBN 978-3-8007-4338-4
*Already published*

### Recommendations on the subject

- **€ 34.00**
  ISBN 978-3-8007-4165-6

- **€ 52.00**
  ISBN 978-3-8007-3590-7

- **€ 34.00**
  ISBN 978-3-8007-3583-9
### Bör, Jörg

**Cables and Wire for moving Industrial Applications**

**In the Age of Industry 4.0**

- Introduction into the design and architecture of movable cables and wire, considering the state of the art in cable materials
- Detailed description of the installation guidelines for cables and wire in trailing chains
- With practice experience, typical failures and failure appearance

**Target Audience**
- Users and electrical designers

**Fields of Expertise**
- Automation engineering

Dipl.-Ing. Jörg Bör is a coordinator for the area of data cables at the VDE Testing and Certification Institute in Offenbach. Unsalaried he works in various national standards committees and is chairman of the DKE committee UK 412.1 „Wires and Symmetric Cables“.

Cables and wire are sophisticated technical products, they are often underestimated. Extreme external influences such as temperatures or chemicals have a serious impact on the use and the product life. The new textbook leads into the structure and the architecture of moving cables and wire, it also considers the state of the art in cable materials.

2017. Approx. 180 Pages

approx. € 32.00

ISBN 978-3-8007-4379-7

To be published in October 2017
Wiegelmann, Jörg

Software Development in C for Microprocessors and Microcontrollers

C Programming for embedded systems

- Practice-oriented introduction into C for embedded systems and deep insight into hardware programming
- General explanations and basics are tool and processor independent
- Including a practical part with a complete and updated case study
- DVD with source code for case study

Target Audience  Development engineers
Fields of Expertise  Electronics, programming

Jörg Wiegelmann is product development manager in the field electronic access control. He has experience in the development of software for added feature telephones, telecommunication transmission equipment, access control systems and its related development environments. He works with the programming language C in the embedded area since 1990.

The programming language C is particularly well suited for software development in embedded systems. The specialist book offers a general, practice-oriented introduction as well as a descriptive practical part for software development in C. The general part describes all necessary basics and tools with numerous practical tips and the theoretically presented knowledge gets illustrated and deepened in the practical part by means of a complete case study. If you want to develop software for embedded systems, this book gives you a deep insight into low-level language and assembler code programming. The included DVD contains a variety of current, useful programs for practice.

7th new revised and extended Edition, 2017
311 Pages. With DVD
€ 42.00
ISBN 978-3-8007-4328-5
Already published

Recommendations on the subject

€ 35.00
ISBN 978-3-8007-3504-4

€ 39.90
ISBN 978-3-8007-3448-1

€ 39.50
ISBN 978-3-8007-3233-3
Bremer, Jan-Konrad
Research Report

**Design Concept for Varactor-based RF CMOS VCOs Based on Nonlinear Methods**

- Presentation of a novel systematic design concept for LC tank VCO circuits
- Basic application of the Andronov Hopf bifurcation analysis, the method of mediation, and the harmonic balance method
- Target: Calculation of optimized starting values for the VCO design parameters to shorten the design process supported by EDA software

**Target Audience**  Engineers  
**Fields of Expertise**  Electronics

2017. 227 Pages  
€ 72.00

ISBN 978-3-8007-4342-1
Already published

Kut, Tobias
Research Report

**EMC filters for DC voltage Converters of Modern Commercial Aircraft**

- Presentation of a new filter design methodology a target oriented and optimal Design of EMC filters exemplified on aeronautical applications
- Considering the new and strict economic and environmental requirements for commercial aircraft

**Target Audience**  Engineers  
**Fields of Expertise**  Electronics

Dipl.-Ing. Tobias Kut studied electrical engineering from 2004 to 2009 at the Technical University Hamburg-Harburg. Afterwards he worked as scientific assistant at the Hamburg Innovation GmbH, the Daimler AG and the Helmut Schmidt University of Hamburg. Since 2015, Tobias Kut is active as system developer EMC at the German ACCUmotive GmbH & Co. KG

