



# Newsletter 42 of EUROPT

EUROPT - The Continuous Optimization Working Group of EURO

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

March 2019

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#### Words from the Chair

Dear Friends,

on behalf of the Managing Board welcome to the 42nd EUROPT Newsletter. A new year is ahead us bringing a bunch of interesting events and chances for networking. You will find a calendar of events and some announcements in the Newsletter. Let me remind our main events: EURO and EUROPT. The 2019 EURO Conference will be held in Dublin, Ireland, on 23-26 June, and the EUROPT Workshop will follow soon after in Glasgow, UK, on 28-29 June. I hope to meet many of you again, this time in Ireland and UK.

A selection committee, including most EUROPT Fellows and Past Chairs beyond the current Managing Board, elected the new EUROPT Fellow, who will deliver the Fellowship Lecture at our workshop in Glasgow. If you missed the announcement, browse the Newsletter to find out which outstanding researcher has been awarded! Let me thank all who proposed candidates and the selection committee for their valuable service to our community. The new EUROPT website <a href="https://www.euro-online.org/websites/continuousoptimization/">https://www.euro-online.org/websites/continuousoptimization/</a> was released about one year and a half ago. We still need to rebuild a reliable memberlist through the website. When it is done, communications will be easily handled by exploiting the features of the website. Please, take a few minutes to register on the website. Thank you all.

Giancarlo Bigi, EUROPT Chair

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#### **EUROPT Fellow 2019**

EUROPT honours outstanding researchers in continuous optimization by awarding annually the EUROPT Fellowship. It is a great pleasure for the EUROPT Managing Board to announce that Jacek Gondzio (The University of Edinburgh) has been elected EUROPT Fellow 2019. Jacek Gondzio is recognized for his outstanding scientific contributions to continuous optimization. He has made remarkable contributions to the theory of interior-point methods, as well as to software development. He has also been deeply involved in our community over many years, through the organization of conferences, including the EUROPT Workshop in 2015 for which he was Chair of the Programme Committee, and serving at editorial boards of leading international scientific journals.

Professor Jacek Gondzio will present the EUROPT Fellowship Lecture as a plenary talk at our annual workshop, which will be held on 28-29 June at the University of Strathclyde in Glasgow (UK).

The selection committee included EUROPT Fellows and Past Chairs beyond the Managing Board:

- Paula Amaral (MB)
- Giancarlo Bigi (MB Chair)
- Immanuel Bomze (Fellow EURO President)
- Sonia Cafieri (MB)
- Andreas Grothey (MB)
- Tibor Illés (MB Honorary Chair)
- Florian Jarre (MB Past Chair)
- Joaquim Judice (Fellow)
- Dmitri Kvasov (MB)
- Marco Locatelli (Fellow)
- Marco Antonio López Cerdá (MB Past Chair)
- Kaisa Miettinen (MB Past Chair)
- Yurii Nesterov (Fellow)
- Laura Palagi (MB)
- Panos Pardalos (Fellow)
- János D. Pintér (MB Past Chair)
- Cornelis Roos (Fellow)
- Yaroslav D. Segeyev (Fellow)
- George J. Still (Fellow)
- Christiane Tammer (MB)
- Tamás Terlaky (MB Honorary Chair)
- Gerhard Wilhelm Weber (MB Honorary Chair)
- Julius Zilinskas (MB Past Chair)

Our warmest congratulations to the new EUROPT Fellow!

## Forthcoming Events

# 17<sup>th</sup> EUROPT Workshop on Advances in Continuous Optimization 28-29 June 2019, Glasgow, UK

http://icelab.uk/europt-2019/

Following the  $30^{th}$  European Conference on Operational Research (EURO 2018, Dublin, Ireland,  $23^{rd}$ - $26^{th}$  June), the  $17^{th}$  EUROPT Workshop on Advances in Continuous Optimization (EUROPT 2019) will take place in Glasgow, UK.

