Newsletter 44 of EUROPT

EUROPT - The Continuous Optimization Working Group of EURO

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

October 2019

In this issue:

Words from the Chair

Dear Friends,

on behalf of the Managing Board welcome to the 44th EUROPT Newsletter. Our mailing-list has been moved to a new address and previous subscribers automatically added. You can find the pointers to manage your subscription and information on how to join in the next pages. Let me thank Paula Amaral who agreed to supervise and moderate it. We are looking forward to all of your news on continuous optimization!

I want to highlight two other items you can find: the first call for contributions for our next workshop, EUROPT 2020, that will take place in Toulouse, France, on 1-3 July 2020: http://europt2020.recherche.enac.fr/; a detailed report on the memorial event at ICCOPT 2019 to honour the life and work of Andrew Conn, who will be greatly missed. The report has been written by Michael Overton, who I am very grateful to for this special contribution.

The new EUROPT website https://www.euro-online.org/websites/continuousoptimization/ was released two years ago. The group is very large but still the member list on the website does not reflect it at all. Please, take a few minutes to register. Even if you already registered and you wish to, please log in again to give your explicit consent to make your profile public. Indeed, only registered users of the working group that explicitly gave consent to make their profile public appear in the member list. Thank you all.

Giancarlo Bigi, EUROPT Chair

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New EUROPT mailing list

The EUROPT mailing-list has a brand new address, namely:

<center>europt.di@listgateway.unipi.it</center>

as it is now hosted on the servers of the Università di Pisa. Subscribers to the previous mailing-list have been automatically subscribed to the new one and got all the information to manage their subscription (including contacts for technical support). Subscribers can send messages to the mailing-list by their own. All messages providing information about continuous optimization and related events/publications are welcome. Please, notice that the list is fully moderated to avoid abuses and inappropriate messages. Moderation is supervised by Paula Amaral, so refer to her for any question or doubt you may have.

If you are not yet in the mailing-list and you wish to, go directly to the webpage:

<center>http://listgateway.unipi.it/mailman/listinfo/europt.di</center>

where you can freely register on your own. Shortly after completing the registration, instructions for managing your subscription will be received.

Please, feel free to invite interested friends of yours to join our mailing-list.

Last but not least, my most sincere thanks to the University of Strathclyde and Edmondo Minisci who have been hosting and supervising the mailing-list in the last years.

Enjoy!

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EUROPT Workshops

18th EUROPT Workshop on Advances in Continuous Optimization
Toulouse, France, July 1-3, 2020

http://europt2020.recherche.enac.fr/

The 18th EUROPT Workshop on Advances in Continuous Optimization (EUROPT 2020) will take place in **Toulouse**, France, **from July the 1st to July the 3rd, 2020**, and will celebrate 20 years of activity of the working group.

Scope

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

Program Committee

- Paula Amaral (Universidade Nova de Lisboa, Portugal)
- Miguel Anjos (University of Edinburgh, UK)
- Paul Armand (Université de Limoges, France)
- Didier Aussel (Université de Perpignan, France)
- Fabien Bastin (Université de Montréal, Canada)
- Giancarlo Bigi (Università di Pisa, Italy)
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- Dmitri Kvasov (Università della Calabria, Italy)
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- Marco López-Cerda (University of Alicante, Spain)
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- Yaroslav Sergeyev (Università della Calabria, Italy)
- Tatiana Tchemisova (Universidade de Aveiro, Portugal)
- Tamas Terlaky (Lehigh University, USA)
- Gerhard Wilhelm Weber (Poznan University of Technology, Poland)
- Julius Zilinskas (Vilniaus Universitetas, Lithuania)

Organizing Committee

- Sonia Cafieri (ENAC, Toulouse, France)
- Nicolas Couellan (ENAC, Toulouse, France)
- Sophie Jan (Institut de Mathématiques de Toulouse, France)
- Frédéric Messine (ENSEEIHT, Toulouse, France)

Venue

EUROPT 2020 will be hosted at ENAC - École Nationale de l'Aviation Civile, in Toulouse, the "pink city" in southern France.

