

International Society on Multiple Criteria Decision Making

E-News • 2018 • Issue 1 (January)



Contents

Letter from the President	2
1 Society News.....	4
1.1 25th International Conference on Multiple Criteria Decision Making	4
1.2 2018 EURO PhD Summer School on MCDA/MCDM, July 23 – August 3, 2018	5
1.3 Election results for the Executive Committee.....	6
2 Obituaries.....	8
2.1 Bernard Roy	8
2.2 Jean-Marc Martel	10
3 Upcoming Events and Call for Papers	11
3.1 MCDM Junior Researcher Best Paper Award (INFORMS).....	11
3.2 Journal of Global Optimization - Call for Papers	12
3.4 Sessions on Multiobjective Optimization at the EURO 2018 and the 16 th EUROPT Workshop on Advances in Continuous Optimization.....	13
3.5 International Symposium on Analytic Hierarchy Process - ISAHP 2018	14
3.6 The 7 th International Conference on Multidimensional Finance, Insurance and Investment (ICMFII'18)	16
3.7 Multiobjective Optimization session at Joint EURO/ALIO International Conference 2018 on Applied Combinatorial Optimization.....	18
3.8 EMO 2019 - Tenth Intl. Conference on Evolutionary Multi-Criterion Optimization.....	20
4 Past Conferences, Workshops, and other News	21
4.1 8 MCDM/A experts share their views on the “Art of Supporting Decision-Making”.....	21
4.2 A Report on the Activities of the INFORMS MCDM Section at the INFORMS Annual Meeting in Houston, Texas, October 22-25, 2017	23
5 New Books/Publications.....	24
5.1 Books, book chapters	24
5.2 Journal papers.....	24
5.3 Conference proceedings	30
5.4 Reports	31
6 Imprints.....	32

Letter from the President

Dear Members of the International Society on MCDM,

I wish you all a Happy New Year! I hope 2017 has been a good year for each of you personally. It has been a great year for our Society as we enjoyed participating in our 24th International Conference on MCDM in Ottawa, Canada. The flip side of this is that we do not have the 25th conference until 2019.



It deeply saddens me to report the passing away of two of our field's major contributors: Bernard Roy and Jean-Marc Martel. You can read brief accounts of their accomplishments in the obituaries section of this issue. As much as I know that this is just the way the nature is, I cannot stop thinking that our field had more than its fair share during the last two years. We are in Bernard's and Jean-Marc's debt for all their contributions to our field and their roles in the developments of many young scholars and practitioners.

I had mentioned earlier that we decided to increase the frequency of MCDA/M summer schools, from every three years to every other year. We intend to alternate the conferences and the summer schools, with one or the other occurring each year. Along with this plan, there will be a summer school in Chania, Greece this summer organized by Constantin Zopounidis and his colleagues. The summer schools have been very successful in recruiting bright young researchers to our field over the years. Many past students have taken active roles not only in research, but also in many of our society's activities including organizing summer schools, conferences, editing Newsletters, serving in the executive committee of our society and so on. I have always been a big fan of the MCDA/M Summer Schools. The students enjoy interacting with top scholars of our field, studying, networking, and socializing with each other. This is a great resource for students and for the future of our field. You can find further details about the summer school in this newsletter. Please note that the deadline for application is very soon (January 31, 2018). I urge advisors to motivate and support their students to attend and the recent students of the summer schools to convey their experiences to their fellow students.

Four members of the executive committee of our society are up for election every two years. We conducted the elections recently and the results are announced in this newsletter. I would like to thank all those who completed their terms, those who ran for office, and those who are just starting their terms. I am delighted to see that there are so many volunteers coming forward who are dedicated to improving our field. Naturally, official positions in the society are not the only means to serve. I invite all members to be actively involved in our society by any means they find suitable. The more involved you are, the more successful the field of MCDM will be.

The preparations for the 25th International Conference on MCDM to take place in the summer of 2019 are already under way. Ilker Topcu and his colleagues are working hard to organize another memorable conference in the fascinating city of Istanbul, Turkey. You can find the announcement

with tentative deadlines in this newsletter. Please start making your plans to attend. The MCDM conference is an event and Istanbul is a city you don't want to miss!

Our sister organization, the INFORMS Section on MCDM, has launched a new award: MCDM Junior Researcher Best Paper Award. I am delighted to see another award targeting young MCDM scholars after our society's MCDM dissertation award. You can find the details of the new award in this newsletter.

For those of you looking for activities in a year without an MCDM conference, there are many events with strong MCDM presences, some of which you can find in Section 2 of this newsletter. You can also find other MCDM-related information such as calls for papers for special issues of journals and lists of MCDM publications in this newsletter.

Our Newsletter Editor Johannes Siebert and his Editorial Team have once again produced a rich newsletter for us. I appreciate not only the content of the newsletter but also their perseverance to publish it just in time twice a year, year after year.

On a personal note, I am spending the 2017-2018 academic year at Georgetown University, Washington, DC, USA. Greetings from beautiful Georgetown!

Murat Köksalan

President of the International Society on MCDM

president (at)mcdmsociety.org

January 20, 2018

Washington, DC

Note: Please remember that you can reach the officers of the Society at the following addresses:

president (at) mcdmsociety.org

president-elect (at)mcdmsociety.org

secretary (at) mcdmsociety.org

mcdm-award (at) mcdmsociety.org

phdaward (at) mcdmsociety.org

newsletter (at) mcdmsociety.org

1 Society News

1.1 25th International Conference on Multiple Criteria Decision Making



Dear friends and colleagues,

The 25th International Conference on Multiple Criteria Decision Making (MCDM 2019) will take place at Istanbul Technical University, Istanbul, Turkey from June 16th to June 21st, 2019.

The Scientific Program Committee will invite delegates to submit their contributions and invited session proposals to MCDM2019 through the online submission system starting mid-August 2018.

Tentative dates are planned as

Submission Deadline for Abstracts: **January 16, 2019**

Notification of Acceptance: February 27, 2019

Early Bird Registration Deadline: March 22, 2019

Deadline for Presenter Registration: May 8, 2019



The local organizing committee and the chairs are from six different universities in Istanbul. The conference venue is in the heart of Istanbul, very close to Bosphorus strait. The campus is easily accessible by public transportation.

Turkey offers some of the world's most important archaeological sites and historical monuments, welcoming Turkish hospitality and a delicious and assorted national cuisine. Istanbul, the meeting point of cultures and civilizations and the capital of empires, is the only city in the world straddling both Europe and Asia. With historic streets, architectural masterpieces of old empires, exciting arts scenes, panoramic vistas, and mystical beauties; Istanbul, the Capital of Culture, is truly a city that never sleeps.

vast and varied activities,



As we will celebrate the 25th organization of MCDM conference, we are planning special events.

I kindly invite you to plan to attend MCDM 2019...

İstanbul'da görüşmek üzere! (See you in Istanbul!)

Sincerely,

Y. İlker Topcu

Professor, Istanbul Technical University
MCDM 2019 Conference Chair



1.2 2018 EURO PhD Summer School on MCDA/MCDM, July 23 – August 3, 2018

EURO PhD Summer School on MCDA/MCDM

Chania, Greece

July 23 - August 3, 2018



THE ASSOCIATION OF
EUROPEAN OPERATIONAL
RESEARCH SOCIETIES



<http://www.mcda-school18.tuc.gr>

The 2018 EURO PhD Summer School on MCDA/MCDM is going to take place in Chania/Greece, during July 23-August 3, 2018.



The Summer School's audience involves PhD students who are interested in theoretical and applied aspects of MCDA/M and seek to get an in-depth understanding of the field and related topics. The aim of this school is to give to doctoral students a state-of-the-art presentation of multiple criteria methods, applications and software. Moreover, the school seeks to stimulate a network of young researchers in

MCDA/M. The scientific program of the summer school consists of invited lectures and working groups for discussion of case studies.

The host institutions will be the Technical University of Crete and the Mediterranean Agronomic Institute of Chania (MAICh) and the venue will be the Conference Center of MAICh.

