



Newsletter 50 of EUROPT

EUROPT - The Continuous Optimization Working Group of EURO

https://www.euro-online.org/websites/continuous-optimization/

December 2022

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Words from the Chair

Dear Friends,

on behalf of the Managing Board welcome to the 50^{th} EUROPT Newsletter. I hope you and your families are all healthy and safe while enjoying the Christmas season.

After a two year break, our community finally had the chance to meet live again. Our annual workshop took place in Lisbon at the NOVA School of Science and Technology together with a summer school as in-presence only events at the end of the last July. Participation to both has been larger than expected. My heartfelt thanks go to all attendees for their enthusiastic participation and in particular to Paula Amaral and her group for the great organization and for setting up unforgettable social activities. A special issue of *Journal of Optimization Theory and Applications* dedicated to the workshop is under preparation. As previously announced, Oliver Stein was named EUROPT Fellow for 2022 and delivered the Fellowship Lecture in Lisbon. The newsletter reports on the workshop in details and it includes an announcement for the special issue and the laudatio for our new fellow as well.

The next workshop is planned to take place at the Corvinus University in Budapest on 23-25 August 2023 and it will be organised by Tibor Illés and his team, which I am very thankful to for taking on the duty. It will be our 20^{th} workshop: in order to celebrate this occasion it will be in the same location where the group was born in 2000. A preliminary announcement for the workshop is included in the newsletter. More detailed news will follow, so stay tuned with us!

Beyond our own activities, announcements of some further events and special issues are included as well. In order to get other news in real-time you can freely join our mailing-list by sending a message to europt@di.unipi.it.

Looking forward to an exciting new year, we hope to meet many of you in Budapest.

Enjoy reading the Newsletter!

Giancarlo Bigi, EUROPT Chair Università di Pisa, Italy giancarlo.bigi@unipi.it

Laudatio for Oliver Stein, EUROPT Fellow 2022



Oliver Stein

Karlsruhe Institute of Technology Institute for Operations Research Continuus Optimization

EUROPT Fellow 2022

Professor Oliver Stein is an outstanding and internationally well-known researcher in the field of continuous optimization. He obtained his graduation in 1997 in Trier with summa cum laude with a doctoral thesis on parametric semi-infinite optimization and his Habilitation at RWTH Aachen with a Habilitation thesis on Bi-level Strategies in Semi-infinite Programming. Since 2006 he is a full professor at the Karlsruhe Institute of Technology after having received a fellowship of the Alexander von Humboldt-Stiftung, a Heisenberg fellowship of the Deutsche Forschungsgemeinschaft, and having worked at the universities of Trier, Aachen, Chemnitz, Duisburg-Essen, and at Virginia Tech, Blacksburg, with research visits to the University of Cambridge and Princeton University.

He has contributed to various areas of continuous optimization such as Mixed Integer Programming and Multiobjective Optimization, Multilevel Optimization and Generalized Nash Games with many high-level papers. Major contributions had been made by him to the theoretical base and to numerical approaches for semi-infinite optimization already during his PhD and Habilitation time. Those papers are still highly cited, and many other important papers have followed since then, mostly published in top journals of our community. Just recently he provided an important survey paper together with Hatim Djelassia and Alexander Mitsos on recent advances in nonconvex semi-infinite programming within the special issue on twenty years of EurOpt in the EURO Journal on Computational Optimization.

Next to his excellent research papers, Oliver Stein has written a research monograph on Bi-level Strategies in Semi-infinite Programming and several Springer textbooks (in German). Those cover topics such as convex analysis, nonlinear optimization, global optimization, and parametric optimization. These books are, as all publications by Oliver Stein, very well written and are an important contribution to raising the interest of young people in the field of continuous optimization. He is also an excellent presenter and teacher and received next to the KIT faculty teaching award several Hector Teaching Awards.

Oliver Stein is doing his research on an international level with co-authors from all over the world (Australia, Croatia, Italy, Mexico, Netherlands, UK, USA, ...). He has received international recognition for his achievements by many invitations to conferences and seminars, and

by invitations to join editorial boards. He has been a member of the editorial board of several journals (Czech Economic Review, JOGO, MMOR, Optimization). Since 2015, he is Editor in Chief of the journal Mathematical Methods of Operations Research.