#### Call for Contributions

The EUROPT Workshop brings together researchers from Europe and around the globe for stimulating discussions on the latest developments in continuous optimization. Colleagues are invited to contribute especially (but not only) on one or more of the following topics:

- Linear and nonlinear optimization
- Large-scale optimization
- Multi- and many-objective optimization
- Mixed integer nonlinear optimization
- Optimization under uncertainty and applications
- Derivative-free optimization
- Semi-infinite optimization
- Global optimization
- Stochastic optimization
- Complementarity and variational problems
- Optimal control and applications
- Conic and semidefinite optimization
- Optimization in industry, business and finance
- Complexity and efficiency of optimization algorithms
- Analysis and engineering of optimization algorithms
- Convex and non-smooth optimization
- Data driven optimization
- Nature inspired methods and algorithms
- Multilevel optimization
- Optimization for learning and data analysis
- Huge-scale optimization
- Artificial intelligence based optimization methods and applications

The **submission** process is done through the EURO submission system. You can find the link and the instructions at http://icelab.uk/europt-2019/abstract-submission/

Info on organised sessions and minisymposia are available at http://icelab.uk/europt-2019/organised-sessions-and-minisymposia/. Please contact the organisers to contribute to the sessions or minisymposia.

Info on the registration fees can be found at http://icelab.uk/europt-2019/registration/

## Plenary Speakers

This year's plenary speakers are (in alphabetical order):

- Claire Adjiman Professor of Chemical Engineering, at the Imperial College, London
- Daniel Kuhn Professor of Operations Research at the College of Management of Technology at EPFL
- Margaret Wright Silver Professor of Computer Science at Courant Institute of Mathematical Sciences, New York University
- EUROPT Fellow 2019 Jacek Gondzio Professor at the University of Edinburgh

More info about the speakers can be found through the page http://icelab.uk/europt-2019/plenary-speakers/

## Important Dates

- Abstract submission: EXTENDED to March 18th 2019
- Notification of acceptance: extended to March 29th 2019
- Early bird registration: extended to April 26th 2019
- Author registration: May 20th 2019 (for authors that want to be included in the final program â registration for attendees that do not want/have to present will be available up to the conference date and on site)
- EUROPT 2019 Workshop: June 28-29, 2019

#### Venue

**Glasgow** is a cultural City, named European City of Culture and UNESCO City of Music, and voted Top 20 "Best of the World" for 2016 by National Geographic Traveller, Top 10 Most Excellent Cities 2018 on Trip Advisor, as well as one of the top 10 Best Places to visit in 2018 by the New York Times.

Glasgow is connected to the rest of the World through 3 international airports: Glasgow International (20 minutes from the City Centre by bus), Edinburgh (55 minutes from the City Centre of Glasgow by direct bus), and Prestwick (45 minutes form City Centre by direct train) More info on Glasgow and Scotland

## More information

More info and updates will be disseminated via twitter, https://twitter.com/icelab\_uk #EU-ROPT2019, and via our web site http://icelab.uk/europt-2019/

## **Organisers**

We look forward to welcoming you in Glasgow in June (the best period to visit Glasgow and Scotland)!

EUROPT 2019 Programme Committee, EUROPT 2019 Organising Committee

# NUMTA2019 – The 3rd International Conference and Summer School "Numerical Computations: Theory and Algorithms"

#### June 15–21, 2019 Le Castella – Isola Capo Rizzuto, Crotone, Italy

http://si.dimes.unical.it/yaro/numta2019

NUMTA2019 - the 3rd International Conference and Summer School "Numerical Computations: Theory and Algorithms" will be held in Italy in the All Inclusive "TH Le Castella Village" resort close to Crotone - the city of Pythagoras, from 15th to 21st June 2019. This edition of NUMTA will be dedicated to the 80th birthday of Professor Roman G. Strongin http://eng.unn.ru/about/organisation/rectors-office/roman-strongin.

Abstract submission deadline: March 18, 2019.

Continuous optimization and machine learning are among the main topics of the Conference (see https://easychair.org/cfp/numta2019 for the NUMTA2019 Call-for-Papers).

Plenary lectures will be delivered by Louis D'Alotto (USA), Renato De Leone (Italy), Kalyanmoy Deb (USA), Luca Formaggia (Italy), Jan Hesthaven (Switzerland), Francesca Mazzia (Italy), Panos Pardalos (USA), Michael Vrahatis (Greece), Anatoly Zhigljavsky (UK).

The **Springer Young Researcher Prize** for the best NUMTA2019 presentation made by a young scientist will be awarded.

**Proceedings** will be published as a special volume of the world-renowned Springer "Lecture Notes in Computer Science" and will contain regularly peer-reviewed short and full papers. One-page abstracts of presentations at NUMTA2019 will be published as online **Book of abstracts** with its own ISBN.