Call for Contributions

The submission system will be opened **mid December 2019**.
Researchers interested in organizing a session (3 or 4 talks) are invited to contact the Program Chair at `sonia.cafieri@enac.fr`

Important Dates

- Abstract Submission: March 1, 2020
- Abstract Acceptance: March 15, 2020
- Registration deadline: April 15, 2020
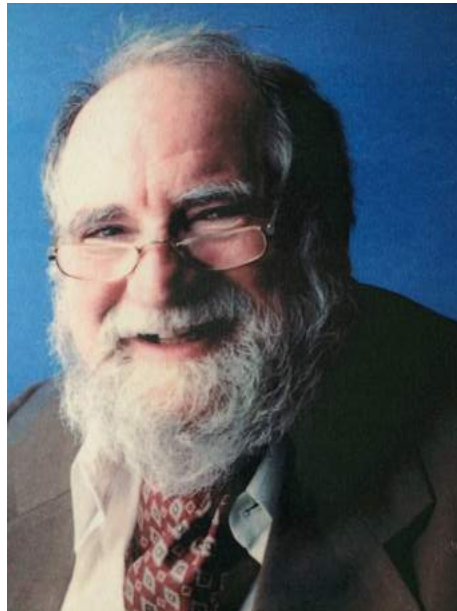- Workshop: July 1-3, 2020

More information

More detailed information about the Workshop will be disseminated via the website http://europt2020.recherche.enac.fr/.

We are looking forward to welcoming you in Toulouse!

Reports

A Memorial Event for Andrew R. Conn

Andrew R. Conn, who played a pioneering role in nonlinear optimization for nearly 50 years, based first at the University of Waterloo in Canada and then at Thomas J. Watson Research Center in Yorktown Heights, New York, died at his home in Westchester County on March 14, 2019. A memorial in his honor was organized at the International Conference on Continuous Optimization (ICCOPT) in Berlin on August 6, 2019 — Andy's 73rd birthday.

Andy Conn

The program started with five short presentations about Andy's life and work.
Philippe Toint began by recalling the LANCELOT project that he undertook with Andy Conn and Nick Gould during the period 1986–1990. He pointed out that although the software is outdated now, its companion project CUTE (Constrained and Unconstrained Testing Environment) and its successors are still in wide use. Philippe also talked about writing the book *Trust Region Methods* (SIAM, 2000) with Andy and Nick along with an extraordinary 44 papers, some with additional co-authors. Philippe recalled many wonderful visits to Andy and his wife Barbara in Waterloo and in New York, and how they shared so many interests. He said how sad he is about Andy's passing, but that he has so many good memories of Andy's joy of life and optimism.

Philippe Toint gives the first presentation. Top left: a photo of Philippe and Andy in their younger days. Top right: many people join the memorial remotely.

Katya Scheinberg talked about how she did an internship with Andy at Yorktown Heights when she was still a Ph.D. student and what a great experience that was. She also described the Derivative-Free Optimization (DFO) work she did with Andy and Luis Nunes Vicente, which led to the book *Introduction to Derivative-Free Optimization* (SIAM, 2009), but commented that the software was built on LANCELOT which then became outdated. They spent a lot of time on the constrained case, using Andreas Waechter's code IPOPT instead of LANCELOT, but did not publish it. She would really like to revive this work, partly as as tribute to Andy and also to Mike Powell. She also commented on how much fun it was to be with Andy and Barbara, and all the fine food and wine they enjoyed.

Annick Sartenaer said she first met Andy in Namur in 1989 when she was a student, whereupon he invited her to Waterloo for two months. There she helped him with preparing an exam, finding a solution to one problem that was not the one Andy expected. It took quite some time before Andy accepted that he could have made a mistake. Annick said that she learned so much from Andy's enthusiastic explanations about everything, and that she felt welcomed by Andy and Barbara as if she were family. A year later, Andy was on the jury of Annick's defense. He sent 31 written questions, commenting in his report that he would ask the rest of his questions at the public defense, which he did, in French. Annick very much appreciated that he read her thesis so thoroughly. Later she published a 58-page joint paper with Andy, Nick and Philippe in SIAM J. Optimization and commented that this paper may be what led to the later restrictions on page length in SIAM journals.