Next to these activities, Oliver Stein has contributed a lot to our community. He organized the 7th EUROPT Workshop in Remagen, Germany, in 2009, jointly with Mirjam Dür. He was a member of the Managing Board of EUROPT from 2012 until 2016. Recently, he was a member of the organizing committee of the 12th International Conference on Parametric Optimization and Related Topics (paraoptXII) which took place in September 2022 in Augsburg, Germany, and of OR 2022, the annual conference of the Operations Research Society of Germany, which took place in September 2022 in Karlsruhe, Germany.

Congratulations to Oliver Stein who is an excellent choice for EUROPT Fellow 2022!

EUROPT Workshops

Report on EUROPT 2022

19th EUROPT Workshop on Advances in Continuous Optimization July 29-30, 2022, Lisbon, Portugal

https://sites.fct.unl.pt/europt2022/



EUROPT 2022, the 19h edition of the EUROPT Workshop on Advances in Continuous Optimization, that is the annual conference of EUROPT, the EURO working group on Continuous Optimization, has been held from July 29 to 30, 2022 at Universidade NOVA de Lisboa, Portugal.

Since the foundation of EUROPT in 2000, this conference has been held every year (except on 4 occasions) in a European city (but for 2011 in Australia and 2017 in Canada), and is one of the major events in the European mathematical optimization community. The 2021 edition was organized in Toulouse (France) and held in virtual format due to the COVID-19 pandemic.

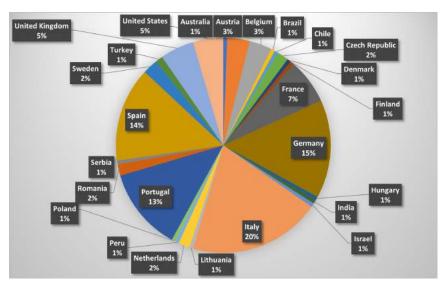
EUROPT 2022 has been a great opportunity for the EUROPT community to get together in person again and enjoying sharing the latest developments in Continuous Optimization.

Committees

The Program Committee, chaired by Giancarlo Bigi (Università di Pisa) and co-chaired by Paula Amaral (Universidade NOVA Lisboa) and Sonia Cafieri (ENAC, Toulouse), was composed by 26 EUROPT members, including the EUROPT Managing Board, as well as some EUROPT Fellows and EUROPT Past and Honorary Chairs. The Organizing Committee was composed by 5 members from Universidade NOVA Lisboa and chaired by Paula Amaral.

Geographical Distribution of the participants

Registered participants were 176 from 26 countries, with the geographical distribution depicted in the figure. Among these participants, 47 were graduate students.



EUROPT 2022: Participation by countries

Scientific Program and EUROPT Fellow Lecture

The rich scientific program of the conference covered all aspects of continuous optimization, and was organized in 12 special invited streams organized in 5 or 6 parallel sessions. Each session grouped 3 or 4 talks, each on a time slot of 25 minutes.

Three Plenary Lectures were delivered by distinguished scholars: Marc Teboulle, Professor at Tel Aviv University, on Algorithms for Structured Nonconvex Optimization; Dolores Romero Morales, Professor at the Copenhagen Business School, on Transparent Machine Learning Calls For More Optimization; and Alper Yildirim, Professor at The University of Edinburgh, on Convex Relaxations of Nonconvex Quadratic Programs: A New Perspective via Convex Underestimators.

Every year, the EUROPT Working Group honours outstanding researchers in continuous optimization by awarding the EUROPT Fellowship. The Fellowship is presented to the awarded researcher at the EUROPT Workshop, where the Fellow delivers the EUROPT Fellowship Lecture as a plenary talk. The recipient of the 2022 EUROPT Fellowship was Oliver Stein, Professor at Karlsruher Institut für Tecnologie, who delivered the EUROPT Fellowship Lecture on Branch-and-bound for Continuous and Mixed-integer Multiobjective Optimization.

Social Program

EUROPT 2022 incorporated also a series of social events.

A conference dinner was organized on July 29th A nice gift was offered at this occasion to all the organizers of streams and special sessions.

A fairwell sunset barbeque was organized on July 30th on the conference site in the university campus. The participants were able to say goodbye in a friendly and relaxed atmosphere.

The participants still on site on July 31^{st} could enjoy also a guided visit to a wine cellar in Bacalhoa.



EUROPT 2022: participants group picture

Journal Special Issue dedicated to EUROPT 2022

We are pleased to announce a Call for Papers for a Special Issue of **Journal of Optimization Theory and Applications** on *Modern challenges in continuous optimization*, dedicated to EUROPT 2022: https://www.springer.com/journal/10957/updates/23432668
Submissions are open. Paper submission deadline: 31 March, 2023.