2016. 138 Pages  
€ 70.00

ISBN 978-3-8007-4284-4
Already published
Zemke, Wilfried/Scherer, Alexander

**Exercises on Electrical Engineering**

**Exercise tasks with solutions**

- The tutorial book for the textbook “Electrical Engineering – Fundamentals, Tables”
- More than 425 exercising examples with detailed solutions
- Broad coverage of electrical engineering: starting with the mathematical-physical basics going on to practically oriented calculations of electrical machines, converters, cables and networks, electrical equipment and installations as well as lighting systems

**Target Audience**
Master technicians students, University students, Certified Engineer students

**Fields of Expertise**
Electrical Engineering

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Dr.-Ing. Wilfried Zemke and Dipl.-Ing. Alexander Scherer dispose of decades of experience in knowledge transfer to electrical engineering contents.

As a supplement to the textbook “Electrical Engineering – Fundamentals, Tables” more than 425 exercising examples on following topics are strengthened in the new exercise book: electrical machines, power electronics, electrical wirings and networks, electrical equipment and installations, lighting systems. The theoretical foundations mediated in the textbook are immersed in the exercise book through practical tasks with solutions.

2017. 439 Pages
€ 59.00
ISBN 978-3-8007-4260-8
Already published

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**Recommendations on the subject**

- € 89.00
  ISBN 978-3-8007-3443-6
- € 99.00
  ISBN 978-3-8007-3401-6
- € 199.00
  ISBN 978-3-8007-3057-5
Minkner, Ruthard/Schmid, Joachim/Däumling, Holger/Prucker, Udo/Bräunlich, Reinhold/Hofstetter, Martin

Ferroresonance Oscillations in Substations with Inductive Voltage Transformers in Medium and High Voltage Systems

- Overview of the undesired phenomenon of ferroresonance oscillations in high and medium voltage networks
- With special focus on inductive voltage transformers (VT)
- Part 102: Ferroresonance oscillations in substations with inductive voltage transformers

Target Audience: Designers, manufacturer, operators and students
Fields of Expertise: Electrical engineering

Long-time practice provided the authors with consolidated knowledge and experience in the field of ferroresonance. They are renowned experts in responsible positions.

This book provides an overview of the undesired phenomenon of ferroresonance oscillations in high and medium voltage networks in connection with the inductive voltage transformers (VT). Ferroresonance oscillations can cause considerable damage to the VT and neighboried equipment. Because of the various forms of manifestation, cases of ferroresonance are not always recognized as such. The book is addressed to development engineers and operators of high voltage power installations and manufacturers of inductive voltage transformers.

2017. Approx. 180 Pages
approx. € 49.00
ISBN 978-3-8007-3395-8
To be published in September 2017

Recommendations on the subject

- € 34.00
  ISBN 978-3-8007-4019-2
- € 19.80
  ISBN 978-3-8007-3670-6
- € 68.00
  ISBN 978-3-8007-3562-4
Recommended on the subject

Seifert/Oschatz/Schinkestraße/Buchheim/Paulick/Beyer/Mailach
Research Report
Transient, Coupled, Energetic and Thermal Physiological Evaluation of Control Strategies for HVAC Systems

- The subject of the research project: Evaluation of transient heating processes at the heat transfer and the derivation of control techniques
- With literature analysis on evaluation methods of thermal comfort
- Systematic development of a test concept with test subjects
- Documentation of the construction of an acclimatized room at the Technical University Dresden

Target Audience
Engineers
Fields of Expertise
Electrical engineering, control engineering, supply engineering

2017. 147 Pages
€ 70.00
ISBN 978-3-8007-4300-1
Already published

Recommendations on the subject

€ 42.00
ISBN 978-3-8007-3450-4

€ 33.50
ISBN 978-3-8007-3117-6

€ 49.00
ISBN 978-3-8007-3108-4
Dittmann, Frank/Luxbacher, Günther (eds.)

