

# Pipeline Scheduling And Inventory Management Of A

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## **27th European Symposium on Computer Aided Process Engineering** - 2017-09-21

27th European Symposium on Computer Aided Process Engineering, Volume 40 contains the papers presented at the 27th European Society of Computer-Aided Process Engineering (ESCAPE) event held in Barcelona, October 1-5, 2017. It is a valuable resource for chemical engineers, chemical process engineers, researchers in industry and academia, students, and consultants for chemical industries. Presents findings and discussions from the 27th European Society of Computer-Aided Process Engineering (ESCAPE) event

### **The Digital Hand** - James W. Cortada 2004

This text provides a historical perspective on how some of the most important American industries used computing over the past half century, describing their experience, their best practices, and the role of industries and technologies in changing the nature of American work.

### *16th European Symposium on Computer Aided Process Engineering and 9th International Symposium on Process Systems Engineering* - W. Marquardt 2006

This proceedings book brings together the leading innovations and achievements by leading professionals. It acts as a forum for engineers, scientists, researchers, managers and students from academia and industry to present and discuss progress being made in research and application of computer-aided process engineering.

### *Optimization and Logistics Challenges in the Enterprise* - Wanpracha Chaovalitwongse 2009-06-17

In a world with highly competitive markets and economic instability due to capitalization, industrial competition has increasingly intensified. In order for many industries to survive and succeed, they need to develop highly effective coordination between supply chain partners, dynamic collaborative and strategic alliance relationships, and efficient logistics and supply chain network designs. Consequently, in the past decade, there has been an explosion of interest among academic researchers and industrial practitioners in innovative supply chain and logistics models, algorithms, and coordination policies. Mathematically distinct from classical supply chain management, this emerging research area has been proven to be useful and applicable to a wide variety of industries. This book brings together recent advances in supply chain and logistics research and computational optimization that apply to a collaborative environment in the enterprise.

### *Air Force Journal of Logistics* - 1998

### *28th European Symposium on Computer Aided Process Engineering* - Stefan Radl 2018-06-26

28th European Symposium on Computer Aided Process Engineering, Volume 43 contains the papers presented at the 28th European Society of Computer-Aided Process Engineering (ESCAPE) event held in Graz, Austria June 10-13, 2018. It is a valuable resource for chemical engineers, chemical process engineers, researchers in industry and academia, students, and consultants for chemical industries. Presents findings and discussions from the 28th European Society of Computer-Aided Process Engineering (ESCAPE) event

### **14th International Symposium on Process Systems Engineering** - Yoshiyuki Yamashita 2022-06-24

14th International Symposium on Process Systems Engineering, Volume 49 brings together the international community of researchers and engineers interested in computing-based methods in process engineering.

The conference highlights the contributions of the PSE community towards the sustainability of modern society and is based on the 2021 event held in Tokyo, Japan, July 1-23, 2021. It contains contributions from academia and industry, establishing the core products of PSE, defining the new and changing scope of our results, and covering future challenges. Plenary and keynote lectures discuss real-world challenges (globalization, energy, environment and health) and contribute to discussions on the widening scope of PSE versus the consolidation of the core topics of PSE. Highlights how the Process Systems Engineering community contributes to the sustainability of modern society Establishes the core products of Process Systems Engineering Defines the future challenges of Process Systems Engineering  
[CIO](#) - 1992-11-01

### **Ocean Weather Forecasting** - Eric P. Chassignet 2006-02-02

This volume covers a wide range of topics and summarizes our present knowledge in ocean modeling, ocean observing systems, and data assimilation. The Global Ocean Data Assimilation Experiment (GODAE) provides a framework for these efforts: a global system of observations, communications, modeling, and assimilation that will deliver regular, comprehensive information on the state of the oceans, engendering wide utility and availability for maximum benefit to the community.