Henry Wolkowicz talked about his many years with Andy as colleagues at the University of Waterloo. He said that Andy recruited him to Waterloo, and that his subsequent career in optimization owed a lot to Andy's encouragement and inspiration. But most of all, he appreciated the warmth of Andy and Barbara, whom he described as a very special couple.

Jim Burke remarked that at this conference there is a lot of nonlinear analysis mixed with nondifferentiability, and that the first person to "go there" algorithmically was Andy in his 1971 Ph.D. thesis. An equivalent formulation of nonlinear programming using exact penalty functions had been established in the convex case by Eremin and Zangwill in the 1960s and

extended to the nonconvex case, using the linear independence constraint qualification (LICQ), by Andy's Ph.D. advisor Tomasz Pietrzykowski. But it was Andy who put this theory to use algorithmically, most notably separating the optimization search direction into "vertical" and "horizontal" pieces. Jim noted that Andy brought people together, was a "straight shooter", engaged young people, created a sense of fellowship and community, and was overall a great guy.

We then heard from some of the other people in the audience in Berlin. Philip Gill, who met Andy at that National Physical Laboratory in England in the 1970s, described Andy as "pathologically cheerful", and commented on how Andy and Barbara were such great hosts. Haihao (Sean) Lu spoke of how he did an internship at Yorktown Heights with Andy in 2016 when he was a 2nd year Ph.D. student. Sean said that he felt so lucky to be mentored by Andy, and that he was always so encouraging.

Then we heard from the many participants who joined us remotely. Nick Gould described how Andy was a dear friend and had a huge impact on his work and life. When Nick took a job at Waterloo after finishing his Ph.D., Andy and Barbara welcomed him with open arms. Luis Nunes Vicente described Andy and Barbara as community-builders. They truly cared about people's careers and personal lives. Luis stayed at their home on many occasions. He recalled the evening at their home when he started to collaborate with Andy and Katya. He said that Andy was always so, so positive. Steve Wright recalled that the first paper of Andy's that he read was about penalty functions. Andy argued that the right approach is to minimize them directly, and that this advice had major impact on Steve's subsequent work. Steve also recalled one of the first referee reports on his work, signed by Andy as was always his custom, and that the report was negative but fair, as well as constructive. Don Goldfarb described Andy as warm, loquacious, outgoing, optimistic, eclectic. He noted that Andy's insistence on signing his referee reports showed his honesty and honorable nature. He will greatly miss Andy's personality and warmth. Sasha Aravkin described working at IBM Yorktown Heights when Andy was his manager. His good sense helped to manage the balance between pure research and client-based work. Andreas Waechter, who was a colleague of Andy's for many years at IBM, said he personally owes Andy a lot. When he thinks of Andy, one of the first memories that comes to mind is his laughter! As well as his patience when Andreas was having difficulties.

We also heard from four of Andy's former Ph.D. students from Waterloo. Yuying Li and Tom Coleman said that Andy changed their lives so much, especially because of his faith in them. He gave them the confidence they didn't have, and they miss him very much. Paul Calamai said that Andy rescued him when he was a Master's student when his advisor left the university. They developed a friendship that lasted many years. Marcel Mongeau, who joined us from a beach in Spain, also spoke very warmly of Andy's influence on him as a student and scientist. One piece of advice that Andy gave him was to focus on writing a good Ph.D. thesis first and worry about publishing papers later.

Many members of Andy's family joined us from London, including his beloved Uncle Oscar. His "baby sister" Marion spoke on their behalf, warmly thanking the community for all the lovely things that were said at this event. She remarked that whenever she sent Andy an email, she would put "re maths" as the subject, to ensure that he would read it and respond.