**History of Electrical Lighting**

**History of electric lighting Volume 26**

- Comprehensive presentation of the history of electric lighting
- Description of the electric lamps (arc, incandescent and LED lamps)
- External lighting in a social context
- Perception of electrical light

**Target Audience**  Archivists, librarians, engineers, journalists, editors and technical historians

**Fields of Expertise** Lighting technology, electrical engineering and engineering history

Dr. phil. Frank Dittmann is a curator for heavy current technology at the German Museum in Munich.

PD Dr. Günther Luxbacher works at the Technical University Berlin at the Institute for philosophy, literature and science and technology history.

The new volume from the series of technical history deals with the topic of lighting considering three aspects. In a first part, the electric lamps such as arc and incandescent lamps or LEDs are the focus. A second part considers the external illumination in the systemic and social context. A final thematic block is devoted specifically to the perception of electrical light in different contexts and the related discourses.

2017. 351 Pages

€ 45.00

ISBN 978-3-8007-4355-1

*Already published*

**Recommendations on the subject**

1. € 45.00
   ISBN 978-3-8007-3520-4

2. € 69.00
   ISBN 978-3-8007-3588-7

3. € 48.00
   ISBN 978-3-8007-4301-8
GI Geoinformatik GmbH (ed.)

ArcGIS 10.5

The German manual for ArcGIS desktop basic and standard

- The only German-language manual for ArcGIS
- Systematic overview of ArcGIS Desktop 10.5 software
- Includes 13 exercise chapters
- Come chapters on ArcToolbox, Python, ArcPy, and ModelBuilder
- With an overview of the most common ArcGIS extensions
- Tips and tricks from the support of GI Geoinformatik GmbH
- Overview of shortcuts, operators, and escape sequences

Target Audience  Practitioner, students and scientists
Fields of Expertise  Geodesy/surveying, geoinformatics/GIS, geosciences, construction, planning and environmental

Since 1994, GI Geoinformatik GmbH offers a complete range for space-related data processing. The product range, reach from the dealing with the ArcGIS software, programming, training and support to the GIS data collection and analysis till the mobile GNSS/GIS solutions and App development. The GI Geoinformatics works on Esri software products from the very beginning and is working closely with Esri Deutschland GmbH as Esri partner.

The updated manual provides a systematic overview of the software ArcGIS Desktop version 10.5, as well as separate chapters on the topics ArcToolbox, Python, ArcPy and the Model Builder. Numerous illustrations, practical exercises and an updated overview of official geo-data contribute significantly to the success of the only German-language ArcGIS handbook. The many tips and tricks are based on years of project experience from the practice and from the support of GI Geoinformatik GmbH.

2017. Approx. 900 Pages
approx. € 89.00
ISBN 978-3-87907-636-9
To be published in September 2017
Web-GIS

Fundamentals, applications and examples of implementation

- Description of the fundamental concepts of web based geo-information systems
- From standard smart mapping solutions up to interactive and dynamic map services
- Depiction of possibilities and boundaries of the individual technologies
- Descriptive and clearly structured access, with examples and illustrations
- Description of current formats, data sources, protocols and interfaces

Target Audience  Application service providers, data providers, geodesist, geoinformatics, geoscientists, Internet service providers, cartographers, software developers, environmental scientists, web designers

Fields of Expertise  Geodesy, Geoinformatics/GIS, Geosciences, Computer Science, Cartography, Environmental sciences

Dr.-Ing. Christian Seip is a scientific assistant at the professorship for geodesy and geoinformatics at the University of Rostock.
Dipl.-Ing. Marco L. Zehner M. Sc. (GIS) is responsible for the subject area of geoinformation at the data processing center Mecklenburg-Vorpommern.

The book describes the basic concepts of web-based geoinformation systems (GIS) – from standard solutions of the smart mapping area to interactive and dynamic map services. The possibilities and limits of the individual technologies are also mediated. With numerous examples and illustrations, this new publication offers an intuitive entry into the partly very complex systems from the fields of computer science, geoinformatics and geodesy. The quick immersion into the subject is assisted by way of indices and references.