### Best Practice in Inventory Management - Tony Wild 2017-11-02

Best Practice in Inventory Management 3E offers a simple, entirely jargon-free and yet comprehensive introduction to key aspects of inventory management. Good management of inventory enables companies to improve their customer service, cash flow and profitability. This text outlines the basic techniques, how and where to apply them, and provides advice to ensure they work to provide the desired effect in practice. With an unrivalled balance between qualitative and quantitative aspects of inventory control, experienced consultant Tony Wild portrays the many ways in which stock management is more nuanced than simple "number crunching" and mathematical modelling. This long-awaited new edition has been substantially and thoroughly updated. The product of decades of experience and expertise in the field, Best Practice in Inventory Management 3E provides students and professionals, even those with no prior experience in the area, an unbiased and honest picture of what it takes to effectively manage stocks in a firm.

### **17th European Symposium on Computed Aided Process Engineering** - Valentin Plesu 2007-05-24

The 17th European Symposium on Computed Aided Process Engineering contains papers presented at the 17th European Symposium of Computer Aided Process Engineering (ESCAPE 17) held in Bucharest, Romania, from 27-30 May 2007. The ESCAPE series serves as a forum for scientists and engineers from academia and industry to discuss progress achieved in the area of Computer Aided Process Engineering (CAPE). The main goal was to emphasize the continuity in research of innovative concepts and systematic design methods as well the diversity of applications emerged from the demands of sustainable development. ESCAPE 17 highlights the progress software technology needed for implementing simulation based tools. The symposium is based on 5 themes and 27 topics, following the main trends in CAPE area: Modelling, Process and Products Design, Optimisation and Optimal Control and Operation, System Biology and Biological Processes, Process Integration and Sustainable Development. Participants from 50 countries attended and

invited speakers presented 5 plenary lectures tackling broad subjects and 10 keynote lectures. Satellite events added a plus to the scientific dimension to this symposium. \* All contributions are included on the CD-ROM attached to the book \* Attendance from 50 countries with invited speakers presenting 5 plenary lectures tackling broad subjects and 10 keynote lectures

Proceedings of the XIV INTERNATIONAL SYMPOSIUM SYMORG 2014 - Aleksandar Marković 2014-06-05

**Operations Research and Enterprise Systems** - Greg H. Parlier 2018-06-28

This book constitutes revised selected papers from the 6th International Conference on Operations Research and Enterprise Systems, ICORES 2017, held in Porto, Portugal, in February 2017. The 15 papers presented in this volume were carefully reviewed and selected from a total of 90 submissions. They are organized in topical sections named: methodologies and technologies; and applications.

**Preprint** -

**20th European Symposium of Computer Aided Process Engineering** - S. Pierucci 2010-06-03

ESCAPE-20 is the most recent in a series of conferences that serves as a forum for engineers, scientists, researchers, managers and students from academia and industry to present and discuss progress being made in the area of "Computer Aided Process Engineering" (CAPE). CAPE covers computer-aided methods, algorithms and techniques related to process and product engineering. The ESCAPE-20 scientific program reflects the strategic objectives of the CAPE Working Party: to check the status of historically consolidated topics by means of their industrial application and to evaluate their emerging issues. \* Includes a CD that contains all research papers and contributions \* Features a truly international scope, with guest speakers and keynote talks from leaders in science and industry \* Presents papers covering the latest research, key topical areas, and developments in computer-aided process engineering (CAPE)

Operational Research - A. Ismael F. Vaz 2018-02-15

This proceedings book presents selected contributions from the XVIII Congress of APDIO (the Portuguese Association of Operational Research) held in Valença on June 28–30, 2017. Prepared by leading Portuguese and international researchers in the field of operations research, it covers a wide range of complex real-world applications of operations research methods using recent theoretical techniques, in order to narrow the gap between academic research and practical applications. Of particular interest are the applications of, nonlinear and mixed-integer programming, data envelopment analysis, clustering techniques, hybrid heuristics, supply chain management, and lot sizing and job scheduling problems. In most chapters, the problems, methods and methodologies described are complemented by supporting figures, tables and algorithms. The XVIII Congress of APDIO marked the 18th installment of the regular biannual meetings of APDIO – the Portuguese Association of Operational Research. The meetings bring together researchers, scholars and practitioners, as well as MSc and PhD students, working in the field of operations research to present and discuss their latest works. The main theme of the latest meeting was Operational Research Pro Bono. Given the breadth of topics covered, the book offers a valuable resource for all researchers, students and practitioners interested in the latest trends in this field.