The city of Chania lies on the northwest coastline of the island of Crete. Being the largest of Greek islands, Crete has a significant contribution to the Greek economy and it is a major tourism and business center in the east Mediterranean region. Chania is the second largest city in Crete with a population of more than 100,000 inhabitants. Due to its natural beauty and variety of sights, Chania is among the leading tourist destinations not only in Greece but also in the whole Mediterranean area. The International Airport of Chania has direct charter and scheduled flights to many European cities. Multiple daily domestic flights also connect Chania with Athens, which is directly connected to all major international hubs.



The deadline for the submission of applications is **January 31st, 2018**. The number of participants will be limited to 50. Details about the Summer School and the application process are available at the website of the Summer School: <http://www.mcda-school18.tuc.gr>

We are looking forward to seeing you in Chania.

1.3 Election results for the Executive Committee

Dear Members of the International Society on MCDM,

At the end of September, we completed our elections for the Executive Committee of our Society. 707 of our members logged in the voting system and 632 of them completed the voting process. Based on the results Salvatore Greco, José Rui Figueira, Hsu-Shih Shih, and Kathrin Klamroth ranked in the top four and were elected to serve in the Executive Committee for the next four years. Please join me to congratulate Salvatore, Jose, Hsu-Shih, and Kathrin. You find their short bios below. I look forward to working with them and I am sure they will make important contributions as members of the Executive Committee.

You can find the complete results of the voting below. As you can see, all our candidates got many votes and have been appreciated by our members. I would like to thank Carlos Henggeler Antunes, Carlos Coello Coello, Dylan F. Jones, Judith Lienert, and Stefan Ruzika for running to serve in the Executive Committee. I am sure that they will continue to serve our Society and field in different capacities.

Finally, I would like to thank Martin Geiger, Pekka Korhonen, and Hirotaka Nakayama for their important contributions to our Society during the last four years as members of the Executive Committee.

Best regards,

Murat Koksalan

President of the International Society on MCDM

Carlos Henggeler Antunes (University of Coimbra & INESC Coimbra, Portugal) - 224

Carlos Coello Coello (CINVESTAV-IPN, Mexico) - 248

José Rui Figueira (Technical University of Lisbon, Portugal) - 311

Salvatore Greco (University of Catania, Italy) - 327

Dylan F. Jones (University of Portsmouth, UK) - 226

Kathrin Klamroth (Bergische Universität Wuppertal, Germany) - 252

Judith Lienert (EAWAG Aquatic Research, Switzerland) - 227

Stefan Ruzika (TU Kaiserslautern, Germany) - 177

Hsu-Shih Shih (Tamkang University, Taiwan) - 265

José Rui Figueira (Technical University of Lisbon, Portugal)



José Rui Figueira is Associate Professor with Aggregation at IST (ULisboa) and researcher at CEG-IST. He also taught at Universities of Évora and Coimbra, and the Nancy's School of Mines (where he got a Full Professor position in 2010). He is a former member of LAMSADE, INESC-Coimbra, and DIMACS research centers. Professor Figueira is the co-editor of the book, "Multiple Criteria Decision Analysis: State of the Art Surveys, Springer, 2016 (2nd Edition). He currently serves as a coordinator of the European Working Group on Multiple Criteria Decision Aiding. He is Associate Editor of JMCD, the Book Editor Section of the EJOR and belong to the advisory board of other scientific international journals ([please click here for further information](#)).

Salvatore Greco (University of Catania, Italy)



Salvatore Greco has been full professor at Department of Economics and Business of University of Catania since 2001. Since 2013, he has been also affiliated to the Business School of Portsmouth University. He is the vice-president of the Italian Association for Mathematics applied to Social and Economics Sciences. He is one of the three coordinators of the EURO Working Group in Multiple Criteria Decision Aiding. His research is mainly focused on Multiple Criteria Decision Aiding and Rough Set Theory. In 2013 he received the Gold Medal of International Society on Multiple Criteria Decision Making ([please click here for further information](#)).

Kathrin Klamroth (Bergische Universität Wuppertal, Germany)



Kathrin Klamroth graduated with a PhD in Mathematics at Braunschweig University, and she attained her Habilitation at Kaiserslautern University, Germany. Before moving to the University of Wuppertal in 2008, she has been appointed at the University of Erlangen-Nuremberg (2002-2008). She has held visiting positions at Clemson University (USA), the University of Copenhagen (Denmark) and Paris Dauphine University (France). Kathrin has been an executive committee member from 2006-2010 and since 2013. She was a member of the MCDM dissertation award committee 2011 and 2013. She has co-organized the MCDM track at several EURO meetings and she was/is co-organizer of a Dagstuhl seminar on MCDM and EMO in 2015 and 2018 ([please click here for further information](#)).

Hsu-Shih Shih (Tamkang University, Taiwan)



Hsu-Shih Shih is Professor at Department of Management Sciences, Tamkang University, Taiwan, R.O.C. He obtained his Ph.D. degree at Industrial Engineering Department of Kansas State University, Manhattan, Kansas, U.S.A. His areas of specialization include decision analysis and support, operations research, soft computing, and environmental management. His publications appear in European Journal of Operational Research, Computers and Operations Research, Journal of Operational Research Society, Group Decision and Negotiation, Fuzzy Sets and Systems, etc. and a book by Springer. He also has been a council member, secretary, and president (2016-17) of Operations Research Society of Taiwan ([please click here for further information](#)).

2 Obituaries

2.1 Bernard Roy

Bernard Roy¹ was born in 1934 (March) at Moulins (Allier) at the centre of France. He graduated in Mathematics in 1954 from (at that time unified) Université de Paris. He then continued obtaining a postgraduate degree in Applied Mathematics in 1957 from the “Institut de Statistiques de l’Université de Paris”. This will be followed by a PhD in Graph Theory, supervised by Claude Berge, in 1961.



However, already in 1957, Bernard Roy, just married to Françoise, started working, first for the CNRS and then for a newly established consulting company which will turn to become SEMA METRA International a highly successful company, among the first to introduce at an European level the use of Operational Research and Management Science in real world problems. In 1962 SEMA METRA created a Scientific Direction directed by Bernard Roy in charge of developing methods and tools for the consulting activity of the company. Many today acclaimed Operational Researchers had the opportunity to come to know OR through the activities of this direction and the quarterly journal “Revue Scientifique de SEMA METRA” (whose editor in chief was Bernard) has been between 1964 and 1977 one of the most innovating journals in OR in Europe. Bernard’s interest in Multiple Criteria Decision Analysis started during this period.

In 1972 Bernard left SEMA joining the newly established “Université Paris Dauphine”, where he became full professor in 1974. At the same year he established a research centre which is the LAMSADE and one of the first Master Degrees in France in Operational Research and Management Science, both of them being active today and internationally recognised. Bernard retired in 2001 turning to emeritus, but until his very last days has been very active in research and consulting. During these years Bernard trained as PhD students many among the most prominent OR researches in Europe today.

Bernard Roy contributions in Operational Research started from scheduling theory where he contributed (at the early 60s) one of the most original methods based on “activity on node” formulation. Later on he contributed in graph theory with several outstanding results summarised in a two volumes book, still today reputed a fundamental in this area. However, Bernard is internationally recognised as being the founder of a distinguished school in Multiple Criteria Decision Analysis based on a constructivist approach to problem structuring and formulation as well as for creating a series of Multiple Criteria Decision Aiding Methods, named outranking methods, using concepts and tools from social choice theory and graph theory.

¹ This text is essentially based upon an extended article appeared in 2011: Denis Bouyssou & Daniel Vanderpooten, Bernard Roy, pp. 753–773, in Profiles in Operations Research: Pioneers and Innovators, A. A. Assad & S. I. Gass (Eds.), Springer, 2011, ISBN: 978-1-4419-6280-5

In 1975 Bernard Roy created the EURO MCDA working group, within the just established European Association of OR Societies. The group have met regularly since then, every 6 months, (the last meeting, the 86th, took place in Paris last October) creating one of the most enduring scientific challenge in OR. Bernard has been president of the AFCET (as was named the French society representing OR at that time) in 1976-78 as well as honorary president of ROADEF (the French OR society). He has been president of EURO in the years 1985-86. He received the EURO Gold Medal in 1992 and the International MCDM Society Gold Medal in 1995 as well as the EURO Distinguished Service Medal in 2015. He has been received as Docteur Honoris Causa in 6 Universities (VUB, Liège, Fribourg, Poznan, Laval and Crete).