2017. 552 Pages
€ 52.00
ISBN 978-3-87907-631-4

Already published

Recommendations on the subject

- Online-Karten im Fokus
  € 46.00
  ISBN 978-3-87907-589-8

- 3D-Stadtmodelle
  € 68.00
  ISBN 978-3-87907-590-4

- FME Desktop
  € 58.00
  ISBN 978-3-87907-591-1
Strobl, Josef/Zagel, Bernhard/Griesebner, Gerald/Blaschke, Thomas (eds.)

**AGIT 3-2017**

*Journal of applied geoinformatics*

- The Yearbook of Geoinformatics
- All contributions from the 29th Symposium for applied geoinformatics (AGIT) Salzburg
- Special focus: 3D/4D geo-visualization/augmented reality, applied geoinformatics/geosciences, business geomantic, dynamic modeling and simulation, energy transition and geoinformation, GDI & Big Data: Infrastructures and services, GeoIT und Industrie 4.0, collective sensing (VGI), GeoWeb 2.0 as a planning tool, and more

**Target Audience**  Practitioner, students and scientists  
**Fields of Expertise**  Geodesy, geoinformatics, geosciences, environmental sciences

Prof. Dr. Josef Strobl is head of the interdisciplinary faculty of geoinformatics at the University of Salzburg.  
Dr. Bernhard Zagel is head of networks and GI-society at the interfaculty department of geoinformatics at the University Salzburg.  
Mag. Gerald Griesebner is a member of the department of geography and geology, where he is responsible for the geoinformatics infrastructure.  
Prof. Dr. Thomas Blaschke is Professor of geoinformatics at the University of Salzburg and head of research studio iSPACE in Salzburg.

The “AGIT” is a forum for users of geoinformatic and related methods and technologies and documents the “state of knowledge and practice” as a central information hub every year. This can be seen in the wide range of methods, applications and theories presented. The journal for applied geoinformatics 3-2017 includes all contributions to the 29th symposium for applied geoinformatics (AGIT) in Salzburg.

2017. 392 Pages  
€ 76.00  
ISBN 978-3-87907-633-8

*Already published*

**Recommendations on the subject**

- ArcGIS Spatial Analyst  
  € 52.00  
  ISBN 978-3-87907-542-3

- ArcGIS for Desktop – Basic 10  
  € 49.00 (Volume 1)  
  ISBN 978-3-87907-540-9

- ArcGIS for Desktop – Basic 10  
  € 49.00 (Volume 2)  
  ISBN 978-3-87907-541-6
**Kolbe, Thomas H./Bill, Ralf/Donaubauer, Andreas (eds.)**

**Geoinformation Systems 2017**

**Contributions to the 4th Munich GI-Round**

- All contributions from the 22nd Munich Training Seminar on Geoinformation Systems
- Thematic areas: BIM and GIS, internet of things, location-based services and navigation, new image data in geo data infrastructures, smart cities and 3D/4D – dynamic data in GIS

**Target Audience** Practitioners, students, scientists

**Fields of Expertise** Research areas geoinformatics/GIS, geoinformation systems

Prof. Dr. Thomas H. Kolbe has been heading the Department of Geoinformatics at the Technical University Munich since 2012. From 2006 to 2012 he held the chair for the methodology of geoinformatics at the Technical University Berlin.

Prof. Dr.-Ing. Ralf Bill has been a university professor for geodesy and geoinformatics at the Agriculture and Environmental Science Faculty of the University of Rostock since 1994.

Dr.-Ing. Andreas Donaubauer has been a member of the chair of geoinformatics at the Technical University Munich since 2012 and is head of the GIS laboratory WZW.

The round table GIS e. V. has already organizing the 22nd Munich training seminar on geoinformation systems from 20 to 21 February 2017 – now with a new name: “Munich GI-Round 2017”. In scientific forums and short presentations, innovative projects are presented by companies and current insights into research and developments in geoinformatics are offered. The Munich GI Round is of great importance in the entire GIS area.