The rich scientific and social programs of EUROPT 2022 made it a great event allowing the EUROPT community to get together again in person after the COVID-19 pandemic, and enjoying advances in Continuous Optimization. The community is now already looking forward to the next event gathering the whole community, that will be held on August 2023 in Budapest.

Giancarlo Bigi (chair)
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Sonia Cafieri (co-chair)
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20th EUROPT Workshop on Advances in Continuous Optimization The EURO continuous optimization working group is coming home

August 23-25, 2023, Budapest, Hungary

www.europt.hu



The 20th EUROpt Workshop: Continuous Optimization Working Group is coming home will be held at Corvinus University of Budapest, Hungary, August 23-25, 2023, where EUROpt WG has been founded on July 14, 2000. The workshop will be organized by the Corvinus Centre for Operations Research (CCOR), Corvinus University of Budapest, the EUROpt WG of EURO and the Hungarian Operations Research Society (HORS).

Scope

The 20th EUROpt Workshop focuses on recent advances on continuous optimization theory, complexity and convergence properties of algorithms, high performance optimization software and wide range of novel applications of (continuous) optimization.

The scope of the workshop includes (but may not be restricted to) the following topics:

Linear and nonlinear optimization

Conic and semidefinite optimization

Convex and non-smooth optimization

Derivative-free optimization

Semi-infinite optimization

Global optimization

Large-scale optimization

Quantum computing optimization

Multi-objective optimization

Mixed integer nonlinear optimization

Stochastic optimization

Optimization under uncertainty and applications

Optimal control and applications

Complexity and efficiency of optimization algorithms

Complementarity and variational problems

Optimization in industry, business, and finance

Computational mathematical optimization

Data driven optimization
Multilevel optimization
Computational game theory
Optimization for learning and data analysis
Huge-scale optimization
Optimization software
Novel applications of continuous optimization

Important Dates

Preliminary registration and abstract submission open: February 15, 2023

Deadline for abstract submission: April 30, 2023

Acceptance of the presentation based on the abstract: May 14, 2023

Deadline for early registration: June 11, 2023 Deadline for late registration: July 16, 2023

Conference begins on August 23 and ends on August 25, 2023

Venue

The 20th EUROpt Workshop: Continuous Optimization Working Group is coming home will be held in the building C of Corvinus University of Budapest in Budapest, Hungary.

Contact

If you have any questions related to the workshop, please do not hesitate to contact:

Marianna E.-Nagy: marianna.eisenberg-nagy@uni-corvinus.hu

or

Tibor Illés: tibor.illes@uni-corvinus.hu

Forthcoming events



Innovative global optimization approaches have attracted many research scientists, decision makers, managers, executives, engineers, academicians, officers, policy makers and practicing researchers in recent years as powerful intelligent computational techniques for solving many complex real-world application problems.

The International Conference on Intelligent Computing and Optimization (ICO'2023) highlights the latest research innovations and applications of algorithms designed for optimization applications within the fields of Science, Computer Science, Engineering, Information Technology, Management, Finance, Business and Economics. Focusing on a variety of methods and systems as well as practical examples, this conference is a significant resource for post graduate-level students, decision makers, and researchers in both public and private sectors who are seeking research-based methods for modeling uncertain and unpredictable real-world problems.

HIGHLIGHT

All accepted and reviewed papers will be published by Springer and made available through Springer-Link Digital Library, one of the world's largest scientific libraries.

CONFERENCE TOPIC

Topics to be discussed in this conference include (but are not limited to) the following:

Intelligent Computing :

Artificial Intelligence, Quantum Computing, Deep Neural Networks, Self Organizing, Fuzzy Logic, Membrane Computing, Evolutionary Computation, Learning theory, Probabilistic methods, Image processing computer vision, Speech recognition, Big Data Analytics, Evolutionary Algorithm, Randomness Monte Carlo Methods, Algorithmic Probability, Chaos Theory, Cryptography, Game Theory, Information Theory, Pattern Recognition, Natural Computing, Evolutionary Robotics Knowledge-based System, Machine Learning, Unsupervised Learning, Computational Finance, Computational Economics, DNA Computing, Deep Learning, Wavelets, Convolutional Neural Network, Cloud Computing, Green Computing.