Bernard Roy started having visual impairing problems already as a child. This problem never being solved turned him almost blind already as a young man and completely blind, while being fully active in science. This did not impeded Bernard to pursue his astonishing scientific career, but also to establish a happy family, to be wine amateur, to travel all around the world. He lost his beloved Françoise in 2015, but he is survived by 4 children and many grandchildren.

Bernard leaves behind him an immense scientific and human legacy. A legacy to be continued by the tens of scholars trained by him and the hundreds of researchers and practitioners who has been able to influence with his original vision of Operational Research Theory and Practice.

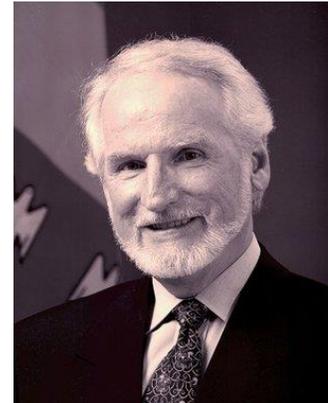
Paris 29/10/2017

Alexis Tsoukiàs

Director of LAMSADE

2.2 *Jean-Marc Martel*

Jean-Marc Martel, professor emeritus of the Faculty of Administration Sciences at Laval University, passed away on November 28, 2017. Born in Quebec City in 1939, he began his career in 1965 at Laval University where he obtained a bachelor's degree in mathematics and a master's degree in statistics. With a fellowship from the Belgian government, he continued his studies at the Catholic University of Louvain, where he obtained his doctoral degree in Applied Economics in 1975.



Jean-Marc pursued an exemplary and successful career dedicated to teaching and research. His commitment to university management and to the promotion of research was tireless. He held a number of academic positions, including that of Visiting Professor at the Université Paris-Dauphine, France and Invited Researcher at the Joint Research Center at Ispra, Italy. For many years, his research was supported by the National Science and Engineering Research Council (NSERC, Government of Canada) and the FCAR (Government of Québec).

Jean-Marc distinguished himself as a leader and prolific and passionate researcher in the field of multicriteria decision making with more than 300 publications, conferences and communications. He supervised or co-supervised more than twenty doctoral students and about 30 at the master's level. He has thus contributed to the training of a generation of **multiple criteria decision-making researchers**. Through his constant work, his commitment and his dedication, Jean-Marc propelled the discipline of multicriteria decision aiding in Quebec and contributed to its international growth. He distinguished himself, in particular, through the rigorous application of MCDA techniques in finance, psychology and the environmental and military fields. In addition, he participated in the organization of some twenty conferences and seminars, including the Fourth International Summer School for Multi-Criteria Decision Making in Quebec City in 1991, the Third Francophone Days of Operational Research in Quebec City in 2001 and the 48th Days of the European Working Group on Multicriteria Decision Aiding in 1998. Thanks to Jen-Marc inspirational influence, the group agreed, for the first time in its history, to meet outside of Europe. Université Laval's Faculty of Business Administration recognized the quality of Jean-Marc's work by conferring on him, in 1989, the Hermès Award for Excellence in Research, in 1991 the Alfred-Houle Medal for his commitment to the doctoral program and in 1997 the Hermes Award for Teaching Excellence.

Those fortunate enough to have worked with Jean-Marc will always cherish the memory of a passionate and creative mentor and colleague, a rigorous and talented researcher and a genuine human being of exceptional honesty, integrity and warmth.

Sarah BenAmor

Telfer School of Management, University of Ottawa, December 9, 2017

3 Upcoming Events and Call for Papers

3.1 MCDM Junior Researcher Best Paper Award (INFORMS)

The MCDM Section of INFORMS is pleased to invite nominations for its **2018 MCDM Junior Researcher Best Paper Award**. The goal of the award is to recognize outstanding papers in the field of multicriteria decision making written by a junior researcher or a team of junior researchers.

A candidate or a team of candidates eligible for the Award must satisfy the following conditions:

1. A candidate must be the single author or the leading coauthor of an article. A team of candidates must consist of the leading coauthors of an article.
2. The article must be written in the English language and published electronically in a peer-reviewed journal within the period between the 1st of January 2015 and the 1st of January 2018.
3. All candidates must be within seven years of their Ph.D. graduation by the 1st of January 2018.
4. All candidates must be members of the MCDM Section of INFORMS.

The nominations for the award shall be submitted by email to Margaret Wiecek wmalgor@clmson.edu by the **1st of February 2018**. For more information about the nomination package and the selection processes, please visit

connect.informs.org/multiple-criteria-decision-making/...

The award is accompanied by a \$500 honorarium for the first prize and an honorable mention for the second and third prize. The award will be presented at the 2018 INFORMS Annual Meeting in Phoenix during an MCDM Awards Session.

Margaret M. Wiecek

wmalgor@clmson.edu

President

MCDM Section (INFORMS)

3.2 *Journal of Global Optimization - Call for Papers*

Special issue on "**Global Optimization with Multiple Criteria: Theory, Methods and Applications**"

Guest Editors

Kaisa Miettinen^a, Carlos Romero^b, Francisco Ruiz^c

^a University of Jyväskylä, Finland

^b Technical University of Madrid, Spain

^c University of Málaga, Spain

This special issue of the **Journal of Global Optimization** will publish original research papers dealing with theoretical and applied issues related to global optimization problems with multiple criteria (or objectives) broadly understood. This call for papers is connected to but not restricted to the papers presented at the 24th International Conference on Multiple Criteria Decision Making, MCDM2017 that was held on 10-14 July, 2017 in Ottawa (Canada).

We welcome papers with a significant amount of new scientific contribution in theory, methods or applications of global optimization involving multiple criteria in line with the scope of the Journal of Global Optimization – an international journal dealing with theoretical and computational aspects of seeking global optima and their applications in science, management and engineering.

Since the topical theme of the MCDM2017 conference was "Creating a Sustainable Society", papers resorting to global optimization with multi-criteria approaches within a sustainable field are especially encouraged. The deadline for submissions is January 31, 2018.

Submission process:

Authors should follow the Instructions for Authors of the Journal of Global Optimization and submit their manuscripts via Springer's online Editorial Manager www.editorialmanager.com/jogo/ by **January 31, 2018**. While submitting, please, make sure to choose in the Editorial Manager SI: MCDM2017 as the Article Type. Submissions are sent to reviewers as they arrive and papers accepted for publication are made electronically available via SpringerLink before the Special Issue is published. Other inquiries should be sent directly to any of the Guest Editors in charge of this issue: Kaisa Miettinen (kaisa.miettinen@jyu.fi), Carlos Romero (carlos.romero@upm.es) and Francisco Ruiz (rua@uma.es).

3.4 *Sessions on Multiobjective Optimization at the EURO 2018 and the 16th EUROPT Workshop on Advances in Continuous Optimization*

Dear Colleague,

I approach you with two invitations:

EURO2018: Next July, the 29th European Conference on Operational Research (<http://euro2018valencia.com/>) will be organized in Valencia, Spain, on July 8-11, 2018.

I am organizing a stream devoted to **Nonlinear Multiobjective Optimization and related topics** and I would like to invite you to organize a session in the stream. If you are interested, please, let me know and I can include your session in the electronic Abstract Submission System and you can invite speakers to your session conveniently (a session can naturally have more than one organizer in which case you'll just have to decide who will chair the session). At this point, you can give a tentative title of your session and you can modify it later. A session should consist of four talks.

The abstract submission deadline is **March 5, 2018** so all abstracts of your session should be in the Abstract Submission System before that date. Please note that abstracts must be written in English and contain no more than 1,500 characters in plain text format (no formulas are allowed). Each registered attendee is allowed to give one presentation at the conference.

If you know a colleague who might be interested in organizing a session, please, feel free to forward this invitation.

I hope that you are interested in organizing a session (or several sessions) and that together we can increase the visibility of multiobjective optimization in this conference!

EUROPT2018: The 16th EUROPT Workshop on Advances in Continuous Optimization (<http://www2.ual.es/EurOPT18/>) will be organized in Almeria, Spain on July 12-13, 2018.

