



## INSIDE THIS ISSUE

- 1 ICS Conference a Smashing Success
- 1 COIN-OR Update
- 2 Message from the Editor and Chair
- 6 Member Profile:  
Harvey Greenberg



- 7 Member Profile:  
Elaine Chew



- 8 Amendment to ICS Bylaws
- 9 2004 ICS Prize Awards
- 9 2005 ICS Prize
- 10 ICS Sessions in New Orleans  
and Iceland

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*"COIN-OR's resources are available on demand, free of charge, and under an open-source license that allows you to use and build on the projects as you see fit."*

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## ICS Conference a Smashing Success

Over 220 participants attended the INFORMS Computing Society Conference in Annapolis MD, an all time record for this conference. The conference, held January 5—7, 2005, brought together researchers, practitioners, and vendors from far and wide, including the US, Canada, China, Germany, and several other countries. Kudos to conference chairs Bruce Golden, S. (Raghu) Raghavan, and Edward Wasil, who put in a tremendous amount of work to make this meeting a resounding success.

*ICS Conference continued on page 5*



*Rapt audience at the ICS Conference luncheon*

## COIN-OR Update

Matthew Saltzman, Clemson University, [mjs@ces.clemson.edu](mailto:mjs@ces.clemson.edu)

Ted Ralphs, Lehigh University, [tkralphs@lehigh.edu](mailto:tkralphs@lehigh.edu)

Robin Lougee-Heimer, IBM TJ Watson Research Ctr., [robinlh@us.ibm.com](mailto:robinlh@us.ibm.com)

### What is COIN-OR?

The **Computational Infrastructure for Operations Research** (COIN-OR) project began as a loose consortium of researchers and practitioners from industry, government, and academia whose common goal was to promote the development and use of open-source software for operations research. The project was initiated by IBM Research in 2000, and made its public debut at the 2000 International Symposium on Mathematical Programming in Atlanta. Since then, the initiative has gained substantial momentum. In March, 2004, the project reached its goal of becoming an independent, self-sustaining entity when the COIN-OR Foundation, a Maryland-based nonprofit educational corporation, was formed to

*COIN-OR continued on page 3*

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## MESSAGE FROM THE EDITOR AND CHAIR

*Ariela Sofer*  
*George Mason University*  
*[asofer@gmu.edu](mailto:asofer@gmu.edu)*

It's been a lengthy delivery but at long last, the Fall 04 volume is out. And just in the nick of time, before the onset of spring. The good news is that the Spring 05 volume is well on its way and we will be back on track. We also have a new look to the newsletter.

Speaking of good news, we have lots of good news to report. The ICS Conference in Annapolis was a huge success, with over 220 attendees and great talks and sessions. As a result we have also added many new members. To top it all, our coffers got a healthy injection of new money (thus ensuring an ample supply of wine and cheese for our future ICS Business meetings). A hearty round of applause to conference organizers Bruce Golden, "Raghu" Raghavan, and Ed Wasil for their outstanding contributions to the Society.

You can find out more about the exciting activities at the conference in the report on the conference in this issue. Also in this volume you will find an update on COIN-OR – an open-source repository of O.R. software, models and data.

As you probably know, ICS sponsors a flagship journal – the INFORMS Journal of Computing. JOC has recently focused on two emerging areas of operations research: computational biology and computational music. While seemingly disparate, both biology and music are undergoing radical developments due to a massive explosion of information and data. New models and algorithms are required to better understand the complex underlying structures, offering both challenges and opportunities to the operations research community. Some of the exciting developments have been captured in a special issue of JOC on Computational Molecular Biology and Bioinformatics, edited by Harvey Greenberg, and in an upcoming special cluster on Computation in Music, edited by Elaine Chew. Harvey is a long time member of ICS, and a founding member of its predecessor organization, the Computer Science Technical Section (CSTS); Elaine is a relatively new member of the Society. Both, however, are working at the forefront of the interface of OR and computing. You can find out more about them in our Member Profile section.

Preparations for the INFORMS Meeting in New Orleans are in full swing.