CD-ROM. 2017. 202 Pages

€ 48.00

ISBN 978-3-87907-626-0

Already published

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**Recommendations on the subject**

- **Grundlagen der Geo-Informationssysteme**
  - € 89.00
  - ISBN 978-3-87907-607-9

- **Strategisches GIS-Management**
  - € 54.00
  - ISBN 978-3-87907-534-8

- **Geodateninfrastrukturen in Theorie und Praxis**
  - € 58.00
  - ISBN 978-3-87907-513-3
Buhmann, Erich (ed.)

**JoDLA**

**Journal of Digital Landscape Architecture 2-2017**

- All contributions from the international conference “Digital Landscape Architecture 2017” at the Anhalt University of Applied Sciences in Bernburg
- Thematic Focuses on Landscape Architecture and Geodesign: Augmented reality, virtual reality, mobile devices, climate change, internet of things, cloud computing, crowd-sourcing, social media, 3D scanning, dot clouds, 3D printing, doctrine

**Target Audience**  Practitioner, students and scientists

**Fields of Expertise**  Geography, geoinformatics, geosciences, landscape architecture, planning and environment

Prof. Dipl.-Ing. Erich Buhmann is professor of landscape informatics at the Hochschule Anhalt in Bernburg. He has been freelance since 1997 and partner of the landscape architecture office “ATELIER BERNBURG”.

This work includes the conference contributions of the international “Digital Landscape Architecture 2017”, which will be held from June 7 to 10, 2017 at the Anhalt University of Applied Sciences in Bernburg. The approximately 50 contributions (mainly in English) deal with focus on landscape architecture and geo-design: Augmented reality, virtual reality, mobile devices, climate change, internet of things, cloud computing, crowd-sourcing, social media, 3D scanning, dot clouds, 3D printing, doctrine.

2017. 292 Pages  € 72.00

ISBN 978-3-87907-629-1

Already published

**Recommendations on the subject**

€ 36.00  ISBN 978-3-87907-517-1

€ 48.00  ISBN 978-3-87907-518-8

€ 29.80  ISBN 978-3-87907-503-4
Hanke, Klaus/Weinold, Thomas (eds.)

19th International Geodetic Week Obergurgl 2017

All contributions of the 19th International Geodetic Week 2017 in Obergurgl

Thematic areas: Slides and settlements, cavity and tunnel surveying, aircraft and/or UAV-supported point data acquisition, GIS and surveying, hydrographic and bathymetric surveying, indoor surveying, disaster surveying and management, surveying and climate change

Target Audience  Practitioner, students and scientists

Fields of Expertise  Geodesy/surveying, geoinformatics/GIS and photogrammetry

Univ.-Prof. Dipl.-Ing. Dr. techn. Klaus Hanke is head of the surveying and geoinformation laboratory at the Technical Faculty of the University of Innsbruck.

Ass.-Prof. Dipl.-Ing. Dr. Thomas Weinold is a scientific assistant at the surveying and geoinformation laboratory at the Technical Faculty of the University of Innsbruck.

The work area for surveying and geoinformation of the University of Innsbruck has organized the 19th International Geodetic Week in Obergurgl in February 2017. The renowned conference is a popular platform for the exchange of ideas for geodesists. This can be seen in the wide range of methods, applications and theories presented. Every two years the “Geodetic Week” provides an up-to-date forum for further education and information exchange around geodesy and geoinformatics.

2017. 340 Pages

€ 46.00

ISBN 978-3-87907-624-6

Already published

Recommendations on the subject

€ 64.00
ISBN 978-3-87907-593-5

€ 32.00
ISBN 978-3-87907-552-2

€ 54.00
ISBN 978-3-87907-504-1
Lienhart, Werner (Ed.)

**Engineering Survey 17**

*Contributions to the 18th International Engineering Survey Course Graz, 2017*

- All lectures and posters of the 18th International Engineering Survey Course at Graz University of Technology
- Thematic focus: construction and measurement technology, Engineering navigation, Monitoring and current engineering projects

**Target Audience**  Practitioner, students and scientists  
**Fields of Expertise**  Geodesy/Surveying

Prof. Dipl.-Ing. Dr. techn. Werner Lienhart is Professor and Head of the Institute of Engineering Geodesy and Measurement Systems at the Technical University of Graz.