Optimization

Ant Colony Optimization, Artificial Bee Colony, Artificial Immune Systems, Artificial Neural Networks, Automatic Computing, Bacterial Foraging, Biological Computing, Chaos Optimization, Coloud Computing, Combinatorial Optimization, Computational intelligence, Continuous Optimization, Cultural Algorithms. Differential Evolution, Direct Search, Evolutionary Computing, Fuzzy Optimization, Genetic Algorithms, Granular Computing, Hybrid Algorithms, Local and Global Search, Memetic Algorithms, Meta-heuristic Methods, Particle Swarm Optimization, Pattern Search, Simulated Annealing, Simulation and Modeling, Soft Computing Techniques, Support Vector Machines, Swarm Intelligence, Tabu Search, Variable Neighborhood Search, Quasi-Newton Methods, Monkey algorithm, Mathematical programming.

Applications

Green IT, IoTs, Adaptive Response, Microwave Field, Electric Skin Activity, Flood Management, Leg Mating Unit, Animal Husbantry, Reinforcement Learning, Solar Energy, Anaerobit Treatment Radiation, Elastic Damping Mechanism, Optimal Power Supply, Smart Home, Traveling Salesman Problem, Clustering Algorithms, Neural Machine Translation, Handwritten Recognition, Web Based Instruction, Load & Pollution Forecasting, S5D-Mobile net, Financial & Debt Ratios, Truth Discovery, Learning Analytics, Face Recognition, Mobile Cloud Gaming, Disposing Waste, Smart Audit, Drone, Menstrual Cycle, Pulse Wave, Traffic Data, Supply Chain, Electricity Prices, Health Economics, Photocells, Knight's Tour Problem, Electro-activated air, Vehicular communications, Elastic damping mechanism, Energy saving, Autonomous Vehicle, Photovoltaic, Grain drying, Loose material, Social Network, Monitoring System, Electroencephalogram, Block-chain, Molecular dynamics, Tree hierarchies, Hub Location, Path relinking, Interoperability, Trend Detection, Packing problem, Android, Transfer Learning Method, MobileNet, Malware Detection and Classification, COVID-19 Pandemics, E-Waste Management, Smart-Farming, Climate Change, Global Warming.

TUTORIALS | WORKSHOPS | SPECIAL SESSIONS

Proposals should provide a focused lecture or scope on new and emerging topics within the scope of the conference. Accepted and presented papers will be published in the Conference Proceedings. All proposals should be submitted by electronic mail to: icico2018@gmail.com

Submission link- https://easychair.org/my/conference?conf=ico2023 Conference website- https://www.icico.info/ E-mail: icico2018@gmail.com

Submission deadline: February 19, 2023

POSTERS | DEMOS

All ICO 2023 Posters & Demos should be submitted by electronic mail to: icico2018@gmail.com

PAPER SUBMISSION

Website: The submission Web page for ICO 2023 is Via Easychair Submission link-https://easychair.org/my/conference?conf=ico2023

SUBMISSION GUIDELINE

- Papers should be in English.
- ✓ Regular papers should be up to 10 pages in length.
- Short papers should be up to 6 pages in length.
- ✓ Previously published work may not be submitted, nor may the work be concurrently submitted to any other conference or journal. Such papers will be rejected without review.
- ✓ Papers must be formatted using the SPRINGER Author's Kit. https://www.springer.com/us/authors-editors/conferenceproceedings/conference-proceedings-guidelines

PUBLICATION

The accepted and reviewed papers of ICO 2023 will be published in the LNNS Lecture Notes in Networks and Systems. The proceedings are submitted for inclusion to the leading indexing services: SCOPUS, SCImago, Google Scholar, ISI Proceedings (CPCI), EI Compendex, CrossRef, Web of Science, and Inspec.

Best and high quality papers will be selected and reviewed by IPC in order to publish extended version of the paper in SCOPUS

IMPORTANT DATES

WORKSHOPS/TUTORIAL PROPOSALS FULL PAPER/POSTER/DEMOS ACCEPTANCE NOTIFICATION CAMERA READY DEADLINE 10 JANUARY 2023 19 FEBRUARY 2023

28 MARCH 2023 19 APRIL 2023

Venue: G Hua Hin Resort & Mall, Hua Hin, Thailand (In Person/Physical Conference)

https://www.ghuahin.com/ Address: 250 201 Soi 94, Hua Hin, Prachuap Khiri Khan 77110, Thailand Submission link- https://easychair.org/conferences/?conf=ico2023 https://easychair.org/cfp/ICO-2023

Please send any inquiry on ICO'2023 to icico2018@gmail.com ICO'2022: https://link.springer.com/book/9783031199592