If you would be interested in organizing a session devoted to multiobjective optimization there, please, let me know. The abstract submission deadline is **March 5, 2018**.

If you have any questions, please, do not hesitate to contact me!

With best regards,

Kaisa Miettinen

Professor Kaisa Miettinen, PhD

University of Jyväskylä

Industrial Optimization Group: <http://www.mit.jyu.fi/optgroup/>

Faculty of Information Technology, P.O. Box 35 (Agora)

FI-40014 University of Jyväskylä, Finland

3.5 *International Symposium on Analytic Hierarchy Process - ISAHP 2018*

Call for Papers

International Symposium on Analytic Hierarchy Process - ISAHP 2018

XIV International Congress

Hong Kong / July 13-15, 2018

AHP/ANP in Technology, Entrepreneurship and Corporate Social Responsibility

The themes of this symposium focus on three areas that have changed the world in recent years. However, rather than consider them as being independent, we need to think of them as interlocked, because their future depends on each other. Thus, it is befitting that the AHP/ANP focuses on them now, for the ANP helps us to study interdependent systems.

Without technology, the implementation of the AHP/ANP would not have been possible. AHP/ANP helps us to understand entrepreneurship and cultivate entrepreneurial talent to meet the social and economic needs, reduce jobless stress, and promote social harmony. Without the entrepreneurial capabilities and tenacity of the initiators of the theory, the spread of the AHP/ANP theory all over the world would not have been possible. Finally, corporate social responsibility (CSR) comprises different stakeholders, who are concerned with sustainability, quality, and corporate brand image. CSR is multi-faceted and has long-term impacts on economic, social, and environmental well-being, especially in health, safety, equity, humanity, child-care, and education. Without the ability to measure intangibles, it would not have been possible to understand the contribution that corporations are making to our society in the social dimension. In a sense, they represent the values of the creator of the theory, Thomas L. Saaty, who pushed developers beyond their comfort zones and against all odds, to create technology and spread ideas all over the world to show that intangibles can be measured in relative terms.

These three themes should be explored in all disciplines. We encourage researchers and practitioners who would like to attend this symposium to explore ideas in new and established areas without fear of being wrong. If it takes hundreds of times to solve a problem, we learned more than just to solve the problem, but hundreds of ways not to solve that problem.

Intuition, past experience and knowledge are the primary requisites of good decision making. However, without measurement all this is futile. Measurement is needed to understand the strength of relationships in multidimensional systems. These are the ingredients of the themes of this symposium

Thomas L. Saaty (†)
University of Pittsburgh
Honorary Founding Chairman
†Died August 14, 2017

Luis Vargas
University of Pittsburgh
Conference Chairman

Jennifer Shang
University of Pittsburgh
Conference Chairman

Deadlines

- **Paper Submission: March 6, 2018**
- **Poster Submission: April 15, 2018**

Individual papers

The ISAHP2018 welcomes papers with original contributions in, but not limited to, more than 50 old and new topics. Submissions for individual papers start on **November 1, 2017**. There are 9 tracks, the full list of topics in the tracks are on the website (www.isahp.org), but feel free to propose a new topic if you feel that none of the listed topics properly describes your work. We are aware that at this moment someone is inventing the future, and part of it could come about because of a new topic proposed at ISAHP2018!

- Track #1 – Multi-criteria Decision Analysis Methodology and Theory
- Track #2 – Government Policy and Decision Making
- Track #3 – Healthcare Decision Making
- Track #4 – Applications in Civil Engineering and Urban Management
- Track #5 – Industrial and Manufacturing Engineering
- Track #6 – Business and Innovation Systems
- Track #7 - Technology
- Track #8 - Entrepreneurship
- Track #9 - Corporate Social Responsibility

Nowadays we are all under pressure to publish our best papers only in the best journals, and there could be possible conflicts between submitting a paper to a conference and then to a journal. Therefore, we **will accept short papers, 3-5 pages**, that you can turn into a longer paper to submit to a journal. The **deadline for ISAHP2018 individual papers is March 6, 2018**.

Posters

We are glad to announce that the ISAHP2018 conference will be accepting poster presentations after the success we had with them in ISAHP2016 in London. An effective poster will help you engage colleagues in conversation and get your main point(s) across to as many people as possible. We invite you to submit the title and abstract of your poster presentation using the [online submission system](#) (the posters are submitted via the same individual paper submission). All poster abstracts will be reviewed by peers. The **deadline for ISAHP2018 poster submissions is April 15, 2018**.

Journal special issues

We are working to organize special issues of journals where extended versions of the ISAHP2018 contributions may be submitted.

3.6 *The 7th International Conference on Multidimensional Finance, Insurance and Investment (ICMFII'18)*



The 7th International Conference on Multidimensional Finance, Insurance and Investment (ICMFII'18)

May 10-12, 2018 ↻ Chania (Crete, Greece)

CALL FOR PAPERS

The International Conference on Multidimensional Finance, Insurance and Investment is devoted to the recent developments and applications of the Multi-Criteria Decision Aid tools in the field of finance and insurance. This scientific event disseminates recent methods and procedures designed to solve problems related to **finance, insurance and investments** formulated through **analytical operational research models** in a multidimensional framework that takes into consideration multiple conflicting and incommensurable decision objectives. The aim of this conference is to bring together **researchers** and **practitioners** from all over the world to discuss recent theoretical and methodological developments as well as new empirical results. Given the popularity of financial portfolio optimization within the fields of finance and operational research, and the large number of active researchers, the idea of organizing an international workshop on multi-attribute portfolio selection (MAPS) was initiated in **Helsinki** in 2005 and chaired by Pekka Korhonen. The second edition of this scientific event took place in **Montreal** and was organized by Belaid Aouni in 2007. The third edition was organized by Alejandro Balbas in **Madrid** in 2009. The international committee has decided to replace the MAPS workshops by an International Conference on Multidimensional Finance, Insurance and Investment (ICMFII). The 2011 edition of the ICMFII held on April 14-16, in Hammamet (Tunisia) and chaired by Fouad Ben Abdelaziz. The fifth edition of the ICMFII was organized on November 25-27, 2013 in **Bahrain** and chaired by Minwir Al-Shammari. The sixth edition of this conference took place on June 26-29, in **Alcoy** (Spain). The 7th edition will be organized by the Technical University of Crete (Financial Engineering Laboratory, conference chairs: Michael Doumpos and Constantin Zopounidis) on May 10-12, 2018 in **Chania**, Greece.

A broad range of topics will be covered during the conference. Papers related to the following topics are suitable for submission to the conference:

- Multi-Attribute portfolio selection
- Multiple Objective Programming in Finance
- Stochastic Programming in Finance
- Option pricing
- Asset and liability management
- Interest rate models
- Capital Budgeting
- Corporate Governance
- Auditing, Accounting, Insurance, and Pension Fund Management
- Multi-Criteria Decision Aid in Finance
- Fuzziness and uncertainty in Finance
- Financial Planning and Financial Engineering
- Portfolio Analysis
- Financial Economics
- Bank Management
- Finance applications
- Insurance applications
- All other topics in relation to Financial Decision Sciences

Plenary talks have been arranged by **Prof. Panos Pardalos** (University of Florida, USA) and **Prof. Salvatore Greco** (University of Catania, Italy and University of Portsmouth, UK).

The ICMFII International committee invites all interested researchers and professionals to submit **extended abstracts** (at most 2 pages) should be written in English. They should clearly include: title, brief abstract, list of key-words, author(s) full name(s), affiliation(s), complete address(es), and e-mail address(es). Please state the name of the contact person. All documents must be sent in RTF (Rich Text File) or Doc format by email to the following address icmfii18@isc.tuc.gr. The **deadline for submitting your Abstract is February 15, 2018**.

Selected manuscripts will be considered as potential full-paper publications in special issues arranged for **The Journal of Global Optimization** and the **International Journal of Financial Engineering & Risk Management**.

Early registration fee for academic participants is €250 and for students is €150. The organizing committee will be glad to assist all registered participants who have paid the registration fee in the Visa process.