Special issues of the international journals Applied Mathematics and Computation (Impact Factor 2017 = 2.300), Journal of Computational and Applied Mathematics (Impact Factor 2017 = 1.632), both produced by Elsevier, and Soft Computing (Impact Factor 2017 = 2.367), produced by Springer, will be dedicated to the Conference and will contain regularly peer-reviewed original research papers.

Information: Please consult the Conference web-site http://si.dimes.unical.it/~yaro/numta2019 for more details and contact the Organizers at numta2016@dimes.unical.it for information.

# ${\bf WCGO~2019} \\ {\bf 6th~World~Congress~on~Global~Optimization}$

July 8-10, 2019 Metz, France

https://wcgo2019.event.univ-lorraine.fr/



# ${\bf XV~ICSP} \\ {\bf XV~International~Conference~on~Stochastic~Programming}$

July 29 - August 2, 2019 Trondheim, Norway

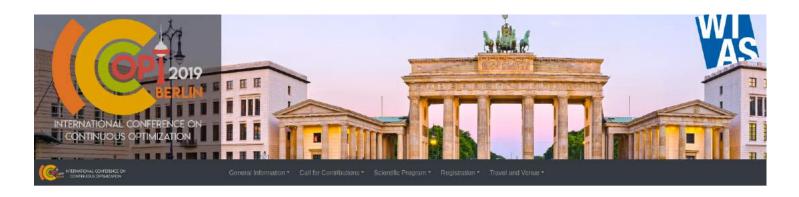
https://www.ntnu.edu/web/icsp/icsp2019



# ICCOPT 2019 International Conference on Continuous Optimization

Aug 5-8, 2019 Berlin

https://iccopt2019.berlin/



# FGS 2019 19th French-German-Swiss conference on Optimization 17-20 Sep 2019 Nice, France

https://fgs-2019.sciencesconf.org/



## Reports

#### Report on ICO 2018

The first edition of the International Conference on Intelligent Computing and Optimization (ICO) ICO 2018 was held during October 04-05, 2018, at HARD ROCK HOTEL PATTAYA in Pattaya, Thailand. The objective of the international conference is to bring the global research scholars, experts and scientist in the research areas of Intelligent Computing and Optimization from all over the world to share their knowledge and experiences on the current research achievements in these fields. This conference provides a golden opportunity for global research community to interact and share their novel research results, findings and innovative discoveries among their colleagues and friends. The proceedings of ICO'2018 are published as a book by Springer (Advances in Intelligent Systems and Computing) and indexed by DBLP, EI, Google Scholar, Scopus, and Thomson ISI.

For this edition, the International Program Committee received over 80 submissions from 26 countries and each paper was reviewed by at least three expert reviewers. The prominent technical committee has selected the best 57 papers for final presentation at the conference venue of Hard Rock Hotel in Pattaya, Thailand. The organizing committee would like to sincerely thank all the authors and the reviewers for their wonderful contribution for this conference. The best and high quality papers will be selected and reviewed by International Program Committee in order to publish the extended version of the paper in the international indexed journals by SCOPUS and ISI WoS.

Three best papers award were presented to Kaoutar Ghazi, Laurent Beaudou, Olivier Raynaud for the paper entitled "Algorithms for a bit-vector encoding of trees", Sunarin Chanta, Ornurai Sangsawang for the paper entitled "A Single Allocation p-Hub Maximal Covering Model for Optimizing Railway Station Location", and Fazilet Ozer, Ismail Hakki Toroslu, Pinar Karagoz, Ferhat Yucel for the paper entitled "Dynamic Programming Solution to ATM Cash Replenishment Optimization Problem".

This conference could not have been organized without the strong support and help from the staff members of Hard Rock Hotel Pattaya, Springer, Easy Chair, Mahidol University, European Union, Click Internet Trafic Sdn Bhd and the Program Committee of ICO'2018. The program committee would like to sincerely thank Prof. Igor Litvinchev (Nuevo Leon State University (UANL), Mexico), Prof. Nikolai Voropai (Energy Systems Institute SB RAS, Russia), Professor Wonsiri Punurai (Mahidol University, Thailand) Patchara Wirojsasitorn, Waraporn Nimitsuphachaisin, Thitiwat Hassajumpon (Hard Rock Hotel Pattaya), and Penart (Malaysia) for their great help and support in organizing the conference.