KEYNOTE SPEAKERS



rofessor Celso C. Ribeiro istitute of Computing of Iniversidade Federal Fluminense,



Professor José Antonio Marmolejo Saucedo Universidad Panamericana Mexico,



Professor Iztok Fister Jr Faculty of Electrical Engineering And Computer Science, University of Maribor, Slovenia



Professor Telmo Matos Department of Computing Engineering, ISEP - IPP; Department of Industrial Engineering and Management, FEUP - UP; Center for Research and Innovation in Business Science and Information Systems. Portug



Professor Sunarin Chanta Department of Industrial Management King Mongkut's University of Technolog North Bangkok, Thailand



Professor Tien Anh Tran
Department of Marine Engineering
Vietnam Maritime University,
Halphong City, Vietnam

IFORS Developing Countries OR resources website

The aim of the Developing Countries On-Line Resources page is to provide the OR researcher with all publicly-available materials on the topic of Operations Research for Development. It also aims to provide a venue for people who are working in the area to share their completed or in-process work, learn from others, and stimulate comments and discussions on the work. To access information regarding IFORS Developing Countries resources, its regular updates - and to submit your possible "free" (not copyright protected) material, you may occasionally visit the link:

http://ifors.org/developing_countries/index.php?title=Main_Page

With this open online resources page we aim to provide a platform to make research and applications of OR widely accessible to the entire OR community including researchers, academicians and scholars in the Developing Countries (DCs).

For this purpose we invite scholarly contributions spanning across all areas and sectors ranging from arts and science, to communication and education.

The International Federation of Operational Research Societies (IFORS) is an almost 60-year-old organization which is currently composed of 51 national societies. Regional Groups of IFORS are: ALIO (The Latin American Ibero Association on Operations Research), APORS (The Association of Asian-Pacific Operational Research Societies), EURO (The Association of European Operational Research Societies), NORAM (The Association of North American Operations Research Societies). IFORS conferences are held every three years. The upcoming conference IFORS 2023 will be held in Santiago, Chile, on July 10-14, 2023. Please visit the following link for details regarding the same:

https://ifors2023.com

Thank you very much for your attention. We look forward to your enthusiastic participation and scholarly contributions.

Gerhard-Wilhelm Weber Poznan University of Technology, Poland gerhard.weber@put.poznan.pl

Special Issues and Calls for chapters



Journal of Optimization Theory and Applications



EUROPT 2022 Special Issue - Modern challenges in continuous optimization

https://www.springer.com/journal/10957/updates/23432668

We are pleased to announce this Special Issue of the Journal of Optimization Theory and Applications (JOTA) related to the 19th Workshop on Advances in Continuous Optimization (EUROPT 2022) which highlighted timely topics and challenges in continuous optimization through 13 thematic streams. The special issue aims at highlighting significant developments that have been presented at the workshop. At least one author of each paper must have attended EUROPT 2022 at the Universidade Nova de Lisboa, July 29-30, 2022.

The short program of the workshop is available at: https://sites.fct.unl.pt/europt2022/files/europt2022-program.pdf

Guest Editors:

Paula Alexandra Amaral, paca@fct.unl.pt Miguel F. Anjos, Miguel.F. Anjos@ed.ac.uk Giancarlo Bigi, giancarlo.bigi@unipi.it Sonia Cafieri, sonia@recherche.enac.fr

Submission Deadline: 31 March 2023

Special Issue on "The Advanced Techniques in Computing and Security" Foundations of Computing and Decision Sciences Call for Papers

1. Introduction

The Advanced Techniques in Computing and Security are essential for the development of modern society.

The emerging needs for building reliable and faster computing system in present society have attracted lots of attention from different perspectives. Providing security and efficient computing methods to ensure the safety, efficiency, and security is becoming urgent both in academy and industry. In particular, it is urgent to explore and exploit new technologies to collect, process, analyze, and apply such big data. The new methods for these needs have covered distinct directions, such as architecture, algorithms, high-performance systems, security and privacy. This special issue addresses this domain and aims to gather recent academic achievements in this field and promote the industrial cooperation with academic achievements.

In summary, the research on the advanced techniques in computing and security can bring a substantial improvement in the functioning of current society.

2. Technical Scope of the Proposal:

The objective of this special issue is to publish papers devoted to the analysis of recent trends in the interdisciplinary area of the advanced techniques in computing and security. To display current developments and address challenges in theory, technology and applications emerging in this competitive field, we devote the Special Issue on "The Advanced Techniques in Computing and Security".

