

Report on the 15th International Conference on Operational Research KOI 2014 Osijek, Croatia

Marijana Zekic-Susac, marijana@efos.hr, Snjezana Pivac, spivac@efst.hr

This year the Croatian Operational Research Society (CRORS) organized its 15th International Conference on Operational Research KOI 2014 in Osijek, from September 24 to September 26, 2014. The conference was organized in collaboration with Faculty of Economics in Osijek and Department of Mathematics, University of Osijek. The program committee chair was professor Rudolf Scitovski and the organizing committee chair was professor Marijana Zekic-Susac. The KOI conference is a major event that has been organized by CRORS since 1991, and the number of participants at the conference is getting larger every year. KOI conferences have been successfully held so far in various cities of Croatia such as: Rab, Rovinj, Trogir, Pula, Split, and Zagreb, but for the first time the conference was held in Osijek, in the Northern East part Croatia.

Comment [s1]: professor



Opening session of the KOI 2014 Conference



KOI 2014 Conference Venue – Faculty of Economics in Osijek

This year 209 authors from 31 countries submitted their abstracts for the conference. In all, 95 papers were presented in eight sections: Invited papers, OR Theory and Applications, Mathematical Programming, Multicriteria Decision Making, Quantitative Methods in Banking and Finance, Statistics and Econometrics, Machine Learning, Data Mining and Analytics, and Special Section in Honor of Luka Neralic. The scientific program of this conference included invited lectures by James J. Cochran (University of Alabama, USA), Goran Lesaja (Georgia Southern University, USA), Ali Emrouznejad (Aston University, UK), Janez Povh (Faculty of Novo Mesto, Slovenia), and Amir Nakib (Universite of Paris est Creteil, France).



Participants of the KOI 2014 conference in front of the Faculty of Economics in Osijek, Croatia

This year, on the occasion of 70th birthday of professor Luka Neralic, one of the founders and the first president of the Croatian Operational Research Society, CRORS organized a **Special section in honor of Luka Neralic**, dedicated to the areas of his research interest.

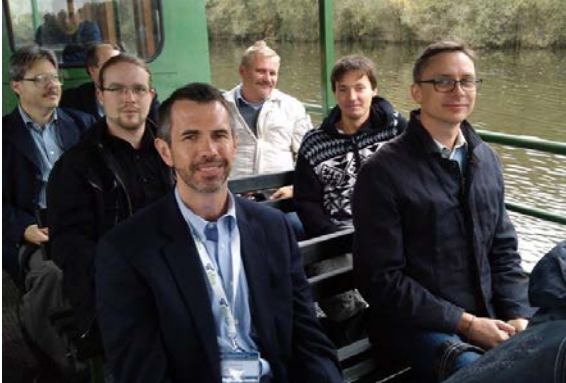


Born on October 16, 1943, Luka Neralic is one of the founders of the Croatian Operational Research Society and was its first president (from 1992 to 1996). He received his PhD from Faculty of Economics, University of Zagreb, Croatia, where he has worked since 1967. He has held a permanent position of Full Professor since 2002. For his special contribution to the development of the society and the area of operational research in Croatia and abroad, he received a CRORS Distinguished Service Award in 2013. He put long-term enthusiastic efforts in promoting operational research in the Croatian academic community by

developing courses, seminars, conferences, and postgraduate programs in operational research. He also contributed to the inclusion and reputation of the CRORS in international professional organizations EURO, IFORS, and INFORMS. In 2008 Luka Neralic received the Charter of Recognition for CRORS from Elise A. Del Rosario (IFORS President) in Sandton, South Africa. He has also established a close collaboration of CRORS with the Slovenian Society of Informatics' Section on Operations Research (SOR). His areas of research interest include Data Envelopment Analysis (DEA), linear programming, parametric programming, multi-objective programming, sensitivity, and stability analysis. He has published three books, four chapters in books, and numerous papers in journals and conference proceedings, professional papers, and other publications. His papers are published in Journal of the Operational Research Society, International Journal of Statistics and Management Systems, Mathematical Communications, Mathematical Methods of Operations Research, Optimization, European Journal of Operational Research, and other journals. He was a visiting scholar at the University of Texas at Austin, Texas, has chaired many conferences in OR, and has received a number of research grants. He is a co-editor of the Central European Journal of Operations Research and an associate editor of the Data Envelopment Analysis Journal. He is also a member of INFORMS, CRORS, and the Croatian Mathematical Society.

Comment [s2]: numerous?

Comment [s3]: professional



KOI 2014 participants at the boat trip in Nature park "Kopacki rit", Croatia

The Special Section in Honor of Luka Neralic consisted of fifteen papers that were presented at the KOI 2014 conference. The authors in this special section were V. Charles, M. Khodabakhshi, S. Rashidi, M. Asgharian, L. Neralic, V. Boljuncic, Y. Li, H. Gao, L. Liang, W. Lu, L. Zadnik Stirn, J. Zerovnik, R. Sotirov, G. Lesaja, T. Peric, Z. Babic, S. Resic, R.E. Wendell, V. Cvetkoska, E. Naumovska, P. Fiala, J. Jablonsky, K. Kotarac, Z. Lukac, M. Gardijan, and T. Skrinjaric. S. Zlobec and V. Rupnik sent messages, while R. D. Banker, E. del Rosario, U. Leopold Wildburger, V. Cvetkoska, J. Skorin-Kapov, D. Skorin-Kapov, and R. E. Wendell sent videos devoted to L. Neralic's birthday.

Also, CRORS has established two awards that were given during the KOI conference, such as CRORS Best Young Researcher Paper Award (BYRPA) which was given to Tihana Skrinjaric from University of Zagreb, Faculty of Economics and Business, as well as CRORS Distinguished Service Award (DSA) which was given to professor Tihomir Hunjak (University of Zagreb, Faculty of Organization and Informatics Varazdin), a former president and one of the founders of CRORS.