For any question concerning the organization of the Conference, you may contact the conference organizers at icmfii18@isc.tuc.gr. For further information, please visit the ICMFII website www.icmfii.com



This conference is endorsed by the International Society on Multiple Criteria Decision Making

3.7 Multiobjective Optimization session at Joint EURO/ALIO International Conference 2018 on Applied Combinatorial Optimization

We invite you to submit a paper for Multiobjective Optimization session at Joint EURO/ALIO International Conference 2018 on Applied Combinatorial Optimization.

The Joint EURO/ALIO International Conference 2018 on Applied Combinatorial Optimization is an event jointly promoted by the Association of European Operational Research Societies (EURO) and the Association of Latin-Iberoamerican Operational Research Societies (ALIO), both within the International Federation of Operational Research Societies (IFORS).

Bologna, Italy, June 25-27, 2018 <https://events.unibo.it/euroal>

Call for papers:

Contributions dealing with any aspect of Applied Combinatorial Optimization are welcome. This includes theoretical achievements, algorithm development and real-world implementations.

Two kinds of submission are possible: short abstracts of at most 1500 characters including up to three references, and extended abstracts of up to 8 pages. The template for short abstracts has a header where the author can state whether the manuscript belongs to an invited session or it is a regular contribution. While, for the "extended abstracts", there is no possibility for associating the abstract with the corresponding Invited Session and this association must be established directly by the Organizer of the Invited Session. All submissions will undergo a review process.

Short abstracts will be distributed at the conference. Extended abstracts will be published on a special issue of Electronic Notes in Discrete Mathematics (ENDM) associated with the conference.

A Feature Cluster of the European Journal of Operational Research, devoted to Applied Combinatorial Optimization, will be published. High quality papers presented at the conference will be invited to this cluster.

Important Deadlines:

- Submission of Extended Abstracts 08/01/2018
- **Submission of Short Abstracts 19/02/2018**
- Early Registration 16/03/2018

Plenary Speakers:

- Andrea Lodi, École Polytechnique de Montréal
- Nelson Maculan, Federal University of Rio de Janeiro
- David Pisinger (EURO Plenary Speaker), Technical University of Denmark

Venue:

The conference will be held at the School of Engineering and Architecture of the Alma Mater Studiorum – Università di [Bologna, Viale del Risorgimento, 2 Bologna](#). The School is within walking distance from the city center, hotels, bars and restaurants.

The city of Bologna offers a lively cultural environment, and is well connected by high-speed trains to Florence (35min), Venice (1h 25min), Milan (1h), Rome (2h), Turin (2h 15min), Naples (3h 30min).

A short video on the city of Bologna: <https://www.youtube.com/watch?>

Best regards,

Guillermo Cabrera-Guerrero

Paula Zabala

3.8 *EMO 2019 - Tenth Intl. Conference on Evolutionary Multi-Criterion Optimization*

March 10-13, 2019

East Lansing, Michigan, USA

www.coin-laboratory.com/emo2019

General Chairs: Kalyanmoy Deb and Erik D. Goodman, USA

Program Chairs:

Carlos Coello Coello, Mexico

Kaisa Miettinen, Finland

Sanaz Mostaghim, Germany

(More committees will be formed soon)

Proceedings:

Full papers will be published by Springer under LNCS series

Planned Sessions:

Keynotes, EMO session, MCDM session, Industry session, Poster session, Competitions

EMO 2019 will accept papers related to EMO, but not limited to following topics:

- Theoretical foundations
- Algorithmic developments
- Multi- and many-objective optimization
- Constraint handling methods
- Preference handling methods and MCDM
- Handling of continuous, combinatorial or mixed-integer problems
- Local search methods
- Hybrid evolutionary-classical approaches
- Performance metrics
- Stopping criteria
- Parallel implementations
- Surrogate assisted multi-objective optimization
- Test problems and benchmark problems
- Algorithm selection approaches
- Large scale optimization
- Real-world applications
- EMO algorithm implementations
- Practicalities involved in EMO – uncertainties, dynamic nature, multi-scenario, etc.
- Bilevel and multi-level EMO approaches

EMO Steering Committee: Carlos Coello Coello, David Corne, Kalyanmoy Deb, Michael Emmerich, Carlos Fonseca, Hisao Ishibuchi, Joshua Knowles, Kaisa Miettinen, Robin Purshouse, David Schaffer, Lothar Thiele

Past EMO Conferences: Switzerland (2001), Portugal (2003), Mexico (2005), Japan (2007), France (2009), Brazil (2011), Portugal (2013), United Kingdom (2015), Germany (2017)

4 Past Conferences, Workshops, and other News

4.1 8 MCDM/A experts share their views on the “Art of Supporting Decision-Making”

Marco Cinelli, Future Resilient Systems (FRS), Swiss Federal Institute of Technology (ETH) Zürich, Singapore-ETH Centre (SEC), Singapore I have always been fascinated by the potentials of Multiple Criteria Decision Making, Analysis and Aiding (MCDM/A) to conduct multi-disciplinary research. Integration of several disciplines is a core component of my research as I develop decision support frameworks and systems for the resilience/sustainability-oriented evaluation of products, technologies and policies in the form of a performance score, ranking or classification.

During my PhD I wondered several times about what MCDM/A experts actually thought about the nature of this discipline and how new students could be introduced to it without the risk of being overwhelmed by the multitude of available methods, approaches and schools of thought.

I decided to find out more about this at the last MCDM conference that was held from 3 to 7 August 2015 at Helmut-Schmidt University in lovely Hamburg. At this event I managed to interview seven leading scholars and a last one after I completed my PhD thesis defense in July 2016. During the interviews I asked them five relatively simple questions and I believe that their answers can help new researchers navigating the process of learning about MCDM/A in a more structured fashion. In fact, the interviewees shared their perspective on:

- (i) what MCDM/A is;
- (ii) main strengths and success factors of MCDM/A;
- (iii) the recommended pathway to pursue a comprehensive understanding of MCDM/A;
- (iv) the main areas of application for MCDM/A;
- (v) the recommended approaches to integrate MCDM/A in other research domains.

I gathered all the answers in a short summary paper titled “**The Art of Supporting Decision-Making**” that was published in April 2017 and you can access it for free at this link:

<http://exchanges.warwick.ac.uk/index.php/exchanges/article/view/136>

If you are interested in the interviews themselves, you can view and also download them for free at this link:

<https://www.dropbox.com/sh/c1srdoytufk4m53/AAAaH1WzBKgJ0Jzt1rbxqVEqa?dl=0>

Highlights of the interviews

The first primary output from the interviews is the clustering of MCDM/A in three main families, including (i) methods of multi-objective optimization with high number of alternatives which can be restricted by constraint functions and objectives to be satisfied, (ii) methods whose goal is the discovery of hidden preference models that decision-makers (DMs) have in their mind and (iii) methods that aim to elicit the preference models of the DMs which have to be constructed since they do not necessarily exist a-priori.

The key success factors of MCDM/A are ascribable to the capability of developing decision support systems that consider many (sometimes conflicting) objectives at the same time, enhance the learning during the whole decision-making process and satisfy most of the typologies of decision-

making challenges in real-life problems, including evaluations in the form of ranking, classification and performance scores.

There is no magic solution to obtain a comprehensive training in MCDM/A domain, and the interviewees provided a list of possible solutions that can empower new comers to specialize into the discipline, including (i) training events and courses with long lectures, case studies and fruitful discussions; (ii) participation in operational research societies, their conferences and resulting network; and (iii) the study of books and academic literature in general.

The list of application areas mentioned by the scholars is long and ever increasing, starting from finance to sustainability. This is justified by the compelling need of providing methods that can help DMs during the interpretation phase of their assessments based on ever increasing lists of individual criteria/indicators that can overwhelm them and not allow making an informed decision.

The last challenge that the interviews tackled was the search for recommendations about the suitable strategies to successfully use MCDM/A in other research domains. The most prominent strategy is that MCDM/A practitioners should approach problems with willingness to learn the issues of the domain under consideration and develop, adapt and select the MCDM/A method(s) that best fit the challenge, and not vice-versa. Another solution consists in the inclusion of training in basics and methods of MCDM/A into university courses (e.g. agricultural sciences, biology, business, chemistry, economics, engineering, management, politics and social sciences) of potential future DMs so that they might be more willing to use these methods once they will be faced with complex decision making challenges.