12th International Symposium on Process Systems Engineering and 25th European Symposium on Computer Aided Process Engineering - 2015-05-28

25th European Symposium on Computer-Aided Process Engineering contains the papers presented at the 12th Process Systems Engineering (PSE) and 25th European Society of Computer Aided Process Engineering (ESCAPE) Joint Event held in Copenhagen, Denmark, 31 May - 4 June 2015. The purpose of these series is to bring together the international community of researchers and engineers who are interested in computing-based methods in process engineering. This conference highlights the contributions of the PSE/CAPE community towards the sustainability of modern society. Contributors from academia and industry establish the core products of PSE/CAPE, define the new and changing scope of our results, and future challenges. Plenary and keynote lectures discuss real-world challenges (globalization, energy, environment, and health) and contribute to discussions on the widening scope of PSE/CAPE versus the consolidation of the core topics of PSE/CAPE. Highlights how the Process Systems Engineering/Computer-Aided Process Engineering community contributes to the sustainability of modern society Presents findings and discussions from both

the 12th Process Systems Engineering (PSE) and 25th European Society of Computer-Aided Process Engineering (ESCAPE) Events Establishes the core products of Process Systems Engineering/Computer Aided Process Engineering Defines the future challenges of the Process Systems Engineering/Computer Aided Process Engineering community

**Linear and Integer Optimization** - Gerard Sierksma 2015-05-01

Presenting a strong and clear relationship between theory and practice, Linear and Integer Optimization: Theory and Practice is divided into two main parts. The first covers the theory of linear and integer optimization, including both basic and advanced topics. Dantzig's simplex algorithm, duality, sensitivity analysis, integer optimization models

19th European Symposium on Computer Aided Process Engineering - Jacek Jezowski 2009-06-12

The 19th European Symposium on Computer Aided Process Engineering contains papers presented at the 19th European Symposium of Computer Aided Process Engineering (ESCAPE 19) held in Cracow, Poland, June 14-17, 2009. The ESCAPE series serves as a forum for scientists and engineers from academia and industry to discuss progress achieved in the area of CAPE. \* CD-ROM that accompanies the book contains all research papers and contributions \* International in scope with guest speeches and keynote talks from leaders in science and industry \* Presents papers covering the latest research, key top areas and developments in computer aided process engineering (CAPE)

Competing Through Supply Chain Management - David F. Ross 2013-11-21

SCM is one of the hottest topics in manufacturing and distribution, and like JIT and TQC it requires a corporate commitment. This book provides both fundamental principles of SCM as well as a set of guidelines to assist in practical application of SCM. It will be one of the first books on the market that deals exclusively with SCM and its application. Readers in the academic, management sciences, sales, marketing and government environments will find this book of particular interest.

**Optimization and Decision Support Systems for Supply Chains** - Ana Paula Barbosa Póvoa 2016-09-13

This contributed volume presents a collection of materials on supply chain management including industry-based case studies addressing petrochemical, pharmaceutical, manufacturing and reverse logistics topics. Moreover, the book covers sustainability issues, as well as optimization approaches. The target audience comprises academics, industry managers, and practitioners in the field of supply chain management, being the book also beneficial for graduate students

**World Class Production and Inventory Management** - Darryl V. Landvater 1997-07-31

The definitive guide to the latest tools & techniques for achieving performance excellence in manufacturing, distribution, and planning Now completely revised and expanded, World Class Production and Inventory Management presents the latest information on the unique tools and techniques needed to manage the planning and production of a manufacturing enterprise. Including a completely new chapter on Efficient Consumer Response (ECR), updated case studies, and additional information on manufacturing integration, this comprehensive reference includes: \* Step-by-step implementation techniques in each key area of production and inventory management \* Fresh perspectives on manufacturing integration and multiple demand stream management \* Best-in-class examples from companies such as Abbott Laboratories, Boeing, and Martin Marietta \* Proven guidelines for avoiding the most common problems and for achieving continually higher levels of performance \* Self-assessment questions helpful in measuring the performance of your company in each operating area Comprehensive and accessible, World Class Production and Inventory Management is an invaluable resource for APICS members seeking CPIM certification, as well as for all those in charge of managing a successful manufacturing enterprise.