*Message from Chair continued on page 5*

## COIN-OR, continued from Page 1

manage the project. The founders were Matthew Saltzman (Clemson University), Lou Hafer (Simon Fraser University), Brady Hunsaker (University of Pittsburgh), and Ted Ralphs (Lehigh University).



*Matt Saltzman (left)  
and Ted Ralphs (below)*



### The COIN-OR Foundation

The objectives of the COIN-OR Foundation are to:

- Accelerate the development and deployment of O.R. technology.
- Maintain an open-source repository of O.R. software, models and data---available to all free of charge and on-demand.
- Provide a forum for the distribution and peer review of O.R. software.
- Nurture the development and maintenance of technical standards.
- Foster collaboration within the O.R. community.
- Promote the use of O.R. technology.

The Foundation is run by a Strategic Leadership Board (SLB). The current members of the SLB are Saltzman (President), Hunsaker (Secretary), Ted Ralphs (Treasurer), Hafer, Robin Lougee-Heimer (IBM Research), Randy Kiefer (INFORMS), and Bjarni Kristjansson (Maximal Software). The composition of the board represents a balance between academia and industry and includes a non-member adviser. The technical aspects of the Foundation's work are overseen by a Technical Leadership Council (TLC). The current TLC members are Laci Ladányi (Chair, IBM Research), J.P. Fasano (IBM Research), Jeff Linderoth (Lehigh University), Leo Lopes (University of Arizona), and Andreas Wächter (IBM Research). The boards held their first public meetings at the INFORMS Annual Meeting in Denver.

### New Web Site

Starting in October 2004, INFORMS became the new host of the Foundation's digital infrastructure. The Foundation now hosts a repository of 16 software packages (with more on the way), as well as FAQs, documentation, mailing lists, and other information related to the project. The move completed the transition to independence and will enable the project to provide a more sophisticated set of project management tools, including Subversion (a repository and version-tracking system similar to CVS but with a number of important improvements), discussion boards, mailing lists, bug trackers, to-do lists, and other tools based on the GForge collaborative development system. GForge deployment is in progress. Visit <http://list.coin-or.org> to join our announcement list (low traffic), our general discussion list (moderate traffic), or any of several special-topic lists.

### Current COIN-OR Components

The repository currently contains the following components:

- Branch-Cut-Price Framework, a frame-work for developing parallel branch-cut-price algorithms for mixed-integer linear programs.
- COIN Branch and Cut, an extensible LP-based branch-and-cut solver (new name for the SBB Simple Branch and Bound component);
- COIN LP, a linear program solver;
- The Cut Generation Library, a collection of algorithms to generate cutting planes;
- Derivative-Free Optimization, a package for solving general non-linear optimization problems when derivatives are unavailable;
- IPOPT, an interior point algorithm for general large-scale non-linear optimization;
- Multifario, a continuation method for computing implicitly defined manifolds;
- The Non-Linear Program Application Programming Interface, subroutine interface for defining and solving non-linear programming problems;
- The Open Solver Interface, a uniform subroutine interface for callable solver libraries;
- Open Tabu Search, a framework for creating tabu search algorithms;

## COIN-OR, continued from Page 3

- The Stochastic Modeling Interface, for optimization under uncertainty;
- SYMPHONY, a parallel branch-cut-price framework and MIP solver;
- The Volume Algorithm, a generalization of the subgradient method, which produces approximate primal solutions as well as dual solutions.

### New Projects

Several new projects are under development, including:

- The Abstract Library for Parallel Search (ALPS), Branch-Cut-Price Software (BiCePS), and BiCePS Linear Integer Solver (BLIS), a new framework for creating high-performance optimization algorithms based on parallel tree search and Lagrangian duality, including an LP-based MIP solver.
- A new release of the Open Solver Interface component, featuring support for a broader range of problem types and algorithms.
- Support Vector Machine-Quadratic Programming (SVM-QP), a large-scale quadratic programming solver designed for machine learning applications.

### Activities

#### Recent Activities

Many new developments over the past year were reviewed in October's *OR/MS Today* (<http://lionhrtpub.com/orms/orms-10-04/frcoin.html>.)