I then said a few words myself. I met Andy when I interviewed for a faculty position at Waterloo in 1979. He picked me up late at night at the train station and took me to stay at his house, welcoming me with a whisky. My Ph.D. thesis was on a topic that was very close to some of Andy's work, so I was quite nervous about meeting him, but he soon set me at

ease with his warmth and friendliness. I enjoyed Andy and Barbara's company very much both then and on many later occasions, both at Waterloo and in New York. What a wonderful and inspiring couple they were. About Andy's famous signed referee reports: back in the days when these were prepared on paper, he complained that one of his colleagues, when acting as editor, would cut the signature off the bottom of the report. Daniel Robinson shared some hilarious referee reports from Andy with me recently, beginning with statements such as "Put yourself in the position of the reader....". The fact is that we in the research community who knew Andy all loved him. Some speakers alluded to the idea that he might be watching the event from the next world. Andy was not religious, but were that to be the case, I think he would have instead attended a parallel session where some of his friends were giving research talks!

Barbara Conn, who joined us from Boston with her children Leah and Jeremy, had the last word. She expressed sincere thanks to the community for the many kind emails and letters she received, and to all the participants at the event. She said that Andy often talked about how lucky he was to enjoy and be good at math, but just as importantly, to have his relationship with the community. Most of all he loved talking and relaxing with colleagues. Barbara said she has so many treasured memories from 50 years with Andy.

The memorial ends with Andy's daughter Leah and wife Barbara speaking from Boston

Finally, I want to thank everyone who participated, including Michael Hintermüller, the ICCOPT 2019 chair, who very kindly encouraged us to hold this memorial, as well as his assistants, and also Frank E. Curtis, who handled the technical side of the event, which was not without challenges!

Andy is survived by his wife Barbara, his mother and four siblings in England, his daughter Leah and his son Jeremy, as well as three grandchildren. He will be greatly missed by his family, the optimization community, and his many friends.

Access to the video of the event can be arranged on request.

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Report on InteriOR-2019

Grey System and Uncertain Analysis Meets Operational Research 2019 International Congress in Bangkok

The 2019 International Congress of GSUA was held in Bangkok, Thailand, in August 8-11. It focused on current research on grey system theory, system sciences and engineering, rapidly advancing technologies in uncertainty analysis, complex equipment development, emergency and innovation management.

The Grey System Theory was developed during the past more than 20 years. More specifically, in 1982, Professor Deng Ju-Long published the first research paper, titled "Control Problems of Grey Systems", in the international journal Systems and Control Letters, of North-Holland Co. The theory of grey systems has been widely applied to analyses, modeling, prediction, decision making, and control, with significant contribution to various systems including, e.g., social, economic, scientific and technological, agricultural, industrial, transportation, mechanical, petrological, meteorological, ecological, hydrological, geological, financial, medical, legal and military ones.

Participants of the 2019 International Congress of GSUA

The 2019 International Congress of GSUA was opened by the welcome speeches of Professor Sifeng Liu and Professor Zhuo Zhang. Professor Sifeng Liu has been devoted to the research of grey system theory for more than 30 years. In 1980s, he put forward a series of new models and new concepts of grey system such as sequence operator (Liu et al., 1986), absolute degree of grey incidence (Liu et al., 1988), and the positioned coefficient of grey number (Liu et al., 1989). Then, in the 1990s, he proposed the so-called buffer operator and its axiom system (Liu et al., 1991), generalized degree of grey incidence (Liu et al., 1992), grey clustering evaluation model with fixed weight (Liu et al., 1993), the measurement of information content of grey number (Liu et al., 1994), LGPG drifting and positioning solution (Liu et al., 1997), grey-econometrics model (Liu et al., 1996), etc. All of these achievements earned him a great attention and recognition by domestic and foreign counterparts; some results were specially introduced in many experts' monographs (see Sifeng Liu, Yingjie Yang, Naiming Xie and Chaoqing Yuan, Institute for Grey System Studies at NUAA, The Journal of Grey System, vol. 30, no. 2, 2018). The 2019 International Congress of GSUA was organized by Institute for Grey Systems Studies (NUAA), Collage of Economics and Management (NUAA: www.nuaa.edu.cn) and Huawei Technologies (Thailand), CO., LTD. International Association of Grey System and Uncertain Analysis (IAGSUA), Grey System Society of China (GSSC), CSOOPEM and supported by