The Institute of Engineering Geodesy and Measurement Systems at Graz University of Technology organized the 18th International Engineering Survey Course in April 2017. This course continues the traditional series based on the optical distance measurement course of 1928. Since 1976, the conference will be called “Engineering Surveying” and organized in the four-year cycle of the Technical Universities of Munich, Zurich and Graz. The following topics will be discussed: construction and structural engineering, engineer navigation, monitoring and current engineering projects.

2017. 570 Pages  
€ 68.00  
ISBN 978-3-87907-630-7  
Already published

**Recommendations on the subject**

- € 78.00  
  ISBN 978-3-87907-467-9

- € 28.00  
  ISBN 978-3-87907-512-6

- € 64.00  
  ISBN 978-3-87907-482-2
Recommendations on the subject

**Digital Image Processing and Geoinformation**

Data fusion under geometric, physical and semantic aspects

- **Focus on the book:** data collection, image analysis and geoinformation systems
- **New:** Leading theme of all content: Data fusing and full content updating
- **New:** Extension to the topic geoinformation

**Target Audience**
Practitioner, students, scientists

**Fields of Expertise**
Geodesy/surveying, geoinformatics/GIS, cartography, photogrammetry, remote sensing and earth sciences

Prof. Dr.-Ing. Stefan Hinz is head of the institute of photogrammetry and remote sensing at the Karlsruhe Institute of Technology (KIT). Dr.-Ing. Thomas Vögtle is a scientific assistant at the same institute.

“Digital image processing” is again presented with completely new content in its 5th edition. The rapid development in this field makes this possible and also necessary. As a focus, this book deals with data fusing under different methodological approaches. In particular, geometrical, physical and semantic aspects are the main focus of the book contemplation. This is exemplified by current research approaches and application-oriented project work shown.

5th complete updated edition, 2017
approx. 340 Pages
approx. € 56.00

ISBN 978-3-87907-638-3
To be published in October 2017

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**Recommendations on the subject**
Luhmann, Thomas/Schumacher, Christina (eds.)

Photogrammetry – Laser Scanning – Optical 3D-Measurement Technology

- Contributions of the Oldenburger 3-Days 2017
- All conference contributions from the 16th Oldenburg 3-Days from 1 to 2 February 2017
- Latest research results and application examples from photogrammetry, laser scanning and optical 3D measurement technology
- Key aspects: Dynamic processes, Recording and processing of laser scan data, Modeling, Applications, Sensors and platforms, Sensor technology, Calibration and measurement uncertainty, Industrial applications

Target Audience: Practitioners, students and scientists
Fields of Expertise: Plant construction, architecture, archeology, automotive engineering, civil engineering, memorial paving, forestry, geodesy/surveying, geosciences, mechanical engineering, medicine, photogrammetry, city planning

Prof. Dr.-Ing. habil. Thomas Luhmann is a professor of photogrammetry and remote sensing at the Jade University of Applied Sciences in Oldenburg.
Dipl.-Ing. (FH) Christina Schumacher is a technology transfer officer at the Jade University of Applied Sciences in Oldenburg.

The Institute for Applied Photogrammetry and Geoinformatics at the Jade University of Applied Sciences Wilhelmshaven/Oldenburg/Elsfleth has organized the 16th Oldenburg 3-Days in February 2017. This event is an important platform for experts in the areas of photogrammetry, geodesy and industrial measurement technology. The event is considered one of the most important in this area. The current contributions document the latest research results and application examples from science and practice, which can rarely be found elsewhere in this form.

2017. 431 Pages
€ 64.00
ISBN 978-3-87907-625-3
Already published

Recommendations on the subject

- € 64.00
  ISBN 978-3-87907-604-8
- € 62.00
  ISBN 978-3-87907-553-9
- € 62.00
  ISBN 978-3-87907-528-7