The program committee also highly appreciate the fruitful guidance and support from Prof. Gerhard Wilhelm Weber (Poznan University of Technology, Poland), Prof. Rustem Popa (Dunarea de Jos University in Galati, Romania), Prof. Valeriy Kharchenko (Federal Scientific Agroengineering Center VIM, Russia), Prof. Milun Babic (University of Kragujevac, Serbia), Prof. Ivan Zelinka (VSB-TU Ostrava, Czech Republic), Dr. Jose Antonio Marmolejo (Universidad Anahuac Mexico Norte, Mexico), Prof. Gilberto Perez Lechuga (University of

Autonomous of Hidalgo State, Mexico), Prof. Ugo Fiore (Federico II University, Italy), Prof. Weerakorn Ongsakul (Asian Institute of Technology, Thailand), Prof. Rui Miguel Silva (Polytechnic Institute of Beja, Portugal), Prof. Alfred Inselberg (Tel Aviv University), Mr. Sattawat Yamcharoew (Sparrow Energy Corporation, Thailand), Mr. KC Choo (CO2 Networks, Malaysia) and Dr. Vinh T. Le (Ton Duc Thang University, Vietnam).

Finally, the organizing committee would like to sincerely thank Dr. Thomas Ditzinger, Dr. Almas Schimmel, Ms. Parvathi Krishnan of Springer for their great support for ICO'2018, and Universiti Teknologi PETRONAS and Government of Malaysia (PAKATAN HARAPAN) for their motivation and encouragement in making this event successful in the global stage.

Now, we are looking forward to ICO 2019, the 2nd International Conference on Intelligent Computing & Optimization 2019, October 3-4, 2019, in Baywater Resort, Koh Samui, Thailand.

Our services for ICO and further conferences and our editorial work aim at a close and fruitful collaboration with EURO and IFORS.

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Pictures from ICO'18

#### Report on ICCSAM 2018

The 1st International Conference on Computer Sciences and Applied Mathematics (ICCSAM 2018; https://iccsam.org/) took place in collaboration with AMIK and STIKOM Tunas Bangsa Pematangsiantar, during October 11st-12th, 2018, in Parapat, North Sumatra, Indonesia. It was a collaborative effort between Bank Muamalat, Indonesian Mathematical Society (INDOMS), Ikatan Profesi Komputer dan Informatika Indonesia (IPKIN). This event was the first conference in this novel conference series. The topics of the conference were dedicate to the motto from Operational Research "Advancing Computability Innovation", which is of vast importance worldwide, especially for an emerging nation like Indonesia with its young population. This conference aimed (1) to bring together the scientists, engineers, researchers and practitioners, academicians, and civil society organization representatives in the scientific forum; (2) to share and to discuss theoretical and practical OR knowledge about innovation in computer science and applied mathematics. Specifically, this conference can be used as a scientific forum for accommodating discussion among young researchers that mostly originated from Indonesia in the field of Computer Science, Applied Mathematics and, especially, Operational Research. Therefore, some of the invited speakers and many of the regular participants at this conference were young and promising researchers that are becoming more and more well-known and reputable in the world. In fact, Operational Research has served at ICCSAM 2018 as our unique interface to the real-world with all of its industrial, economic, developmental and educational challenges, and as precious opportunity of the youth to getting further introduced into modern research and the international scientific community.

Parapat with its famous Hotel Niagara that hosted ICCSAM 2018 is located at world-famous Lake Toba - offering a spectacular view on a unique landscape of nature, and of the culture of the local Batak and Toba people. This very special venue gave the opportunity to many further reflections and discussions, e.g., on creation of future industries and working places, on environmental protection - of rain forest, orangutans, elephants, etc., on eco-friendly tourism, etc. We trust that our Operational Research with its wide spectrum, powerful scientific tools and network of scholars and friends, can be a "key technology" to giving answers and solutions on challenging questions.

The keynote talks focused especially on the OR, Computer Sciences and Applied Mathematics. They discussed nine Main Areas of latest OR, computational and applied mathematical issues and developments, for example, in Software Engineering, Security and Networks, Information Systems, Liguistic Computing, Computing, and Theoretical Foundations of Mathematics - with a future promise to OR Applications, e.g., in medicine.