China Association of Science and Technology co-sponsored the 2019 International Congress of GSUA. International Association of Grey System and Uncertain Analysis (IAGSUA: www.iagsua.org) is a worldwide, non-political organization for spreading the ideas and knowledge and promoting the application of Grey System. The congress gathered researchers to present current research findings and practical experiences from the wide community which is now involved in Grey Systems Theory and Applications, Uncertain Systems, Systems Analysis, Modeling and Simulation, Data Mining, Forecasting and Decision-making, Complex Equipment Development Management, Emergency Management, Technical Innovation and Emerging Industry Development, etc. The 2019 International Congress of GSUA was hosted by Nanjing University of Aeronautics and Astronautics (NUAA) and Huawei Technologies (Thailand), CO., LTD.

Topics which were considered during the congress included, but were not limited to: System Analysis, Data Mining and Processing, Grey Systems Modeling and Simulation, Grey Forecasting and Decision Making, Grey Control, Grey System Theory and Applications, Grey Numbers and their Operations, Grey Equation and Grey Matrix, Sequence Operator and Grey Data Mining, Grey Incidence Analysis Model, Grey Clustering Evaluation Model, Grey Programming, Grey Input-output, Grey Matrix Game Model, Uncertain Systems, Practical Applications of Grey Methods, Artificial Intelligence, Industrial Engineering, Complex Equipment Development Management, Quality and Reliability Management, Cost Management, Risk Management, Project Schedule Management, Supplier Management, Marketing Strategy, Business Process Management and ReEngineering, Emergency Management, Technical Innovation and Emerging Industry Development.

The keynote speeches were delivered by scientists such as Yingjie Yang, Yicha Zhang, Ling Xiao, Rafa Mierzwiak, Ying Wang, Tao Liu, Wenping Wang, Naiming Xie, Yuhong Wang, R.M. Kapila Tharanga Rathnayaka, Chaoqing Yuan and Ehsan Javanmardi. The topics focused on the progress in grey systems theory and its application, challenges and the significant contribution to general system theory. Professor Yingjie Yang (Centre for Computational Intelligence, De Montfort University, Leicester, Leicestershire, UK) and Professor Naiming Xie (Nanjing University of Aeronautics & Astronautics, College of Economics and Management, Nanjing, China) speeches especially focused on the scientific background for appearance of grey systems theory, characteristics of grey system, comparison of several uncertain systems models and challenges for its further theoretical development and progress in its application.

During the 2019 International Congress of GSUA, plenary lectures took place, opening several fruitful discussions. International Association of Grey System and Uncertainty Analysis (GSUA) awarded the best PhD dissertation in Grey System and Uncertainty Analysis. Winners, Junjie Wang (supervisor: Yaoguo Dang, Nanjing University of Aeronautics and Astronautics), Liangyan Tao (supervisor: Sifeng Liu, Nanjing University of Aeronautics and Astronautics), Rafal Mierzwiak (supervisors: Wladyslaw Mantura and Ewa Wiecek-Janka, Poznan University of Technology), received a certificate, recognition at the 2019 Congress of GSUA, and publication of an abstract in the Grey Systems Theory and Application (GS: http://www.iagsua.org/phd-dissertation-award-of-gsua/). Furthermore, Best Papers of the 2019 International Congress of GSUA were distinguished and announced during the closing ceremony. More and more, models and techniques based on the grey number analysis are applied in Operational Research, Optimization and Information Science, where they constitute a crucial objective scope for the grey system theory community.

We are looking forward for the next event organized by International Association of Grey System and Uncertain Analysis. If you are interested in the next events organized by International Association of Grey System and Uncertain Analysis, please follow their website (www.iagsua.org).