Profile

Marco Cinelli is a postdoctoral researcher since April 2017 at the Future Resilient Systems (FRS) Programme of Singapore-ETH Centre, working on resilience, sustainability and decision support systems. Prior to his appointment at FRS, Marco was an early career fellow at the Institute of Advanced Study and research assistant in the Sustainable Materials and Manufacturing Group of WMG Department at the University of Warwick in the UK.

He holds a Ph.D. in Engineering from the University of Warwick, an International Master in Environmental Sciences with a major in Sustainable Development from Ca' Foscari University in Venice and Hiroshima University and a Bachelor degree in Environmental Sciences from Padua University.

Contact details

Marco Cinelli
Singapore-ETH Centre, Future Resilient Systems (FRS)
1 Create Way
#06-01 CREATE Tower
Singapore 138602

Phone: +65 8694 6133

@: marco.cinelli@frs.ethz.ch

<http://frs.ethz.ch/>

[Google Scholar profile](#) | [LinkedIN profile](#) | [ETH profile](#)



4.2 A Report on the Activities of the INFORMS MCDM Section at the INFORMS Annual Meeting in Houston, Texas, October 22-25, 2017

The MCDM Section was established in 2010, having had its roots in the International Society on MCDM dating from 1979. Since its inception, the Section has been having strong visibility at each INFORMS meeting. At the 2017 INFORMS Annual Meeting in Houston, the activities featured a sponsored cluster of sessions and a business meeting.

The Houston cluster included 13 sessions and 47 talks that fully covered the first three days of the conference and a wide spectrum of MCDM topics. We were glad to have a big group of presenters despite other conferences that took place in North America earlier in 2017.

Our Section plans to maintain strong presence at the 2018 INFORMS Annual Meeting in Phoenix. Serpil Sayin, the 2018-2019 Section President, will serve as the MCDM Cluster Chair and will organize the MCDM stream for Phoenix. If you are interested in organizing a session and would like to help, please contact her at SSAYIN@ku.edu.tr.

If you are interested in other topics that were discussed during the business meeting, please go to <http://connect.informs.org/multiple-criteria-decision-making/about-us/bylaws> and read the minutes. Below I will highlight two most important matters.

First, we would like to increase the membership in the Section. We urge the members of the MCDM Society to join our Section, especially that the Section membership does not require the INFORMS membership. We also urge those who already are the Section members to get involved in recruiting new members. The stronger we get, the more powerful we will be in convincing others about our issues. Membership is open to anyone interested in MCDM. To become a member or to renew your membership for 2018, visit <http://www.informs.org/Community/MCDM> and click on “Join.”

Second, in 2018 our Section will start an exciting event! We will present the first ever edition of the MCDM Junior Researcher Best Paper Award that recognizes outstanding papers in the MCDM area and written by a junior researcher or a team of junior researchers. The Award will be given every year at the INFORMS Annual Meeting during an MCDM Awards Session. For more information about the nomination package and the selection process, please visit <http://connect.informs.org/multiple-criteria-decision-making/awards>.

Wishing all MCDM researchers and supporters a successful and professionally rewarding 2018,

Margaret M. Wiecek

wmalgor@clemsun.edu

President

MCDM Section (INFORMS)

5 New Books/Publications

This section presents a list of papers published from 2017. This list is by no means exhaustive. If you want your recent publications to appear in the next newsletter, please send an email with the complete citation of your work to lucie.galand@dauphine.fr.

5.1 Books, book chapters

L. C. Dias, A. Morton, J. Quigley (Eds.), **Elicitation - The Science and Art of Structuring Judgement**, *International Series in Operations Research & Management Science*, 2018.

G. Kirlik, S. Sayın, H.H. Zhang, **A Multiobjective Solution Method for Radiation Treatment Planning**, *Operations Research Applications in Health Care Management*, 262:379-392, 2018.

K. Miettinen, J. Hakanen, **Why Use Interactive Multi-Objective Optimization in Chemical Process Design?** [*Multi-Objective Optimization: Techniques and Applications in Chemical Engineering*](#), 2nd Edition, by G. P. Rangaiah, 151-188, 2017.

E. Mu, M. Pereyra-Rojas, **Practical Decision Making Using Super Decisions v3: An Introduction to the Analytic Hierarchy Process**, *Springer Briefs in Operations Research*, 2018.

V. D. Noghin, **Reduction of the Pareto set: An axiomatic approach**, *Studies in Systems, Decision and Control*, 126, 2018.

Z. Önen, S. Sayın, **Evaluating Healthcare System Efficiency of OECD Countries: A DEA-Based Study**, *Operations Research Applications in Health Care Management*, 262:141-158, 2018.

G.-H. Tzeng, K.-Y. Shen, **New Concepts and Trends of Hybrid Multiple Criteria Decision Making**, 1st Edition, *CRC Press, Engineering & Technology, Mathematics & Statistics*, 2017.

5.2 Journal papers

R. Allmendinger, M. Ehrgott, X. Gandibleux, M.J. Geiger, K. Klamroth, **Navigation in multiobjective optimization methods**, *Journal of Multi-Criteria Decision Analysis*, 24(1-2):57-70, 2017.

M.J. Alves, C. Henggeler Antunes, **A semivectorial bilevel programming approach to optimize electricity dynamic time-of-use retail pricing**, *Computers & Operations Research*, 92:130-144, 2018.

Z. Bashir, J. Wątróbski, T. Rashid, W. Sałabun, J. Ali, **Intuitionistic-Fuzzy Goals in Zero-Sum Multi Criteria Matrix Games**, *Symmetry*, 9(8):158, 2017.

C. Bazgan, F. Jamain, D. Vanderpooten, **Discrete representation of the non-dominated set for multi-objective optimization problems using kernels**, *European Journal of Operational Research*, 260(3):814-827, 2017.

J. Becker, A. Becker, W. Sałabun, **Construction and Use of the ANP Decision Model Taking into Account the Experts' Competence**, *Procedia Computer Science*, 112:2269-2279, 2017.

K. Belahcene, C. Labreuche, N. Maudet, V. Mousseau, W. Ouerdane, **Explaining robust additive utility models by sequences of preference swaps**, *Theory and Decision*, 82(2):151-183, 2017.

H. Bernardo, A. Gaspar, C. Henggeler Antunes, **An application of a multi-criteria decision support system to assess energy performance of school buildings**, *Energy Procedia*, 122:667-672, 2017.

G. Cabrera, M. Ehrgott, A.J. Mason, A. Raith, **A matheuristic approach to solve the multiobjective beam angle optimization problem in intensity-modulated radiation therapy**, *International Transactions in Operational Research*, 25 (1):243-268, 2018.

T. Chugh, Y. Jin, K. Miettinen, J. Hakanen, K. Sindhya, **A Surrogate-Assisted Reference Vector Guided Evolutionary Algorithm for Computationally Expensive Many-Objective Optimization**, *IEEE Transactions on Evolutionary Computation*, to appear.

T. Chugh, K. Sindhya, J. Hakanen, K. Miettinen, **A Survey on Handling Computationally Expensive Multiobjective Optimization Problems with Evolutionary Algorithms**, *Soft Computing*, to appear.

M. Cinelli, S. R. Coles, M. N. Nadagouda, J. Błaszczyszki, R. Słowiński, R. S. Varma, and K. Kirwan, **Robustness analysis of a green chemistry-based model for the classification of silver nanoparticles synthesis processes**. *Journal of Cleaner Production* 162:938-948, 2017.

M. Cornu, T. Cazenave, D. Vanderpooten, **Perturbed Decomposition Algorithm applied to the multi-objective Traveling Salesman Problem**, *Computers and Operations Research*, 79:314-330, 2017.

H. Cunningham, S. Knowles, P. Hansen, **Bilateral foreign aid: How important is aid effectiveness to people for choosing countries to support?** *Applied Economics Letters*, 24:306-10, 2017.

K. Dächert, K. Klamroth, R. Lacour, D. Vanderpooten, **Efficient computation of the search region in multi-objective optimization**, *European Journal of Operational Research*, 260(3):841-855, 2017.