There were five keynote speakers of the conference: Prof. Dr. Gerhard-Wilhelm Weber (Poznan University of Technology, Poland, and METU, Ankara, Turkey): "Voxel-MARS and CMARS: Methods for early detection of Alzheimer's disease by classification of structural brain MRI"; Prof. Dr. Abdel Salhi (Essex University, UK): "Data Privacy: An Optimisation Approach and a Case Study in Cluster Analysis"; Prof. Dr. Kamal Z. Zamli (Faculty of Computer Systems and Software Engineering, Universiti Malaysia Pahang, Malaysia); Prof. Dr. Saib Suwilo (University of North Sumatra, Medan, Indonesia), and Prof. Dr. Herman Mawengkang (University of North Sumatra, Medan, Indonesia).

ICCSAM-2018 became a great success event, attracting researchers from four countries and provide a great academic experience for the participants. It was attended by 120 participants, and there are more than 106 abstracts were accepted for presentation at ICCSAM-2018.

The conference organizers and many of the participants have a long and cordially friend-ship within IFORS and EURO, especially, at their conferences with streams and sessions. In reverse, many of our EURO and IFORS friends have been invited to North Sumatra, to the city of Medan and to Lake Toba, and received hospitality in recent ten years.

The social program included a visit of the Zoo of Siantar, very well-known in the region, and of a museum on wildlife in Medan. At both we became reminded us of the aforementioned responsibilities of humankind - and of the great promises to provide help by a further development and use of modern OR.

During the conference, Willi kindly invited to the next conference highlights of EURO 2019 in Dublin, Ireland (https://www.euro2019dublin.com/), and IFORS 2020 in Seoul, Korea (www.ifors2020.kr).

As the Editor in Chief of the conference, Herman (Professor Mawengkang) would like to extend his deepest appreciation to all local organizers, the team around the host Dr. Ahmad Ridwansyah Putra who worked very hard and showed a great care and warmth, to all the keynote speakers, participants and all the many friends from near and far. Without their support this conference was not a success. Finally, we wish you all a great success in the years to come.

Hope to see you again at The ICCSAM 2019.

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International seminar and speaker participants

## Report on ICCESEN 2018: A Double OR Meeting: Broadening Horizons

The 5th International Conference on Computational and Experimental Science and Engineering (ICCESEN 2018) was successfully held in Kemer-Antalya, Turkey, last October 12-16, 2018 (http://www.iccesen.org/). Organizing committee members of the conference were from the various universities in Turkey which was leaded by Prof. Dr. Iskender Akkurt (Süleyman Demirel University, Isparta, Turkey). The conference hosted around 500 registered participants from about 45 different countries. The ICCESEN-2018 was detailed into 10 different Themes (http://www.iccesen.org/page/topics); this associated Operational Research (OR) with emerging interdisciplinary studies: They included recent advances in HighTech and Medicine, endorsed by OR methods such as Optimization, in all its directions and forms, Data Mining, Machine and Deep Learning, OR Computation and Artificial Intelligence.

The five-day conference was established very well within a hospitable frame, where participants had the time to meet old and new friends, to share their experiences, to exchange their ideas and to collaborate for the future studies. The conference contributed some important success to OR working groups due to the diversity of the studies and in a very friendly environment provided.

The conference was highlighted by the following topics of the given talks of the Invited Speakers: Prof. Dr. Numan Akdogan (Gebze University of Technology, Turkey): Recent Advances in Nanotechnology and Shapeable Magnetoelectronics, where he explained "Nanotechnology" and informed the participants about the new developments on the topic; Prof. Dr. Oleg Burdakov (Linkoping University, Sweden) "Regularized Monotonic Regression"; Prof. Burdakov mentioned "Smoothed Monotonic Regression (SMR)", convex quadratic optimization problem, its solution by using the Smoothed Pool-Adjacent-Violators (SPAV) algorithm and SMR- OR applications; Prof. Dr. Madjid Fathi (University of Siegen, Germany) "A Knowledge based Concept for Mechanical Therapy instead of Chemical Therapy", where he introduced the recent developments on the cancer treatments with related to the clinical results. Prof. Dr. Amir Hussain (Edinburg Napier University, UK) "Cognitive Big Data Analytics for Cybersecurity Applications", Prof. Dr. Sushil Kumar Kansal (Pajcab University, India): "Visible Light Photo catalysts: Preparation, Characterization and Application for the Treatment of Organic Pollutants in Aqueous Phase"; Prof. Dr. Ravindra Nuggehalli (New Jersey Institute of Technology, USA): "Research Opportunities and Challenges in Materials Science & Engineering-An Overview", where the examples from the energy sector as well as the device sector were discussed; Prof. Dr. Ahmad Umar (Najran University, Saudi Arabia): "Semiconductor nanomaterials for Sensors and environmental remediation applications"; Prof. Dr. Gerhard-Wilhelm Weber (Poznan University of Technology, Poland, along with Prof. Dr. Vilda Purtcuoglu (METU, Ankara, Turkey)): "Voxel-MARS and CMARS: Early Warning of Alzheimer's Disease by Classification of Structural Brain MRI".