Plenary lectures during the 2019 International Congress of GSUA

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Report on Academic Talk and Conference in Poznan

Management Meets Operational Research
Poznan University of Technology

In August 2019 Prof. Dr. *Christopher S. Tang* took a research and academic journey through Asia, Europe and America. One of his journey stops was Poznan University of Technology in Poland. The day started with a fruitful meeting with Prof. Dr. Roman Slowiński and us at Faculty of Computer Science, Institute of Computing, invited by Professor Slowiński. This more than one hour long productive research discussion focused on interdisciplinary subjects in the research areas of management, computer science, manufacturing, environmental protection, logistics and supply chain management, including Operational Research and mathematical models that help us to describe our environment and future perspectives for better life. This conversation may be summarize, that data- and value-supported models and solutions with OR became increasingly important nowadays. Designedn distinctive and creative solutions should be applicable among our communities, helping us also in multi-criteria decision making processes including our daily life. This is what should also be published in our premium journals of OR.

Prof. Dr. Christopher Tang is affiliated at University of California in Los Angeles as a University Distinguished Professor, and Edward Carter Chair in Business Administration, UCLA Anderson School Companies. On August 26 Professor Christopher gave an Academic Talk at the Faculty of Engineering Management of Poznan University of Technology. This conference topic was: "Making Supply Chain Transparent for a Better World: Information and Analysis". Professor Tang covered the "story" about giving more visibility to supply chain problems, reducing various supply chain risks, and sharing with the public what researchers know about state-of-the-art and future of supply chains. He asked some more questions, such as: Should a firm disclose its supply chain information to the public? What are the risks and opportunities? Prof. Dr. Christopher Tang also presented his recent research and case-based studies to illustrate how supply chain transparency can improve our world: "planet, people and profi". D.Sc. Dr. Arkadiusz Borowiec, Vice-Dean of Faculty of Engineering Management, welcomed our speaker and guests. This meeting was moderate by Willi - Prof. Dr., D.S.c. Gerhard Wilhelm Weber (FEM PUT Poznan, Poland), who introduced our guest, when both met first and became friends (at INFORMS International Taipei 2018) and how they collaborated so far (e.g., related with IFORS News and IFORS Developing Countries Online Resources).

Academic Talk at the PUT Faculty of Engineering Management given by Prof. Dr. Christopher S. Tang

During and after the academic talk, members of FEM asked several lively and interesting questions, leading to lively discussions between audience and our invited scholar. In fact, every member of

the audience introduced him- or herself to Professor Tang, herewith giving chances to friendship and to future exchange and collaboration with our guest.

Indeed, the discussion after the inspiring and great talk by Prof. Dr. Christopher Tang created a solemn but also enthusiastic atmosphere that became extended by an official reception in Dean's Office at FEM with D.Sc. Dr. Arkadiusz Borowiec, D.Sc. Dr. Eng. Agnieszka Misztal and D.Sc. Dr.Eng. Katarzyna Ragin-Skorecka who are the three Vice-Deans of FEM, PUT); the Dean of FEM, Prof. D.Sc. Eng. Magdalena Wyrwicka, had to be out of office at that day and extended her appreciation and support of this meeting.

Then, a pleasant lunch meeting of Professor Tang took place in the Old Town of Poznan with D.Sc. Dr. Eng. Agnieszka Misztal, Dr. Eng. Maciej Szafrański (PUT Rector's Representative for Technical Knowledge Accelerator), Dr. Eng. Mariusz Branowski, MSc. Arkadiusz Kalemba (Administrative Director of FEM), Willi (Prof. Dr., D.S.c. Gerhard Wilhelm Weber) and Magda (Dr. Eng. Magdalena Graczyk-Kucharska).