This Special Issue solicits topics as follows, but is not limited to:

- Architectures:
 - Interconnection networks
 - o Sensor, wireless and RFID systems
 - Network-on-chip architectures
- Algorithms:
 - o Resource allocation and management,
 - Distributed computing
 - Network routing and traffic control
- High-Performance Systems:
 - o Operating systems for parallel/distributed systems
 - o Software engineering for parallel/distributed system
- Security and Privacy :
 - o Cloud security,
 - o Intrusion detection,
 - o Data provenance
 - Cyber science and engineering

The quality and topics of the submissions should correspond to the high standards of publications in FCDS and its Aims and Scope: http://fcds.cs.put.poznan.pl/fcds/.

3. Important Dates

Full Paper Submission will start on: December 10, 2022

Deadline for submission: February 15, 2023 **Special issue will close on:** September 30, 2023

The special issue is planned to be published during 2023, the assignment of accepted papers to the given volume (and its date) depends on the finishing the reviewing and revision process. Submissions should follow the journal's style and guidelines presented here: http://fcds.cs.put.poznan.pl/FCDS/Submissions.aspx.

Manuscript submission must be made by e-mail to the following address that authors should mention in their letter to the Editorial Office that the manuscript is submitted to this "Special Issue": fcds@cs.put.poznan.pl.

In case of any question, please contact by e-mail the guest editors:

Prof. Jacek Blazewicz

Institute of Computing Science, Poznan University of Technology, Poland

Email: jblazewicz@cs.put.poznan.pl

Prof. Jie Li

School of Electronic, Information and Electrical Engineering, Shanghai Jiao Tong University,

China

Email: li_jiecs@sjtu.edu.cn

Prof. Lei Shi

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Email: shilei@zzu.edu.cn

Prof. Yangjie Cao

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Dr. Yinling Wang

School of Cyber Science and Engineering, Zhengzhou University, China

Email: shirleywang0314@hotmail.com



CALL FOR FULL CHAPTERS

DE GRUYTER

Computational Intelligence for Supply Chains

NO PUBLICATION CHARGES

The book edited by Dr. Pandian Vasant (*MERLIN Research Centre, TDTU, HCMC, Vietnam*),
Professor Gerhard-Wilhelm Weber (*Poznań University of Technology, Poland*),
Dr. Anirban Banik (*National Institute of Technology Sikkim, India*)
Professor Elias Munapo (*NWU - Mafikeng Campus, South Africa*),

Full Chapter Submission: 31st December 2022

Submission via Email Only; anirbanbanik94@gmail.com, Elias.Munapo@nwu.ac.za

Computational intelligence for supply chains demonstrates the recent approaches implemented in developing novel computational intelligence techniques for the supply chain. It gives a comprehensive background on innovative, creative and state of the art applications of computational intelligence, focusing on supply chain sectors such as planning, information, sources, inventory, production, and block-chain. It discusses topics such as intelligent algorithmic enhancements and smart performance measurement approaches and provides insights into the implementation of novel computational intelligence strategies to aid in the sustainable decision-making process. With this book, readers can enhance their problem-solving skills to solve real-world problems effectively implementing appropriate techniques from emerging fields, including smart hybrid quantum computing and swarm intelligence, cloud computing, and innovative optimization.

Computational intelligence for supply chains is designed for managers, decision-makers, practitioner, researchers, academicians, natural scientist, applied mathematicians, statisticians, and postgraduates seeking latest research trends of computational intelligence in supply chain management.

TARGET AUDIENCE

Policy makers, Governmental officer, Ministers, Directors, General managers, Chief executive officers, Professors of colleges and universities, People associated with research and development, Research scholars such as senior research fellows, post-doctoral fellow, junior research fellows, PhD students, UG and PG students, Decision makers, and Business leaders.

TOPICS

Recommended topics include, but are not limited to, the following:

Meta-heuristics algorithms, Optimization, Optimal control and Stochastic optimal control, Evolutionary algorithms, Classical optimization techniques, Hybrid algorithm, Adaptive neuro-fuzzy inference systems, Artificial neural network, Fuzzy logic, Health Economics, Implementation in business and Industries, Operational research, Quantum computing strategies, Business analytics, Machine learning, Automation, Robotics, Data science and technology, Artificial intelligence, Swarm intelligence, Renewable energy, Smart agriculture, CO_2 emission management, Nature inspired algorithms, Resource management and allocation, Data mining, RFM optimization model, Models related to logistics and production, Computational economics, Computational finance, Marketing models, Data warehousing, smart supply chain.