Prof. Dr. Gerhard-Wilhelm Weber was one of the plenary speakers (see above); in fact, Prof. Dr. Vilda Purtcuoglu actively participated at discussions following presentations on behalf of Prof. Weber at the conference. In the talk, the importance of OR in neuroscience and its contributions to the practices of diagnosing neurodegenerative diseases with computer-aided

systems based on brain image analysis was explained. This research benefits from the new tools of Data Mining, of Statistical, Machine and Deep Learning, and of Artificial Intelligence, called CMARS, RCMARS, RMARS, CGPLM and RCGPLM. In another contribution of Prof. Weber, stochastic optimal control under regime switches, paradigm shifts jumps and delay, was introduced with its newest and upcoming applications in finance, economics and medicine. The importance of OR community and OR innovation, was emphasized, particularly in EURO and our worldwide OR community of IFORS was underlined. Indeed, it is of great importance to meet with representatives of other dynamic fields of science and technology, to present to them our modern OR and seek for future points of exchange and collaboration. This is what we aimed for at ICCESEN 2018, and what the Special Issue "Advances of Optimization in Science, Economics, Engineering and Medicine" of the journal Optimization Methods and Software at the occasion of ICCESEN 2018 intends.

Encouraged by the success of ICCESEN in its 5th year was made possible to organize another scientific event in the same time which is "1st International Conference on Sustainable Sciences and Technology (ICSuSaT 2018)" (http://icsusat.net/). The topics of ICSuSaT-2018 were particularized with related to the themes: Natural Science, Social Sciences, Engineering Sciences, Applied Sciences, Medical Sciences (https://icsusat.net/topics). The variety of topics gave an opportunity to the attendees for broadening their horizons. Besides the scientific excellence of the conference, participants enjoyed the warm weather, Mediterranean Sea and the beauty of Antalya. Gala Dinner of the conferences provided a great occasion for the participants to experience traditional folk dances as well as to socialize and do networking.

Both conferences provided a special ambience and international platform - with a particular reachout into Middle East and South Asia - to interconnect the attendees and share news on OR studies, OR meetings and most facinating newest trends, right now entering our community. The participants of ICCESEN 2018 and ICSuSaT 2018 were informed by us about our upcoming OR-meeting in Dublin, Ireland: EURO 2019 (https://www.euro2019dublin.com/), and cordially invited to it.

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#### Report on ORBEL 33

# 33rd annual conference of the Belgian Operational Research Society Hasselt, Belgium, February 7-8, 2019

https://www.orbel.be/orbel33/

This year, the Belgian Conference on Operational Research (ORBEL) was held on 7-8 February, 2019 at the campus Hasselt of Hasselt University. This campus is housed in the former city prison, which is still evident from the architecture of this beautifully renovated building. The conference was organized by the Research Group Logistics of Hasselt University and the chair of the organizing committee was Prof. An Caris.





The conference attracted 109 participants, hosted three plenary speakers and 52 talks in 16 sessions. The participants had the opportunity to discuss and contemplate about new operations research techniques and applications.

During the opening session a first plenary talk was given by Prof. Claudia Archetti, Associate Professor in Operations Research at the University of Brescia. The focus of her talk was on the interplay between vehicle routing problems and recent business trends like e-commerce. The plenary talk of Prof. Sandra Transchel, Associate Professor of Supply Chain and Operations Management at the Kuehne Logistics University, concluded the first conference day. She provided the audience with an interesting overview on quantitative models to manage supply chains for perishable products. Finally, the third plenary talk was given by Prof. Richard F. Hartl, Professor and Chair of Production and Operations Management at the University of Vienna. He addressed vehicle routing problems with equity and balance criteria.