Fruitful research discussion in PUT Faculty of Computer Science with (from the left) Prof. Dr. Roman Slowiński, Prof. Dr. Christopher S. Tang, Dr. Eng. Magdalena Graczyk-Kucharska, and Prof. Dr. Gerhard- Wilhelm Weber

Group photo after productive discussions with FEM employees and research scientists

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Report on InteriOR-2019

Cheerful Congress on OR with the Youth
in Hospitable Medan, North Sumatra, Indonesia
10 Years at the Side of EURO and IFORS Conference Communities

The *5th International Conference on Operational Research 2019* (InteriOR-2019) was held at August 20-23, 2019, at Grand Mercure Medan Angkasa Hotel, in beautiful Medan, North Sumatra, Indonesia (https://indoms-acehsumut.org/the-5-th-international-seminar-on-operational-re search-interior-2019/). The congress of InteriOR-2019 was jointly organized by the Department of Mathematics Universitas Sumatera Utara, the Indonesian Mathematical Society (IndoMS) Sumatera Utara and Aceh Region and the Indonesian Operations Research Association (IORA) (https://indoms-acehsumut.org/the-5-th-international-seminar-on-operational-rese arch-interior-2019/). The conference consisted of about 100 contributions, and it became a Festival of Science, of Colors and of Hospitality!

The opening ceremony was started by ringing a gong which is a traditional method to illustrate commence of an important event in Indonesia. The opening speeches were made by committee members to welcome all the participants and to give a brief introduction on InteriOR-2019. Then the ceremony was featured by a traditional folkdance show in Grand Mercure Medan Angkasa Hotel. The theme of InteriOR-2019 was "Better Living with Operations Research", providing an opportunity for attendees to discuss about trend topics in wide application areas of OR studies, to exchange ideas and extend their knowledge on new advances in theories and practices of mathematics and, particularly, Operational Research.

Keynote speakers included **Tutut Herawan** (University of Malaya, Malaysia), **Burcu Gürbüz** (Üsküdar University, Turkey): "Numerical Approach for Rumor Propagation Model", and **Gerhard-Wilhelm Weber** (Poznan University of Technology, Poland; IAM, METU, Turkey): "Modern Water-Resource Management: Application of Novel OR-Analytics Snow Classification on Sentinel 2 Imagery by MARS" and "Classification and Generation of Digital Marble Art (EBRU) by revisiting OR via Deep Learning". During the days of InteriOR-2019, Burcu and Willi were Visiting Professors at the university UIN-SU in Medan.

The conference presented a diverse range of plenary, invited and contributed presentations, posters and other types of presentations by academics, students and representatives of government agencies. InteriOR-2019 was led by Honorary and International Boards, including Prof. Dr. Runtung, Prof. Dr. Kerista Sebayang, Prof. Dr. Herman Mawengkang (Editor), and Prof. Dr. Gerhard-Wilhelm Weber. Tremendous efforts and care were spent by the Chair of InteriOR 2019, Prof. Dr. Saib Suwilo and his team, together with the Publicity Chair members.

During the closing program, Professor Mawengkang gave an intensive speech to share his valuable opinions about this important scientific meeting with the participants at the end of succesful InteriOR conference in its 5th issue. Besides the scientific excellence of the conference, participants enjoyed the warm weather, great hospitality, famous cuisine of North Sumatra and the beauty of Medan, Indonesia, with its rich and diverse cultural elements from near and far. The conference provided a special ambience and international platform, with a particular

outreach to Europe and East Asia, to interconnect the attendees and share news on OR studies and OR meetings. The participants of InteriOR-2019 were informed about and also cordially invited to the upcoming OR meetings in Seoul, South Korea: IFORS 2020 (ifors2020.kr/) and in Athens, Greece: EURO 2021 (https://www.euro-online.org/web/pages/421/activities-list).

The organizers and participants of InteriOR conference service are very happy and grateful about a **10 years' long tradition of fruitful collaboration and deep friendship with EURO and IFORS conference communities!**

This is Medan, Indonesia! Cheerful InteriOR-2019.

At InteriOR-2019 (from left to right): Prof. Dr Tutut Herawan, Prof. Dr. Saib Suwilo, Prof. Dr. Saharman Gea, Prof. Dr. Burcu Gürbüz and Prof. Dr. Gerhard-Wilhelm Weber

At InteriOR-2019 (from left to right): Prof. Dr. Suryati Ngatasi Sitepu, Prof. Dr. Herman Mawengkang, Prof. Dr. Burcu Gürbüz, Prof. Dr. Gerhard-Wilhelm Weber, Prof. Dr. Sajadin Sembiring and Prof. Dr. Siti Rusdiana.