In addition to high quality presentations, KOI 2014 participants also enjoyed social events such as a charming welcome reception at the boat-restaurant on the Drava river and the conference excursion to Nature park „Kopacki rit“ in Baranya, where they enjoyed a boat trip, good wines at old wine cellars and the traditional Slavonian dinner with folk music.

The abstracts of the papers presented at the conference were published in the "Book of abstracts – KOI 2014", and the full papers are sent for a double-blind review after the conference. Accepted papers will be published in the Croatian Operational Research Review journal which is indexed in Current Index to Statistics, EBSCO, EconLit, Inspec, Proquest, Mathematical Review, Zentrallblat fuer Mathematic, and other databases.

Comment [s4]: they

Comment [s5]: cellars

Teaching Effectiveness Colloquium (TEC) Croatia 2014

The **Teaching Effectiveness Colloquium (TEC) Croatia 2014** workshop was organized in conjunction with the KOI 2014 conference with the aim of enhancing the quality of teaching OR courses at the university level. The workshop was chaired by James J. Cochran from University of Alabama. In addition to Professor Cochran, the instructors of the TEC were also Jeffrey D. Camm and Michael J. Fry from University of Cincinnati, USA. A total of 68 participants attended the workshop; attendees were primarily young faculty members from various countries including Croatia, Slovenia, Czech Republic, Russia, Poland, and India as well as several other countries. The participants enjoyed the lectures on the following topics: **Modeling for Insights** (prof. Jeffrey D. Camm, University of Cincinnati, USA), **Excel-Based Tools for Teaching Analytics** (prof. Michael J. Fry, University of Cincinnati, USA),

Engaging and Re-Engaging Students with Active Learning (prof. James J. Cochran, University of Alabama, USA).

In his lecture professor Camm demonstrated how modeling can be used not only to create models, but to also gain insights into business problems and possible ways of solutions as well as to learn something new from alternative models of the same problems. Professor Fry presented a number of examples and provided hands-on tips on ways to teach students to effectively use the analytics tools provided as Excel add-ins, such as Solver and Risk Solver. Professor Cochran demonstrated interesting examples of ways to get the attention of students, make students active participants in the class, and enhance their understanding through active learning. The impressions of the participants were very good; they especially liked examples presented during the workshops, and several said they will definitely use these examples in their classroom. James J. Cochran, the chair of the TEC workshop emphasized: "The tools of operations research are tremendously relevant and useful in the modern world. It is increasingly important that we efficiently use resources, and this is what we can accomplish through the tools of operations research. OR researchers are constantly finding new and novel ways to apply the discipline in business, engineering, and even the sciences." The TEC has been previously organized by Professor Cochran and various colleagues in the USA, Uruguay, South Africa, Colombia, Kenya, India, Argentina, and Cameroon.



James J. Cochran talks about TEC Workshop at the Opening session of KOI 2014



Jeffrey D. Camm gives his lecture at TEC Croatia 2014



Michael J. Fry gives his lecture at TEC Croatia 2014

About the TEC Croatia 2014 instructors



Jeffrey D. Camm is the Head of the Department of Operations, Business Analytics, and Information Systems at University of Cincinnati, and Assistant Director of the Center for Business Analytics at the same university. He was a visiting professor at Dartmouth College and Stanford University. He earned his BS from Xavier University, Cincinnati, in Mathematics, Summa Cum Laude, 1980, and PhD in Management from Clemson University, Clemson, South Carolina 1984. He coauthored six books, and a number of research papers in relevant journals such as *Journal of Combinatorial Optimization*, *Interfaces*, *Management Science* and others. He received a number of awards, such as the 2006 INFORMS Prize for the Teaching of OR/MS Practice and others.



Michael J. Fry is an Associate Professor with Tenure at Department of Operations, Business Analytics & Information Systems, University of Cincinnati, as well as the Director of the Center for Business Analytics, University of Cincinnati. He earned M.S.E. in Industrial and Operations Engineering, University of Michigan in 1998, and a PhD degree in Industrial and Operations Engineering, University of Michigan in 2002. He is the author of four books, several book chapters, and has published a number of papers in relevant journals such as *European Journal of Operational Research*, *Operations Research*, *Manufacturing & Service Operations Management*, and others.



James J. Cochran received an MS in Economics in 1984 and an M.B.A. in 1985 from Wright State University. He then earned a Ph.D. in Quantitative Analysis from the University of Cincinnati in 1997. Currently he is a Professor of Applied Statistics and the Rogers-Spivey Faculty Fellow at the Alabama University in the Department of Information Systems, Statistics, and Management Science. He has previously been on the faculty at Louisiana Tech University, Wright State University, Drexel University, the University of Cincinnati, and Miami University. His publications include a number of papers in journals, five books, and a number of other publications in the areas of OR, statistics, and analytics. He is the Editor in Chief of the *Wiley Encyclopedia of Operations Research and Management Science*, Vol 8, Wiley-Blackwell, 2011, and was the Editor in Chief of the *INFORMS Transactions on Education* from 2007-2012. He received a number of awards, such as INFORMS Prize for the 2008 Teaching of OR/MS Practice and the 2010 Mu Sigma Rho Statistical Education Award. In 2006 he was elected to the International Statistics Institute, in 2011 he was named a Fellow of the American Statistical Association, and in 2014 he received the ASA's Founders Award.

Web page of the KOI 2014 conference: <http://www.hdoi.hr/koi2014>
Web page of the TEC Croatia 2014 workshop: <http://www.hdoi.hr/tec>
Web page of the Croatian Operational Research Society: <http://www.hdoi.hr>