The conference also hosted two interesting workshops, organized by two of the sponsors. Gurobi demonstrated how ENGIE Fabricom uses their software to optimize the distribution of 200000 devices in the Antwerp area while maintaining a constant workload for its employees. Conundra discussed how advanced heuristics can be used to solve real-life problems in the distribution sector. Another sponsor, OM partners had the honour to reward Hendrik Wijnant (Ghent University) with the ORBEL award for best master thesis in operations research for his work entitled "The influence of line balancing on line feeding for mixed-model assembly lines".

As Hasselt is known as "the capital of taste", the conference dinner took place in the restaurant "Het Smaaksalon", which is integrated into the stylish decor of Huis de Corswarem. Huis

de Corswarem is a stately neoclassical mansion, built at the end of the 19th century to symbolize the prestige of the prominent family de Corswarem. Its interior includes a beautiful neo-Gothic party room with a remarkable mantelpiece and stucco ceiling decoration. Besides enjoying refined dishes based on regional and seasonal products, the attendees of the dinner were entertained with live piano music.



An Caris, Katrien Ramaekers and Kris Braekers orbel33@uhasselt.be.

#### Call for Papers

#### **Special Issue of Foundations of Computing and Decision Sciences**

Open access, no publication fee journal (<a href="https://www.degruyter.com/view/j/fcds">https://www.degruyter.com/view/j/fcds</a>)

indexed by Scopus and Web of Science (ESCI)

# Special Issue on "Numerical Techniques Meet with OR"

Papers related to the subject of "Numerical Techniques Meet with OR" will be considered for peerreviewed publication in a special issue of the journal Foundations of Computing and Decision Sciences (FCDS; http://fcds.cs.put.poznan.pl/fcds/).

Numerical methods play an important role in *Operational Research* problems. They apply in various branches of economcics, finance, management, physics, biology, medicine, earth sciences, etc. Currently, new technologies and methodologies provide an opportunity to advance numerical techniques. A wide range of problem-solving techniques and methods applied in *Operational Research* are simulation and mathematical optimization, Markov decision processes, econometric methods, data envelopment analysis, neural networks, and decision analysis. Such techniques are developed within the overlapping field of *Numerical Techniques in Operational Research*.

The rapidly growing interest of numerical techniques provides new developments in the field of *Operational Research* and its applications. This has triggered the development of new mathematical methods and algorithms, aiding to solve some of the most complicated and hard problems in the areas of the *Operational Research*.

*FCDS* focusses on the best and high quality selected papers on the following research topics. The special volume will cover a broad range of topics in the field of Numerical Techniques, which are applied on *Operational Research* problems and dynamical models. Potential topics include, but are not limited to, the following areas of *Operational Research* and numerical-computational methods used therein:

- o finite element methods,
- o collocation methods.
- o high performance computing,
- o interpolation techniques,
- o multiple-variable discretization techniques,
- o linear programming,
- o stochastic programming,
- O optimization algorithms
- o numerical simulation,
- o behavioral economics and finance,
- o linguistics and cognition,
- o combinatorial optimization,
- O computational modelling and simulation,
- O Bayesian approach in operational research, etc.

The use of methods from modern *Operational Research* is a prerequisite for any paper submitted to this special volume to enter the reviewing process.

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/.

The deadline for submission is *August 1, 2019*.

The paper length should *not* exceed 25 journal pages.

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:

fcds@cs.put.poznan.pl.

To specify the special issue, please indicate in the submission e-mail "NTMOR-2019".

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

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#### Call for Papers

Special Issue on SMART FUZZY OPTIMIZATION IN OPERATIONAL RESEARCH AND RENEWABLE ENERGY: MODELLING, SIMULATION, AND APPLICATION

#### **Deadline for Submissions 1.11.19**

#### 1. AIMS AND SCOPE

Over the last five decades fuzzy optimization have found numerous successful applications in diverse fields including operational research, manufacturing, information technology, energy optimization, data science and smart cities, big data analytics and the list goes on. Fuzzy optimization has strongly influenced research and development in other areas of intelligent computing leading to many hybrid and deep learning systems. It has opened up new horizons in thinking, research and development and it will certainly guide us into another half century of progress. Actually, fuzzy optimization is one kind of the approximation of nonlinear optimization techniques, which has basically formed some systematic but not unified theory of fuzzy systems and other fuzzy-sets based methodologies. Fuzzy Optimization and Decision Making is an interdisciplinary area focusing upon methodologies for extracting useful knowledge and experiences from data technology. Specific topics include fuzzy sets, rough sets, statistical methods, parallel/distributed data mining, hybrid fuzzy optimization such as hybrid evolutionary and swarm intelligence methods and human interaction, big data optimization, IoTs, flexibility, reliability and robustness, smart systems in specific domains, high-dimensional data, energy optimization and software engineering, data science, analytics, etc.