#### COIN-OR at ICS '05

COIN-OR projects figured in a number of presentations at the Annapolis ICS conference. A complete list can be found at <http://www.coin-or.org/ics05.html>.

### Upcoming Conferences

There will be a cluster on *Computational Software Development* at IFORS 2005 in Honolulu. COIN-OR and other open-source developers are invited to present their research. Contact Robin Lougee-Heimer ([robinlh@us.ibm.com](mailto:robinlh@us.ibm.com)).

ICS is sponsoring a mini-cluster on open source at the 2005 INFORMS Annual Meeting in New Orleans. Developers interested in presenting in this mini-cluster should contact Ted Ralphs ([tkralphs@lehigh.edu](mailto:tkralphs@lehigh.edu)).

The New Orleans meeting will include a tutorial on the COIN Branch and Cut component of the COIN-OR library. The annual meeting of the COIN-OR membership will also be held in conjunction with the INFORMS annual meeting.

### Getting Involved

The easiest way to get involved is to become a member of the Foundation. For a nominal contribution, you can support the Foundations activities and receive the Foundations newsletter. Another way to participate is by making your resources (data, models, source code, interfaces, etc.) available to the community at COIN-OR. You can receive recognition, tap into potential collaborators, and establish a foundation for others to build on. By using the resources at COIN-OR and giving us feedback on your experience, you can help us build better tools and make the most effective use of our volunteer developers and contributors. COIN-OR's resources are available on demand, free of charge, and under an open-source license that allows you to use and build on the projects as you see fit. This makes it easy for O.R. professionals to collaborate with others and accelerates the pace of innovation. COIN-OR welcomes new members and new open-source projects, so please let us know if you have something to contribute. For more information on hosting your project at COIN-OR, please visit <http://www.coin-or.org>.

Picture this:

*Scene from the ICS  
conference luncheon*



## ICS Conference, continued from Page 1



*Bill Pulleyblank*

The Conference was kicked off by a plenary talk by William Pulleyblank of IBM, who gave a fascinating in-sight into the design and capabilities of Blue Gene, the world's most powerful super-computing system. This massively scalable system is built with a revolutionary architecture that affords dramatic reductions in power consumption, cost and space requirements, and a peak processing power in the teraflops. As Director of IBM's Deep Computing Institute and the executive overseeing the Blue Gene project, Pulleyblank gave conference attendees a first-hand overview of the design challenges facing the developers of Blue Gene, and the opportunities that the supercomputer will present for optimization and business analytics.

The second day of the conference featured Erhan Erkut in a rousing luncheon presentation on "Using Technology to Facilitate Learning." In the past ten years Erhan has been intensively using technology to improve the delivery of introductory courses for business students at the University of Alberta. In his entertaining yet informative style, Erhan gave the audience useful ideas on how to use technology to encourage active learning and create a rich learning environment.



*Erhan Erkut*

Other highlights of the conference included two sessions in memory of Carl Harris, organized by Saul Gass and Don Gross. Carl, who was the 39<sup>th</sup> President of ORSA, was among the founders of ICS and the INFORMS Journal on Computing, and a leading advocate of the Society. The sessions covered a variety of topics in computing in operations research, areas that were near and dear to Carl.

Overall the conference featured over 170 talks in six parallel sessions focusing on the conference theme of "The Next Wave in Computing, Optimization, and Decision Technologies." Presentation tracks addressed a wide mix of disciplines and interests, ranging from applications in supply chain, environment, economics, transportation, biomedicine and telecommunications, to music computation, and from AI, heuristics, modeling, and optimization, to modeling languages and software. The program also featured a tutorial by Ravi Ahuja and Jim Orlin on "Very Large Neighborhood Search," as well as other mini-tutorials.

The choice of venue was particularly successful. Founded in 1649, Annapolis offers a delightful combination of history attractions, great restaurants, colonial-era taverns, and old-world pubs within a short walk of the conference hotel. Scattered tables in the hotel lobby area provided attendees a comfortable venue for networking or even working with colleagues. The hotel bar lounge offered die-hard ICSer's further opportunity for relaxation and conversation with old or new-found colleagues.