GUIDELINES FOR AUTHORS

Full chapters submitted to this book should be limited to 20 pages and all interested authors must consult the guidelines for manuscript submissionshttps://www.degruyter.com/page/2021



Contributors may also be requested to serve as reviewers for this project.

Guidelines for preparing of Images

All images submitted to the book must be TIFF or JPEG or something like that additionally to being included in the manuscript to ensure a good quality later on.

Please note that it is the authors' responsibility to get permission, in case they use images from other sources.

Guidelines for Reference & Websites

The references should be at the end of each chapter in Vancouver style, with numbers and ordered by the appearance in the text. For websites, authors are always advised to give the last access date.

Note: There are **no submission** or **acceptance fees** for manuscripts submitted to this book for publication, *Computational Intelligence for Supply Chains*. All manuscripts will undergo a **double-blind peer review** editorial process. Submissions of Chapters in **Word** or **Latex** format are allowed for this book.

Corresponding Editors:

All queries related to this Book MUST be directed to:

Dr. Anirban Banik, National Institute of Technology Sikkim, India;

Email: anirbanbanik94@gmail.com

Prof. Dr. Elias Munapo, NWU - Mafikeng Campus, South Africa;

Email: Elias.Munapo@nwu.ac.za



CALL FOR FULL CHAPTERS

DE GRUYTER

Smart Green Energy Production

The book edited by

Dr. Pandian Vasant (MERLIN Research Centre, TDTU, HCMC, Vietnam),
Professor Dr. Gerhard-Wilhelm Weber (Poznań University of Technology, Poland),
Dr. Vladimir Panchenko (Russian University of Transport, Moscow, Russia),
Dr. J. Joshua Thomas (UOW Malaysia KDU Penang University College, Malaysia)

Submission via Email Only; joshua.j.thomas@gmail.com, pancheska@mail.ru Submission deadline 31st December 2022

(NO ARTICLE PROCESSING CHARGE)

ABOUT THE BOOK

Smart Green Energy Production provides details insight on current approaches used in the research and development of cutting-edge technology for sustainable energy production. The book gives in-depth background on innovation, creation and original implementation, concentrating on energy crisis management and CO₂management sectors such as planning, information, sources, greenhouse gas, carbon emissions, renewable energy, bio-energy and effect of climate change. The book discusses topics such as new and holistic improvements in intelligent algorithms and demonstrates the implementation of sustainable computational intelligence techniques to mitigate unpredictable natural and human-made problems. The book will aid the readers to solve real-world problems effectively using the appropriate techniques from the present and emerging fields, including hybrid quantum computing, swarm intelligence, and innovative optimization.

Smart Green Energy Production aims to be an important reference source for practitioners, managers, IT experts, data scientists, researchers, academicians, natural scientist, applied mathematicians, statisticians, and post-graduates seeking recent advancements in green energy production and management and their corresponding application in the real world.

TARGET AUDIENCE

Policy makers, Governmental officer, Ministers, Directors, General managers, Chief executive officers, Professors of colleges and universities, People associated with research and development, Research scholars such as senior research fellows, post-doctoral fellow, junior research fellows, and PhD students, UG and PG students, Decision makers, and Business leaders.

TOPICS

Recommended topics include, but are not limited to, the following:

Meta-heuristics algorithms, Optimization, Optimal control and Stochastic optimal control, Evolutionary algorithms, Classical optimization techniques, Hybrid algorithm, Adaptive neuro-fuzzy inference systems, Artificial neural network, Fuzzy logic, Health Economics, Implementation in business and Industries, Operational research, Quantum computing strategies, Business analytics, Machine learning, Automation, Robotics, Data science and technology, Artificial intelligence, Swarm intelligence, Renewable energy, Smart agriculture, CO₂ emission management, Nature inspired algorithms, Resource management and allocation, Data mining, RFM optimization model, Models related to logistics and production, Computational economics, Computational finance, Marketing models, Data warehousing.

SUBMISSION GUIDELINES FOR CONTRIBUTORS



Full chapters submitted to *Smart Green Energy Productions* hould be limited to 20 pages and all interested authors are requested to consult the guidelines for manuscript submissions https://www.degruyter.com/page/2021

Submission Guidelines for Images

All images submitted to *Smart Green Energy Production* for publication must be **TIFF** or **JPEG** or something like that additionally to being included in the manuscript to ensure a good quality later on. Please note that it is the authors' responsibility to get permission, in case they use images from other sources.