The high complexity of neural systems and the large number of constituents with an often unknown functional interconnections lead to significant computational challenges. An important consideration is the development of mathematical models incorporating the many influences of randomness, noise, uncertainty and fuzziness in both their static and time-dependent versions. The quality of prediction by a model highly depends on the integration of imprecise data and the quantification of uncertain structural parameters. A sophisticated analysis of the influence of all types of randomness, uncertainty and noise is indispensable for the development of reliable computational and neural models and programs.

**Objective of this special issue** is to explore latest modeling, simulation and fuzzy optimization, related with and renewable energy, electronics and electricity, and various related subjects. This offers a concentrative venue for researchers to make rapid exchange of ideas and innovative research findings in fuzzy optimization and Operational Research. In particular, new interdisciplinary approaches in fuzzy optimization applications, computer science and engineering applications, or strong conceptual foundations in newly evolving topics are especially welcomed. We invite researchers and experts worldwide to submit high-quality innovative research papers and critical review articles on the subsequent potential topics.

#### 2. TOPICS COVERED

The topics include but are not limited to:

Energy optimization	Operational research
o Power supply reliability o Power systems o Hybrid renewable energy o Photovoltaic o Energy efficient	o System reliability o Combinatorial problems o Parameters optimization o Autonomous vehicle o Dynamic programming
Fuzzy modeling and simulation	Big Data Analytics and IoTs
o Fuzzy cybercrime o Fuzzy visualization o Fuzzy detection o Fuzzy computing o Fuzzy regulation o Fuzzy vehicular networks o Fuzzy failure diagnosis o Non-Fuzzy approaches to uncertainty handling o Comparison: Fuzzy vs. Non- Fuzzy approaches	o Cloud computing o Territorial planning o Link prediction o Smart vehicles o Deep learning o Online social networks o Remote sensing o Sensor technologies o Electricity and commodity markets

#### 3. SUBMISSION GUIDELINES

All authors should read 'Information for Authors' before submitting a manuscript <a href="http://cis.ieee.org/ieee-transactions-on-fuzzy-systems.html">http://cis.ieee.org/ieee-transactions-on-fuzzy-systems.html</a>.

Submissions should be through the IEEE TFS journal website <a href="http://mc.manuscriptcentral.com/tfs-ieee">http://mc.manuscriptcentral.com/tfs-ieee</a>. It is essential that your manuscript is identified as a *Special Issue* contribution:

- Ensure you choose **'Special Issue'** when submitting.
- A cover letter must be included which includes the title 'Special Issue on Smart Fuzzy Optimization in Operational Research and Renewable Energy: Modelling, Simulation, and Applications'

#### 4. IMPORTANT DATES

1 November 2019 Submission deadline

January 2020	Notification of the first round review	)
April 2020	Revised submission due	) for guidance only
July 2020	Final notice of acceptance/reject	)

#### **5. GUEST EDITORS**

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People wishing to submit announcements to the EUROPT mailing list should address their message to europt-announce@lists.strath.ac.uk. The message will then be distributed upon approval by the EUROPT Managing Board.

For specific questions, the members of the Managing Board can be contacted:

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#### Editor's notes

Dear members of EUROPT, dear readers,

In this first Newsletter of 2019, as tradition we are pleased to announce a rich season of events for the EUROPT community. We are pleased to announce the second call for abstracts for the next EUROPT Workshop in Glasgow (UK). Please note the deadline extension for abstract submission. A plenary lecture will be given by J. Gondzio, who has been awarded EUROPT Fellow 2019, as we are honored to announce in the present Newsletter. Please also note the other forthcoming events of interest for our community. Please do not miss these opportunities of meeting and exchange!

Reports on some events that took place in 2018, and call for papers, complete the Newsletter.

Many thanks for contributing to this letter, hoping to see many of you at our annual workshop in Glasgow.

The Newsletter Editor

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