Many thanks to all those who made this conference a resounding success. Special thanks go to the session organizers and chairs, the authors, speakers and referees who contributed to the high quality of the conference. We are indebted to the INFORMS Business Office and in particular to Mary Magrogan Director of Subdivision Services for their strong support and contributions. Finally, our heartfelt appreciation goes to organizers Bruce, Raghu and Ed, who made this successful event possible, and to Stacy Calo the Conference Administrative Coordinator for keeping everything in check.

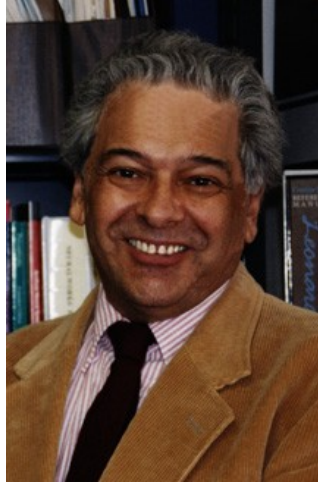
Reported by Ariela Sofer



*ICS luminaries at the conference luncheon. From left to right: Ravi Ahuja (facing back), Bruce Golden, Erhan Erkut, Ed Wasil, Raghu Raghavan, and Stacy Calo.*

## MEMBER PROFILE: HARVEY J. GREENBERG

Harvey Greenberg was a founding member and second Chairman of the ORSA Special Interest Group on Computer Science, which became the ORSA Computer Science Technical Section (CSTS) under his second chairmanship in 1984/85, and this became ICS. He organized the first CSTS symposium, *The Impacts of Microcomputers on Operations Research*, held in Denver in 1985. He is the founding editor of the *INFORMS Journal on Computing* (1987-92), and last year he edited a special JoC issue on *Computational Molecular Biology/Bioinformatics* (16:4), with the goal of highlighting the exciting opportunities for OR to contribute to the “revolution” in medical biology.



Harvey has devoted his career to the development of the interfaces between operations research and computer science. His services with INFORMS and other organizations reflect innovation and energy. He was among the first to develop a web page full of useful OR materials, including his well-known *Mathematical Programming Glossary*. Most recently, he introduced the *INFORMS TutORials Series*, for which he is the first editor. Harvey is indeed a man at the forefront.

The same is true for his research. During the past 4½ years, following an inspiring visit to Sandia National Laboratories, Harvey developed interests in computational molecular biology. He has since become a driving force in this area. In joint work with Bernhard Palsson (UC San Diego) and his students he has used constraint-based modeling to determine the size and shape of the steady-state flux space in a metabolic network system. He has also used multiple objectives for understanding reconstruction and functionality of the human mitochondrial network. One of his current projects is to apply OR modeling to understand how stress affects the immune system in pregnant women. He has also co-authored a substantive survey (JoC 16:3), showing the many opportunities for combinatorial optimization in computational biology. He recently organized a forum in Denver, attended by about 35 people in operations research who are, or want to be, engaged in this field. Harvey has helped to identify the challenges and how one can quickly obtain the requisite knowledge of science.

His contributions include teaching and curriculum design. Just after receiving his Ph.D. from The Johns Hopkins University in 1968, Harvey joined the CS/OR faculty at

SMU and developed many new courses, as a leader in their development of graduate programs. In particular, he taught the first course in *Mathematical Programming Systems*, which was then very new (and which he described in the ACM SIGMAP Newsletter). During that formative period, Harvey learned a great deal from Jim Kalan and later from Eli Hellerman, Bill Orchard-Hays, Dennis Rarick, and John Tomlin.

In recent years Harvey has integrated his energies in education, research, and service toward a common goal of getting people involved with applying operations research to the life sciences. He founded the Center for Computational Biology at the University of Colorado, and instituted a Certificate in Computational Biology at the graduate level. He designed new courses in mathematics and computer science for this program, and he helped to create bridge courses, *Biology for Computer Scientists, Engineers, and Mathematicians* and *Computer Science for Bioscientists*. He coordinated this with his design of M.S. and Ph.D. options in existing degree programs in Applied Mathematics and in Computer Science.