Computational Methods and Models for Transport - Pedro Diez 2017-06-28

This volume addresses challenges and solutions in transport and mobility of people and goods with respect to environment, safety, security and socio-economics issues, exploring advanced computational research work and the latest innovations in transport. This book brings together lectures presented at the ECCOMAS Thematic CM3 Conference on Transport held in Jyväskylä, Finland, 25-27 May 2015. It is divided into three parts, I: Reviews and Perspective, II: Computational Methods and Models and III: Translational Research. Each of these parts consists of contributions that present solutions to many transport challenges in this complex, rapidly changing subject. The work contains the latest achievements of European research and technological

developments needed for the next decade through computational results of scientific and technical experts who have made essential contributions in transport efficiency in Europe. The material presented here is the state of the art in Transport Modeling, Simulation and Optimization in the fields of Aeronautics, Automotive, Logistics, Maritime and Rails. Furthermore, this volume also answers the question how to apply Computational Research in Transport in order to provide innovative solutions to Green Transportation challenges of identified in the ambitious Horizon 2020 program. This book is intended for students, researchers, engineers and practitioners that are computationally involved in the deployment of Intelligent Transport Systems (ITS) in the areas of optimal use of road, traffic and travel data, traffic and freight management ITS services, road safety and security, sea traffic management, etc.

**Principles and Practice of Constraint Programming** - Peter J. Stuckey 2008-08-28

This volume contains the proceedings of the 14th International Conference on Principles and Practice of Constraint Programming (CP 2008) held in Sydney, Australia, September 14–18, 2008. The conference was held in conjunction with the International Conference on Automated Planning and Scheduling (ICAPS 2008) and the International Conference on Knowledge Representation and Reasoning (KR 2008). Information about the conference can be found at the website <http://www.unimelb.edu.au/cp2008/>. Held annually, the CP conference series is the premier international conference on constraint programming. The conference focuses on all aspects of computing with constraints. The CP conference series is organized by the Association for Constraint Programming (ACP). Information about the conferences in the series can be found on the Web at <http://www.cs.ualberta.ca/~ai/cp/>. Information about ACP can be found at <http://www.a4cp.org/>. CP 2008 included two calls for contributions: a call for research papers, describing novel contributions in the field, and a call for application papers, describing applications of constraint technology. For the first time authors could directly submit short papers for consideration by the committee. The research track received 84 long submissions and 21 short submissions and the application track received 15 long submissions. Each paper received at least three reviews, which the authors had the opportunity to see and to react to, before the papers and their reviews were discussed extensively by the members of the Program Committee.

**Integrated Supply Chain Planning in Chemical Industry** - Thomas Kirschstein 2015-01-07

Thomas Kirschstein provides an overview on methods and approaches for planning and optimizing large-scale chemical production networks. The focus is on an integrated modelling of chemical production processes, logistical processes as well as environmental effects. Therefore, a hybrid simulation framework is designed taking into account time series models for modelling chemical production processes, linear optimization models for describing logistical processes as well as stochastic processes for modelling environmental effects.