F. Daolio, A. Liefoghe, S. Verel, H. Aguirre, K. Tanaka, **Problem features vs algorithm performance on rugged multi-objective combinatorial fitness landscapes**, *Evolutionary Computation*, 25(4):555-585, 2017.

L.C. Dias, C. Henggeler Antunes, G. Dantas, N. Castro, L. Zamboni, **A multi-criteria approach to sort and rank policies based on Delphi qualitative assessments and ELECTRE TRI: the case of smart grids in Brazil**, *Omega*, 76:100-111, 2018.

J. Drake, J. Carlos, T. de Hart, C. Monleón, W. Toro, J. Valentim, **Utilization of multiple-criteria decision analysis (MCDA) to support healthcare decision-making FIFARMA, 2016**, *Journal of Market Access & Health Policy*, 5(1), 1360545, 2017.

J.G. Duarte Neto, M.A.S. Machado, L.F.A.M. Gomes, A.M. Caldeira, F.S.V. Sallum, **Investments in a New Technological Infrastructure: Decision Making Using the ELECTRE-TRI Methodology**, *Procedia Computer Science*, 122:194-199, 2017.

M. Ehrgott, I. Ljubić, S.N. Parragh, **Feature cluster: Recent advances in exact methods for multi-objective optimization**, *European Journal of Operational Research*, 260(3):805-806, 2017.

S. Faizi, T. Rashid, W. Sałabun, S. Zafar, J. Wątróbski, **Decision Making with Uncertainty Using Hesitant Fuzzy Sets**, *International Journal of Fuzzy Systems*, 1-11, 2017.

S. Faizi, W. Sałabun, T. Rashid, J. Wątróbski, S. Zafar, **Group Decision-Making for Hesitant Fuzzy Sets Based on Characteristic Objects Method**, *Symmetry*, 9, 136, 2017.

V. Ferretti, J. Liu, V. Mousseau, W. Ouerdane, **Reference-based ranking procedure for environmental decision making: Insights from an ex-post analysis**, *Environmental Modelling & Software*, 99:11-24, 2018.

S. French, P. Beliveau, P. Bruno, S. Passmore, J. Hayden, J. Srbely, G. Kawchuk, **Research priorities of the Canadian chiropractic profession: a consensus study using a modified Delphi technique**, *Chiropractic & Manual Therapies*, 25, 38, 2017.

L. Gourvès, J. Monnot, F. Pascual, D. Vanderpooten, **Bi-objective matchings with the triangle inequality**, *Theoretical Computer Science*, 670:1-10, 2017.

N. ter Haar, K. Annink, M. Sulaiman et al, **Development of the autoinflammatory disease damage index (ADDI)**, *Annals of the Rheumatic Diseases*, 76:821-30, 2017.

J. Hart, R. Hinman, A. Van Ginckel, M. Hall, R. Nelligan, K. Bennell, **Factors influencing cane use for the management of knee osteoarthritis: a cross sectional survey**, *Arthritis Care & Research*, 2018.

G. Hernández-Ledesma, E. Ramos, C. Fernández-y-Fernández, J. Aguilar-Cisneros, J. Rosas-Sumano, L. Morales-Ignacio, **Selection of best software engineering practices: A Multi-Criteria Decision Making approach**, *Research in Computing Science*, 136:47-60, 2017.

A. Ishizaka, S. Siraj, **Are multi-criteria decision-making tools useful? An experimental comparative study of three methods**, *European Journal of Operational Research*, 264(2):462-471, 2018.

J. Jankowski, W. Sałabun, J. Wątróbski, **Identification of a Multi-criteria Assessment Model of Relation Between Editorial and Commercial Content in Web Systems**, *Multimedia and Network Information Systems*, 506:295-305, 2017.

S. Kaddani, D. Vanderpooten, J.M. Vanpeperstraete, H. Aissi, **Weighted sum model with partial preference information: application to Multi-Objective Optimization**, *European Journal of Operational Research*, 260(2):665-679, 2017.

I. Kaliszewski, I. Miroforidis, J. Stańczak, **The airport gate assignment problem – multiobjective optimization versus evolutionary multi-objective optimization**, *Computer Science*, 18(1):41-52, 2017.

O. Khaled, M. Minoux, V. Mousseau, S. Michel, X. Ceugniet, **A compact optimization model for the tail assignment problem**, *European Journal of Operational Research*, 264(2):548-557, 2018.

M. Köksalan, V. Mousseau, S. Özpeynirci, **Multicriteria Sorting with Category Size Restrictions**, *International Journal of Information Technology and Decision Making*, 16(1):5-23, 2017.

K.M. Lin, M. Ehrgott, **Multiobjective navigation of external radiotherapy plans based on clinical criteria**, *Journal of Multi-Criteria Decision Analysis*, 2017.

K.M. Lin, M. Ehrgott, A. Raith, **Integrating column generation in a method to compute a discrete representation of the non-dominated set of multi-objective linear programmes**, *4OR*, 15(4):331-357, 2017.

F. Lolli, A. Ishizaka, R. Gamberini, B. Rimini, **A multi-criteria framework for inventory classification and control with application to intermittent demand**, *Journal of Multicriteria Decision Analysis*, 24(5-6):275–285, 2017.

F. Lolli, A. Ishizaka, R. Gamberini, B. Rimini, B. Elia, P. Laura, **Requalifying public buildings and utilities using a group decision support system**, *Journal of Cleaner Production*, 164, 1081-1092, 2017.

C. López, A. Ishizaka, **Cloud-based ERP system selection using the group sorting method GAHPSORT**, *Computers in Industry*, 92:12-14, 2017.

B. Martin, A. Goldsztejn, L. Granvilliers, C. Jermann, **Constraint propagation using dominance in interval Branch & Bound for nonlinear biobjective optimization**, *European Journal of Operational Research*, 260(3):934-948, 2017.

D.M. Martin, M. Mazzotta, **Non-monetary valuation using Multi-Criteria Decision Analysis: Sensitivity of additive aggregation methods to scaling and compensation assumptions**, *Ecosystem Services*, 29:13-22, 2018.

F. Martins, E. Santos, L. Vils, **Organizational creativity in innovation – a multicriteria decision analysis**, *Independent Journal of Management & Production*, 8:1223-1245, 2017.

A. Mazziotta, D. Podkopaev, M. Trivino, K. Miettinen, T. Pohjanmies, M. Monkkonen, **Quantifying and Resolving Conservation Conflicts in Forest Landscapes via Multiobjective Optimization**, *Silva Fennica*, 51(1), 1778, 2017.

M. Miller, D. Gransberg, **Measuring users' impact to support economic growth through transportation asset management planning**, *International Journal of Public Policy*, 14:1-26, 2017.

E. Miloslavsky, R. Naden, J. Bijlsma et al, **Development of a Glucocorticoid Toxicity Index (GTI) using multicriteria decision analysis**, *Annals of the Rheumatic Diseases*, 76:543-46, 2017.

F. Moura, P. Cambra, A. Gonçalves, **Measuring walkability for distinct pedestrian groups with a participatory assessment method: A case study in Lisbon**, *Landscape and Urban Planning*, 157:282-96, 2017.

E. Mu, R. Chung, I. Reed, **Paradigm Shift: Eyewitness Identification as a Multi-criteria Decision Making Task**, *International Journal of Production Economics*, 184:95-106, 2017.

M. Namazi, R. Gholami, **Comprehensive ranking model of companies via accounting information, balanced scorecard and PAPRIKA technique**, *Journal of Accounting Knowledge*, 7:7-33, 2017.

E. de Olde, H. Moller, F. Marchand et al, **When experts disagree: The need to rethink indicator selection for assessing sustainability of agriculture**, *Environment, Development and Sustainability*, 19:1327-42, 2017.

M. Pereyra-Rojas, E. Mu, J. Gaskin, T. Lingham, **The Higher-Ed Organizational-Scholar Tension: How Scholarship Compatibility and the Alignment of Organizational and Faculty Skills, Values and Support Affects Scholar's Performance and Well-Being**, *Frontiers of Psychology*, 8, 2017.

A.E. Phillips, C.G. Walker, M. Ehgott, D.M. Ryan, **Integer programming for minimal perturbation problems in university course timetabling**, *Annals of Operations Research*, 252(2):283-304, 2017.