Harvey believes that the history of OR and CS are purposefully intertwined, and that our fields have naturally benefited from this. He also feels that OR has lost some of the areas that were clearly part of OR when he was starting decades ago – one example is simulation, but even subjects like mathematical programming are identified on their own, rather than as part of OR. This loss of identity could hurt the growth that an OR view has brought to the table, notably an interdisciplinary approach to problem-solving. Harvey believes that this is our greatest asset, and that INFORMS needs to pay attention to what is happening and how we can best contribute to the evolution of these interfaces.



## MEMBER PROFILE: ELAINE CHEW

Elaine Chew is an Assistant Professor in the Epstein Department of Industrial and Systems Engineering at the University of Southern California Viterbi School of Engineering, where she is also a key investigator at the Integrated Media Systems Center. She received a B.A.S. in mathematical and computational sciences, and music at Stanford University, and S.M. and Ph.D. degrees in Operations Research from the Massachusetts Institute of Technology. Between Cambridge and Los Angeles, she spent a year at Lehigh University as a Visiting Assistant Professor.

Born in Buffalo, New York, Elaine grew up on a university campus in Singapore where her father, Chew Kim Lin, was founding president of the Operational Research Society of Singapore and founding editor of the Asia-Pacific Journal of Operations Research. As a second-generation operations researcher, she learnt from an early age that nothing was sacrosanct where mathematical modeling was concerned; everything from Rubik's cube to organizing furniture in a new home was approached analytically with mathematical equations. Upon her father's advice she opted for mathematical and computational sciences (instead of pure mathematics) at Stanford, an interdisciplinary degree between the departments of mathematics, statistics, computer science and operations research. As an undergraduate, she did a summer research project with George Dantzig, where she implemented and tested an interior point method proposed by Von Neumann.

Thus, equipped with some OR knowledge and computational experience, she enrolled at MIT's Operations Research Center on an Office of Naval Research graduate fellowship. The fellowship gave her the opportunity to explore projects in a variety of different areas, namely, mathematical programming, and the then emerging fields of

computational biology and computational finance. However, it was while she was teaching pianolab, the basic piano skills requirement for MIT students enrolled in music theory and composition courses, as an Affiliated Artist of Music and Theater Arts that it dawned on her that

it was quite natural and reasonable to describe and explain music in mathematical terms and that she might be able to make a highly enjoyable and fulfilling career of it. Her Ph.D. thesis completed under the supervision of Jeanne Bamberger, with OR co-advisor Georgia Perakis, proposed a mathematical model for tonality, the system of relations that serves as a framework for our hearing of tonal music, and computational methods for abstracting tonal structures. Her Spiral Array model and the algorithms introduced an "interior point" approach to the problem of key finding in computational music cognition.

A year after graduation, she was recruited by the University of Southern California's Epstein Department of Industrial and Systems Engineering to forge a link between the department and the Integrated Media Systems Center. There, her foray into mathematical modeling of music flourished and expanded to include collaborative projects in music information retrieval, distributed immersive performance and musical expression synthesis. She also developed a course on computational methods for music perception and cognition, the contents of which she has put online in the spirit of MIT's OpenCourseWare, for which she was one of the early contributors while working for Dick Larson as a research assistant.



*Elaine Chew (on left) in Rehearsal with Flying Sonics*

Apart from creating computer models to analyze and manipulate music, Elaine also performs frequently as an articulate proponent of post-tonal music. Her performances can be heard on NPR and WGBH's *Art of the States* program. Her musical adventures include collaborations with colleagues Dennis Thurmond and Chris Kyriakakis at USC to create *Flying Sonics* – a tale of immersive audio and diverse instruments, a concert integrating live performers, electro-acoustic compositions and state-of-the-art immersive audio, and with long-time violinist friend Julia Ogrydziak to present *Dark Blue Sky Dream*, a multimedia concert at the Ask Jeeves Planetarium in Oakland's Chabot Space and Science Center.