**Advances in Production Management Systems. Artificial Intelligence for Sustainable and Resilient Production Systems** - Alexandre Dolgui 2021-09-01

The five-volume set IFIP AICT 630, 631, 632, 633, and 634 constitutes the refereed proceedings of the International IFIP WG 5.7 Conference on Advances in Production Management Systems, APMS 2021, held in Nantes, France, in September 2021.\* The 378 papers presented were carefully reviewed and selected from 529 submissions. They discuss artificial intelligence techniques, decision aid and new and renewed paradigms for sustainable and resilient production systems at four-wall factory and value chain levels. The papers are organized in the following topical sections: Part I: artificial intelligence based optimization techniques for demand-driven manufacturing; hybrid approaches for production planning and scheduling; intelligent systems for manufacturing planning and control in the industry 4.0; learning and robust decision support systems for agile manufacturing environments; low-code and model-driven engineering for production system; meta-heuristics and optimization techniques for energy-oriented manufacturing systems; metaheuristics for production systems; modern analytics and new AI-based smart techniques for replenishment and production planning under uncertainty; system identification for manufacturing control applications; and the future of lean thinking and practice Part II: digital transformation of SME manufacturers: the crucial role of standard; digital transformations towards supply chain resiliency; engineering of smart-product-service-systems of the future; lean and Six Sigma in services healthcare; new trends and challenges in reconfigurable, flexible or agile production system; production management in food supply chains; and sustainability in production planning and lot-sizing Part III: autonomous robots in delivery logistics; digital

transformation approaches in production management; finance-driven supply chain; gastronomic service system design; modern scheduling and applications in industry 4.0; recent advances in sustainable manufacturing; regular session: green production and circularity concepts; regular session: improvement models and methods for green and innovative systems; regular session: supply chain and routing management; regular session: robotics and human aspects; regular session: classification and data management methods; smart supply chain and production in society 5.0 era; and supply chain risk management under coronavirus Part IV: AI for resilience in global supply chain networks in the context of pandemic disruptions; blockchain in the operations and supply chain management; data-based services as key enablers for smart products, manufacturing and assembly; data-driven methods for supply chain optimization; digital twins based on systems engineering and semantic modeling; digital twins in companies first developments and future challenges; human-centered artificial intelligence in smart manufacturing for the operator 4.0; operations management in engineer-to-order manufacturing; product and asset life cycle management for smart and sustainable manufacturing systems; robotics technologies for control, smart manufacturing and logistics; serious games analytics: improving games and learning support; smart and sustainable production and supply chains; smart methods and techniques for sustainable supply chain management; the new digital lean manufacturing paradigm; and the role of emerging technologies in disaster relief operations: lessons from COVID-19 Part V: data-driven platforms and applications in production and logistics: digital twins and AI for sustainability; regular session: new approaches for routing problem solving; regular session: improvement of design and operation of manufacturing systems; regular session: crossdock and transportation issues; regular session: maintenance improvement and lifecycle management; regular session: additive manufacturing and mass customization; regular session: frameworks and conceptual modelling for systems and services efficiency; regular session: optimization of production and transportation systems; regular session: optimization of supply chain agility and reconfigurability; regular session: advanced modelling approaches; regular session: simulation and optimization of systems performances; regular session: AI-based approaches for quality and performance improvement of production systems; and regular session: risk and performance management of supply chains \*The conference was held online.

**10th International Symposium on Process Systems Engineering - PSE2009** - Rita Maria de Brito Alves 2009-09-14

The 10th International Symposium on Process Systems Engineering, PSE'09, will be held in Salvador-Bahia, Brazil, on August 16–20, 2009. The special focus of PSE 2009 is Sustainability, Energy, and Engineering. PSE 2009 is the tenth in the triennial series of international symposia on process systems engineering initiated in 1982. The meeting brings together the worldwide PSE community of researchers and practitioners who are involved in the creation and application of computing-based methodologies for planning, design, operation, control and maintenance of chemical and petrochemical process industries. PSE'09 will look at how PSE methods and tools can support sustainable resource systems, emerging technologies in the areas of green engineering, and environmentally conscious design of industrial processes. - sustainable resource systems - emerging technologies in the areas of green engineering - environmentally conscious design of industrial processes

**Innovations in Computer Science and Engineering** - H. S. Saini 2021-04-23

This book features a collection of high-quality, peer-reviewed research papers presented at the 8th International Conference on Innovations in Computer Science & Engineering (ICICSE 2020), held at Guru Nanak Institutions, Hyderabad, India, on 28–29 August 2020. It covers the latest research in data science and analytics, cloud computing, machine learning, data mining, big data and analytics, information security and privacy, wireless and sensor networks and IoT applications, artificial intelligence, expert systems, natural language processing, image processing, computer vision and artificial neural networks.