J.A. Plasencia-Soler, F. Marrero-Delgado, M. Nicado-García, Y. Aguilera-Sánchez, **Procedimiento para la priorización de Factores Críticos de Éxito, Procedure for prioritisation Critical Success Factors**, *DYNA*, 84(202):26-34, 2017.

W. Sałabun, A. Piegat, **Comparative analysis of MCDM methods for the assessment of mortality in patients with acute coronary syndrome**, *Artificial Intelligence Review*, 48(4):557-571, 2017.

- F.S.V. Sallum, L.F.A.M. Gomes, M.A.S. Machado, **Evaluation of international banks in Turkey: na application of the TOPSIS-DEMATEL approach**, *Revista de la Escuela de Perfeccionamiento en Investigación Operativa*, 24:23-36, 2017.
- J. Simpson, A. Raith, P. Rouse, M. Ehrgott, **Considerations for using data envelopment analysis for the assessment of radiotherapy treatment plan quality**, *International Journal of Health Care Quality Assurance*, 30(8):703-716, 2017.
- K. Sindhya, A. Manninen, K. Miettinen, J. Pippuri, **Design of a Permanent Magnet Synchronous Generator using Interactive Multiobjective Optimization**, *IEEE Transactions on Industrial Electronics*, 64(12):9776-9783, 2017.
- A. Soares, A. Gomes, C. Henggeler Antunes, C. Oliveira, **A Customized Evolutionary Algorithm for Multiobjective Management of Residential Energy Resources**, *IEEE Transactions on Industrial Informatics*, 13(2):492-501, 2017.
- O. Sobrie, N. Gillis, V. Mousseau, M. PirLOT, **UTA-poly and UTA-splines: additive value functions with polynomial marginals**, *European Journal of Operational Research*, 264(2):405-418, 2018.
- E. Tacconelli, E. Carrara, A. Savoldi et al and the WHO Pathogens Priority List working group, **Discovery, research, and development of new antibiotics: the WHO priority list of antibiotic-resistant bacteria and tuberculosis**, *The Lancet Infectious Diseases*, 2017.
- D. Vanderpooten, L. Weerasena, M.M. Wiecek, **Covers and approximations in multiobjective optimization**, *Journal of Global Optimization*, 67(3):601-619, 2017.
- J.Y.T. Wang, M. Ehrgott, **A three-objective user equilibrium model: Time surplus maximisation under uncertainty**, *Journal of Multi-Criteria Decision Analysis*, 2017.
- T. Wang, V. Mousseau, N. Pedroni, E. Zio, **An empirical classification-based framework for the safety criticality assessment of energy production systems, in presence of inconsistent data**, *Reliability Engineering and System Safety*, 157:139-151, 2017.
- J. Wątróbski, K. Małecki, K. Kijewska, S. Iwan, A. Karczmarczyk, R.G. Thompson, **Multi-Criteria Analysis of Electric Vans for City Logistics**, *Sustainability*, 9, 1453, 2017.
- L. Weerasena, B. Soylu, M.M. Wiecek, **An algorithm for approximating the Pareto set of the multiobjective set covering problem**, *Annals of Operations Research*, 248(1):493-514, 2017.
- M. Xu, G. Fadel, M.M. Wiecek, **Improving the performance of the augmented Lagrangian coordination: decomposition variants and dual residuals**, *Journal of Mechanical Design*, 139(3), 2017.
- Y. Xu, C.-H. Yeh, **Sustainability-based selection decisions for e-waste recycling operations**, *Annals of Operations Research*, 248(1-2):531-552, 2017.

W. Zhang, Y. Ju, L.F.A.M. Gomes, **The SMAA-TODIM approach: Modeling of preferences and a robustness analysis framework**, *Computers & Industrial Engineering*, 114:130-141, 2017.

L. Zhang, Y. Xu, C.-H. Yeh, L. He, D.Q. Zhou, **Bi-TOPSIS: A new multicriteria decision making method for interrelated criteria with bipolar measurement**, *IEEE Transactions on Systems, Man and Cybernetics: Systems*, 47(12):3272-3283, 2017.

P. Ziemba, J. Wątróbski, M. Ziolo, A. Karczmarczyk, **Using the PROSA Method in Offshore Wind Farm Location Problems**, *Energies*, 10, 1755, 2017.

5.3 Conference proceedings

E. Aggarwal, **Fuzzy Logic and TOPSIS: An integration approach for product recommendation in online business**, *Proceedings of Fifth PAN IIM World Management Conference*, 183-192, 2017.

S. Alismaili, M. Li, J. Shen, Q. He, **A consumer-oriented decision-making approach for selecting the cloud storage service: From PAPRIKA perspective**, *Lecture Notes in Business Information Processing 296, Revised Selected Papers from 15th Workshop on e-Business (WeB 2016)*, 1-12, 2017.

T. Chugh, K. Sindhya, K. Miettinen, Y. Jin, T. Kratky, P. Makkonen, **Surrogate-assisted Evolutionary Multiobjective Shape Optimization of an Air Intake Ventilation System**, *Proceedings of the 2017 IEEE Congress on Evolutionary Computation*, 2017.

I. Kaliszewski, J. Miroforidis, D. Podkopaev, **Multiple Criteria Decision Making and Multiobjective Optimization - A Toolbox**, *Selected Papers from BOS-2016 and IWIFSGN-2016, Uncertainty and Imprecision in Decision Making and Decision Support: Cross Fertilization, New Models and Applications, Advances in Intelligent Systems and Computing*, 135-142, 2017.

L.A.D. Rangel, E.F. Sbruzzi, L.F.A.M. Gomes, **When criteria losses are valued in different ways: treatment with TODIM- Θ** , *Proceedings of ENEGEP 2017 - XXXVII National Production Engineering Meeting*, 2017.

F.S.V. Sallum, L.F.A.M. Gomes, M.A.S. Machado, **The combined use of the WINGS and PROMÉTHÉE II multicriteria methods in the prioritization of multimarket investment funds**, *Annals of XIII CNEG - XIII National Congress of Management Excellence*, 2017.

J. Shi, Q. Zhang, B. Derbel, A. Liefoghe, S. Verel, **Using parallel strategies to speed up Pareto local search**, *Proceedings of the 11th International Conference on Simulated Evolution and Learning (SEAL 2017)*, *Lecture Notes in Computer Science*, 2017.

O. Sobrie, V. Mousseau, M. Pirlot, **A Population-Based Algorithm for Learning a Majority Rule Sorting Model with Coalitional Veto**, *Proceedings of the 9th International Evolutionary*

Multi-Criterion Optimization (EMO 2017), Lecture Notes in Computer Science, 10173:575-589, 2017.

J. Wątróbski, W. Sałabun, G. Ladorucki, **The Temporal Supplier Evaluation Model Based on Multicriteria Decision Analysis Methods**, *Proceedings of the Asian Conference on Intelligent Information and Database Systems (ACIIDS 2017)*, Lecture Notes in Computer Science, 10191, 2017.

5.4 Reports

European Centre for Disease Prevention and Control, **ECDC Tool for the Prioritisation of Infectious Disease Threats – Handbook and Manual**, ECDC, 2017.

E. Tacconelli, N. Magrini, Co-ordinating Group, **Global priority list of antibiotic-resistant bacteria to guide research, discovery, and development of new antibiotics**, *World Health Organization (WHO) Short Summary*, 2017.

K. Weyer, E. Tacconelli, N. Magrini, Co-ordinating Group, **Prioritization of pathogens to guide discovery, research and development of new antibiotics for drug-resistant bacterial infections, including tuberculosis**, WHO/EMP/IAU/2017.12, 2017

6 Imprints

Johannes Siebert: newsletter@mcdmsociety.org, johannes.siebert@mci.edu

Lucie Galand: lucie.galand@dauphine.fr

Sandra Huber: sandra-huber@hsu-hh.de

Jana Krejčí: jana.krejci@unitn.it

We are working on publishing the newsletter of the International Society on Multiple Criteria Decision Making two times a year. Usually the deadline for the January issue is January 10th and the issue is intended to be published “around January 20th”. Usually the deadline for the September issue is August 20th and the issue is intended to be published “at the beginning of September”. Contributions can be sent at any time to the editor (please see the address provided above).