Submission Guidelines for Reference and Websites

References in the chapters should be at the end of each chapter in **Vancouver style**, with numbers and ordered by the appearance in the text. For websites, authors are always advised to give the last access date.

Note: There are **no article processing charge** or **acceptance fees** for manuscripts submitted to **Smart Green Energy Production** for publication. All manuscripts will undergo a **double-blind peer review** editorial process. Submissions of Chapters in **Word** or **Latex** format are allowed for this book.

Submission via Email Only; joshua.j.thomas@gmail.com, pancheska@mail.ru

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Volume 1: Introduction of Artificial Intelligence in Smart
Autonomous, Robotics & Drone Technology
Full Chapter Submission Deadline: 30 June 2023
Volume 2: Advances of Artificial Intelligence in Smart
Autonomous, Robotics & Drone Technology

A book edited by Prof. Elias Munapo (NWU - Mafikeng Campus, South Africa),

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Introduction

This book describes the development an analysis of the main artificial intelligence techniques used in smart autonomous, robotics and drone related problems. These are classified by their applications in the most significant fields of this area in computational intelligence methods and meta-heuristic methods. The creation of this book is based on the importance of this branch of engineering in the economic activity of a country and is motivation to continue doing research in it. The analysis also addresses some aspects of computational complexity found in ordinary optimization as well as the most common NP-hard problems in this research field. The innovative results obtained are presented and the virtual future of this technology is projected as well as the new challenges and opportunities to venture into this important field of human activity. In the scope of important subjects addressed there also Quantum Physics, Number Theory, Neuroscience, Stochastic Optimal Control with Regime Switching, Operational Research and the Arts, and their emerging applications. The major contribution of this book will be on the impact and benefits of these technologies for the improvement human quality and convenience life in the near future across the planet.

Objective of the Book

This book will include the impact and benefits of artificial intelligence technologies to the cutting edge research fields on autonomous



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industry, robotics engineering and drone technology in order to solve real world problems faced by humankind. Special importance will be given by the Scientific foundations, to most emerging research and application on them.

Target Audience

Academics, practitioners, professionals, managers, policy makers, government officials, executives, post doctorates, and under graduates/post graduates students, College graduates, technician, technology experts, business leaders, Research officers.

Recommended topics include, but are not limited to, the following:

Smart manufacturing, artificial intelligence, computational intelligence, metaheuristics, operational research, autonomous systems, hybrid systems, stochastic optimal control, regime switching, number theory, quantum physics, automation, robotics, automobile industry, intelligent surveillance, drone applications in real-world problems in agriculture, health, natural disasters, manmade problems.

Submission Procedure



Researchers and practitioners are invited to submit the full chapter on or before **30 June 2023**. Authors will be notified by **15 July 2023** about the status of their full chapters. All submitted chapters will be reviewed on a double-blind review basis. Contributors may also be requested to serve as reviewers for this project.

Note: There are no submission or acceptance fees for manuscripts submitted to this book publication, *Artificial Intelligence in Smart Autonomous, Robotics & Drone Technology*. All manuscripts are accepted based on a double-blind peer review editorial process.

Publisher

This book is scheduled to be published by Apple Academic Press. http://www.appleacademicpress.com/ Indexing: The Book Citation Index (BKCI) in Web of Science and SCOPUS

Guideline for manuscript preparation is given below:

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Editor's notes

Dear members of EUROPT, dear readers,

As the year 2022 is coming to an end, please first let me say I am pleased to contribute through the newsletter to report on the success of the EUROPT events and on its successful scientific achievements of the year, as well as spreading information on next activities of our community.

In this 50th Newsletter we report in particular on the successful EUROPT workshop held in Lisbon last July, together with our second summer school. A laudatio to our EUROPT Fellow 2022, Oliver Stein, is also included. Looking ahead towards the new year, we are very happy to announce our next workshop, EUROPT 2023: The EURO continuous optimization working group is coming home, that will be held in Budapest at Corvinus University, where the EUROPT group was funded.

We are pleased to announce the Call for Papers of a special issue of *Journal of Optimization Theory and Applications* dedicated to EUROPT 2022, open to the participants of the event with submission deadline set to the end of March 2023. The Call for Papers for another special issue and for chapters in collections are also announced in this Newsletter.

Please also take the occasion to discover the resources on the IFORS Developing Countries OR website and consider to contribute.

I thank all the contributors to this newsletter, and I hope you all enjoy the reading.

I wish you all the best for the Holiday season and a brighter 2023!

The Newsletter Editor

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