In 2004, she was honored with an NSF Career award for her proposal on performer-centered approaches to computer-assisted music making, in which she stated that her purpose was “to establish engineering music research as a core academic discipline” and to “promote the use of computational research in music processing by humans as a basis for creating and improving human-computer interaction in computer music systems.” She has presented research papers at international conferences on Music Information Retrieval, Music and Artificial Intelligence, Sound and Music Computing, and Computer Music Modeling and Retrieval, and at the INFORMS Computing Society meetings; she has published in Springer Verlag’s Lecture Notes in Computer Science and Operations Research / Computer Science Interfaces Series and has forthcoming publications in the Computer Music Journal and Computing in Musicology. She has organized special clusters at the INFORMS and the INFORMS Computing Society meetings, and is currently guest editing a special cluster of papers on music and computation for the INFORMS Journal on Computing. She has been a member of INFORMS since 1992.



*Participants of the special sessions on Music, Computation and AI at the ICS Conference. From the left: Ozgur Izmirlı, Judy Franklin, Anja Volk, Chris Raphael, Elaine Chew, and Ching-Hua Chuan*

## AMENDMENTS TO ICS BYLAWS APPROVED

At the ICS Business Meeting in Annapolis (January 5, 05) the membership approved changes to the ICS Bylaws. The resolution and its rationale are given below.

### Be it resolved that

1. The first sentence of Article IV Section 2 (Terms of Office) be changed from  
“*All terms begin at the conclusion of the fall ICS Business meeting.*”  
to  
“*All terms begin at the start of the calendar year following the election.*”
2. The last two sentences of Article IV Section 4 (voting) be changed from  
“*Ties in any of these elections are broken by a vote taken at the spring ICS Business Meeting. The election process must be completed before this meeting takes place.*”  
to  
“*The election process must be completed within 6 weeks following the Fall Business Meeting. Ties in any of these elections are broken by a run-off vote to be completed within 6 weeks of these elections.*”
3. Note 1 of Article 4 be deleted.

Note: The existing ICS Bylaws can be found at [http://mason.gmu.edu/~asofer/ics/bylaws\\_frame.html](http://mason.gmu.edu/~asofer/ics/bylaws_frame.html)

### Rationale for Amendments

Section 3 of Article IV (Nominations) stipulates that “...The Chair shall also take nominations from the floor during the ICS fall Business Meeting...” Section 5 of Article IV (Election Process) stipulates that “Ballots shall be issued by one of the following media: a) letter mail ballot; b) electronic mail; c) a combination of letter mail and electronic mail ballots.” Combined, these stipulations imply that the balloting cannot be completed by the conclusion of the fall ICS Business meeting, and hence terms of elected officers cannot begin at that time.

In addition the existing mechanism for breaking ties by a vote at the spring ICS Business Meeting is not practical since the Society no longer holds Business Meetings **each** spring.

The proposed amendments (1) and (2) guarantee that balloting will occur in a timely fashion after the Fall Business meeting, and provides a more practical timetable for the assumption of term by newly elected officers. The amendment also proposes a valid mechanism for breaking ties in elections.

Note 1 of Article 4 gives provisions for the Terms of Office for the years 2000 and 2001. These are no longer relevant hence the Note may be deleted as proposed in (3)

## SAHINIDIS, TAWARMALANI WIN 2004 ICS PRIZE

The 2004 ICS Prize was awarded to **Nikolaos V. Sahinidis and Mohit Tawarmalani** for their contributions to the field of Nonlinear global optimization summarized in their book *Convexification and Global Optimization in Continuous and Mixed-Integer Nonlinear Programming*, and embodied in the BARON software package

The award committee was chaired by Jonathan Eckstein, and included also David Gay, Lou Hafer, Terry Harrison, and John Hooker. In awarding the prize the committee gave the following citation:

The work embodied in this book and the BARON software package comprises a path-breaking advance in the theory and computational practice of optimizing nonconvex nonlinear models. Mathematical programming methods have traditionally only been able to compute local optima of such models, and practitioners seeking global optima had to resort to a variety of heuristic and ad hoc techniques. This work, drawing on original contributions of the authors and the work of many other researchers, addresses the computation of provably global optima by bringing together a variety of mathematical programming techniques ranging from branch and bound to convex analysis. It thus unites a number of traditionally separate research areas in creating an enabling technology for new application fields. The book also includes interesting engineering applications, with computational results giving persuasive proof of the work's usefulness. Given the challenging nature of the models it addresses, the success of BARON is remarkable. Work of this nature opens up new applications for the future of mathematical programming.