**Linear and Integer Programming** - Gerard Sierksma 2001-11-01

"Combines the theoretical and practical aspects of linear and integer programming. Provides practical case studies and techniques, including rounding-off, column-generation, game theory, multiobjective optimization, and goal programming, as well as real-world solutions to the transportation and transshipment problem, project scheduling, and decentralization."

*Institutional Strengthening: Building Strong Management Processes -*

*22nd European Symposium on Computer Aided Process Engineering - 2012-12-10*

Computer aided process engineering (CAPE) plays a key design and operations role in the process industries. This conference features presentations by CAPE specialists and addresses strategic planning, supply chain issues and the increasingly important area of sustainability audits. Experts collectively highlight the need for CAPE practitioners to embrace the three components of sustainable development: environmental, social and economic progress and the role of systematic and sophisticated CAPE tools in delivering these goals. Contributions from the international community of researchers and engineers using computing-based methods in process engineering Review of the latest developments in process systems engineering Emphasis on a systems approach in tackling industrial and societal grand challenges

*Scheduling in Green Supply Chain Management - Wolfgang Albrecht 2021-04-01*

This book presents scheduling with a medium- and short-term focus, which makes it possible to capitalize on fleeting market opportunities while simultaneously working to reconcile economic and environmental priorities. It introduces a new mixed-integer approach to hierarchical discrete-time and continuous-time scheduling, combining aspects of production and recycling, forward and reverse logistics as well as emissions trading for multi-stage supply chain networks. Problem-specific variants of relax-and-fix heuristics and genetic algorithms are also proposed. Given its scope, the book provides a range of practical tools and new perspectives for researchers and professionals in the field of supply chain management.

**Sustainable Design and Manufacturing** - Steffen G. Scholz 2021-10-19

This book consists of peer-reviewed papers, presented at the International Conference on Sustainable Design and Manufacturing (SDM 2021). Leading-edge research into sustainable design and manufacturing aims to enable the manufacturing industry to grow by adopting more advanced technologies and at the same time improve its sustainability by reducing its environmental impact. Relevant themes and topics include sustainable design, innovation and services; sustainable manufacturing processes and technology; sustainable manufacturing systems and enterprises; and decision support for sustainability. Application areas are wide and varied. The book will provide an excellent overview of the latest developments in the sustainable design and manufacturing area.

**18th European Symposium on Computer Aided Process Engineering** - Bertrand Braunschweig 2008-06-18

Plenary Lectures. Topic 1 -- Off-Line Systems. Topic 2 -- On-Line Systems. Topic 3 -- Computational & Numerical Solutions Strategies. Topic 4 -- Integrated And Multiscale Modelling And Simulation. Topic 5 -- Cape For The Users!. Topic 6 -- Cape And Society. Topic 7 -- Cape In Education.

*21st European Symposium on Computer Aided Process Engineering - E. N. Pistikopoulos 2011-07-21*

The European Symposium on Computer Aided Process Engineering (ESCAPE) series presents the latest innovations and achievements of leading professionals from the industrial and academic communities. The ESCAPE series serves as a forum for engineers, scientists, researchers, managers and students to present and discuss progress being made in the area of computer aided process engineering (CAPE). European industries large and small are bringing innovations into our lives, whether in the form of new technologies to address environmental problems, new products to make our homes more comfortable and energy efficient or new therapies to improve the health and well being of European citizens. Moreover, the European Industry needs to undertake research and technological initiatives in response to humanity's "Grand Challenges," described in the declaration of Lund, namely, Global Warming, Tightening Supplies of Energy, Water and Food, Ageing Societies, Public Health, Pandemics and Security. Thus, the Technical Theme of ESCAPE 21 will be "Process Systems Approaches for Addressing Grand Challenges in Energy, Environment, Health, Bioprocessing & Nanotechnologies."