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Forthcoming events

Winter School on Network Optimization

The 9th edition of the Winter School on Network Optimization will take place at Hotel Estoril-Eden, Monte Estoril, Portugal, from the 20th to the 24th of January 2020. Its main objective is to provide an opportunity for PhD students to get together and attend high level courses in the field of Network Optimization. Non-PhD students are welcome to attend the school, but the number of participants is limited and priority will be given to PhD students.

In this edition of the school, the lecturers and subjects to be addressed are:

- Arie Koster (RWTH Aachen University) - *Robust Network Optimization*;
- Elena Fernandez (Universidad de Cadiz) - *Formulations for Location-Routing*;
- Hande Yaman (KU Leuven) -*Hub Location Problems*;
- Ivana Ljubic (ESSEC Business School of Paris) - *Branch-and-Benders-cut algorithms: modern implementations of Benders Decomposition*;
- Mario Ruthmair (University of Vienna) - *Optimization in Social Networks.*

The school is part of the activities of the of the ENOG (European Network Optimization Group). The event is also endorsed by the EURO (the Association of European Societies) and APDIO (the Portuguese OR society).

Potential participants are invited to submit their CVs to the address netopt2020@fc.ul.pt no later than the 31st October. Further information is available in the webpage http://netopt2020.campus.ciencias.ulisboa.pt

Call for Papers

Special Issue of Optimization Methods and Software
"Advances of Optimization in Science, Economics, Engineering and Medicine"
on the occasion of

6th International Conference on
Computational and Experimental Science and Engineering
(ICCESEN 2019)

Submission deadline: *February 15, 2020*

Papers presented at, or related to the subjects of the *International Conference on Computational and Experimental Science and Engineering, ICCESEN 2019,* October 23-27, 2019, Kemer, Antalya, Turkey (http://www.iccesen.org/), will be considered for peer-reviewed publication in a special issue of the journal *Optimization Methods and Software* (*OMS*): http://www.tandfonline.com/goms.

The quality and topics of the submissions should correspond to the high standards of publications in OMS and its Aims and Scope:

http://www.tandfonline.com/action/journalInformation?show=aimsScope&journalCode=goms20.

The deadline for submission is *February 15, 2020*.

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

Submissions should follow the journal's style and guidelines presented here:

http://www.tandfonline.com/action/authorSubmission?journalCode=goms20&page=instructions.

Manuscript submission must be made online via the journal's ScholarOne Manuscripts site

http://mc.manuscriptcentral.com/goms.

To specify the special issue, choose "***ICCESEN-2019***".

In case of any question, please contact by e-mail either the guest editor

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or, alternatively, OMS *Editor-in-Chief*: **Prof. Dr. Oleg Burdakov**: oleg.burdakov@liu.se.

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People wishing to submit announcements to the EUROPT mailing list should address their message to europt.di@listgateway.unipi.it. 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 Newsletter you can find the first call for contributions for our forthcoming EUROPT Workshop, EUROPT 2020. I am very honoured to chair the Program Committee of this edition of our annual event, that will also celebrate the 20 years of activity of our working group. We will welcome you in Toulouse, southern France, at ENAC, from July the 1st to the 3rd, 2020. Please save these dates!

It is my great pleasure to include in this Newsletter a report on the memorial event in the honor of Andrew R. (Andy) Conn, that was held during the ICCOPT conference in Berlin last August. This was a wonderful initiative by Michael Overton. Many participants were allowed to join remotely the event (thanks to Franck E. Curtis for managing this!). I could join remotely, and I am very grateful for this opportunity I had. Andy is and will be greatly missed by his family, friends, colleagues and all who were touched by his scientific and human qualities, his optimism and generosity. I am sure that he will continue inspiring many of us. Many thanks to Michael Overton for the accurate report on the event.

Some other events and announcements involving our optimization community are also reported in this letter. My sincere thanks to all contributors.

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The Newsletter Editor

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