*Computational Intelligence and Its Applications - Abdelmalek Amine 2018-04-26*

This book constitutes the refereed proceedings of the 6th IFIP TC 5 International Conference on Computational Intelligence and Its Applications, CIAA 2018, held in Oran, Algeria, in May 2018. The 56 full papers presented were carefully reviewed and selected from 202 submissions. They are organized in the following topical sections: data mining and information retrieval; evolutionary computation; machine

learning; optimization; planning and scheduling; wireless communication and mobile computing; Internet of Things (IoT) and decision support systems; pattern recognition and image processing; and semantic web services.

**Metaheuristics for Scheduling in Industrial and Manufacturing Applications** - Fatos Xhafa 2008-08-22

During the past decades scheduling has been among the most studied optimization problems and it is still an active area of research! Scheduling appears in many areas of science, engineering and industry and takes different forms depending on the restrictions and optimization criteria of the operating environments [8]. For instance, in optimization and computer science, scheduling has been defined as "the allocation of tasks to resources over time in order to achieve optimality in one or more objective criteria in an efficient way" and in production as "production schedule, i. e. , the planning of the production or the sequence of operations according to which jobs pass through machines and is optimal with respect to certain optimization criteria. " Although there is a standardized form of stating any scheduling problem, namely "efficient allocation of jobs on machines - which can process no more than one activity at a time - with the objective to optimize some objective function of the job completion times", scheduling is in fact a family of problems. Indeed, several parameters intervene in the problem definition: (a) job characteristics (preemptive or not, precedence constraints, release dates, etc. ); (b) resource environment (single vs. parallel machines, unrelated machines, identical or uniform machines, etc. ); (c) optimization criteria (minimize total tardiness, the number of late jobs, makespan, flowtime, etc. ; maximize resource utilization, etc. ); and, (d) scheduling environment (static vs. dynamic, in the former the number of jobs to be considered and their ready times are available while in the latter the number of jobs and their characteristics change over time).

**10th International Symposium on Process Systems Engineering** - Rita Maria de Brito Alves 2009

The 10th International Symposium on Process Systems Engineering, PSE'09, will be held in Salvador-Bahia, Brazil on August 16-20, 2009. The special focus of PSE 2009 is Sustainability, Energy and Engineering. PSE 2009 is the tenth in the triennial series of international symposia on process systems engineering initiated in 1982. The meeting brings together the worldwide PSE community of researchers and practitioners who are involved in the creation and application of computing-based methodologies for planning, design, operation, control and maintenance of chemical and petrochemical process industries. PSE'09 will look at how the PSE methods and tools can support sustainable resource systems and emerging technologies in the areas of green engineering: environmentally conscious design of industrial processes. PSE methods and tools support: - sustainable resource systems - emerging technologies in the areas of green engineering - environmentally conscious design of industrial processes

**Master Planning and Scheduling** - John F. Proud 2021-11-30

Discover the practical, real-world advantages of the Oliver Wight master planning and scheduling methodology. The newly revised Fourth Edition of Master Planning and Scheduling: An Essential Guide to Competitive Manufacturing delivers a masterful exploration of today's master planning and scheduling techniques, as well as an insightful discussion of the future of the master planning and scheduling processes and profession. Written in the context of an ever-evolving digital environment and augmented with new and critical information required to implement best practices, the book is a guide for practitioners and leaders on the principles of master planning and scheduling and its application in modern and future work environments. In this book, readers will learn: Insights regarding top-down, bottom-up, and side-to-side integration of business practices in support of a company's strategic direction and tactical deployment The critical link between time-phased integrated business planning, master planning, master scheduling, capacity planning, and material planning "How-to" details and examples to support master planning and scheduling implementation and enhancements within the company's demand and supply organizations Master Planning and Scheduling is an indispensable guide for supply chain professionals, planners and schedulers in all functional domains of a business. It also belongs on the bookshelves of any executive or manager who seeks to improve their understanding of best practice planning and scheduling processes and how those processes enable a business to outperform the competition through alignment, integration and synchronization across all functions in an organization.

Information Computing and Automation -