Congratulations Nick and Mohit!!



*Terry Harrison (center) presenting Award to Nick Sahinidis (left) and Mohit Tawarmalani at the ICS Business Meeting in Denver*

## CALL FOR NOMINATIONS: 2005 ICS PRIZE

Nomination Deadline: June 15, 2005

Nominations are invited for the INFORMS Computing Society (ICS) Prize for the best English-language paper or book on the Operations Research/Computer Science interface. The objectives of the prize are to:

- Promote the development of high-quality work advancing the state of the art in the operations research/computer science interface,
- Publicize and reward the contributions of those authors/researchers who have advanced the state of the art, and
- Increase the visibility of excellent work in the field.

To be eligible, a nominated work must be:

- Published in the open literature,
- Pertinent to the operations research/computer science interface, and
- Written in English.

The prize committee for 2005 is chaired by Robert Fourer. This prize will be awarded November 14, 2005, at the INFORMS Fall Meeting in New Orleans. The award is accompanied by a certificate and a \$1,000 honorarium.

Nominations must include the title, author or authors, bibliographic information appropriate to the form of publication, and a copy of the nominated work. Electronic nominations, with the nominated work included as an attached file, are encouraged.

### Contact Information:

Professor Robert Fourer

Department of Industrial Engineering and Management  
Science  
Northwestern University  
2145 Sheridan Road Room C234  
Evanston, IL 60208-3119, USA  
Phone: (847) 491-3151  
Fax: (847) 467-1828  
Email : 4er@iems.northwestern.edu

For further information regarding the INFORMS Computing Society Prize, see the ICS home page at:  
<http://www.informs.org/ics>

## ICS SESSIONS FOR INFORMS NEW-ORLEANS MEETING

INFORMS ANNUAL MEETING  
NEW ORLEANS  
NOVEMBER 13-16, 2005

John Chinneck, Carleton University, [chinneck@sce.carleton.ca](mailto:chinneck@sce.carleton.ca)



I am looking forward to an interesting and lively set of ICS-sponsored sessions for the INFORMS Annual Meeting in New Orleans this coming November 13-16, 2005. We need your input to make this a success: please contact me if you would like to organize a session of 3-5 papers on an ICS-relevant topic.

Also get in touch if you have an ICS-relevant paper, or a couple of papers but not enough for a session. I will see if I can group such papers into sessions by topic.

I would also like to raise the profile of some of the popular themes within ICS by organizing multiple sessions into mini-tracks under the ICS umbrella. Let me know if you would like to organize a mini-track of several sessions on a larger theme.

More information on the conference is available online at <http://www.informs.org/Conf/NO2005/>

I'll look forward to hearing from you soon!



## ICS SESSIONS FOR EURO XXI IN ICELAND JULY 2-5, 2006



Euro XXI will be held at the University of Iceland in Reykjavik. Iceland is home to tremendous icecaps, glaciers, spouting geysers, volcanoes (hopefully dormant), raging rivers, a multitude of birds, cavorting whales just offshore and many other surprises. ICS will be sponsoring a cluster of sessions at the conference, organized by Bjarni Kirstjansson. Suggestions for topics of invited sessions and proposals of sessions are welcome. Contact Bjarni at [bjarni@maximalsoftware.com](mailto:bjarni@maximalsoftware.com).

More information on the conference is available at <http://www.euro2006.org/>



### Message from Chair, continued from Page 1

John Chinneck has already lined up an intriguing set of sessions but there are still openings for talks or sessions dealing with the many aspects of OR and computing. See John's announcement above.

I would like to extend a warm welcome to our two new officers, Lou Hafer and Nick Sahinidis. Lou and Nick are replacing Brian Borchers and Robert Fourer, who have completed their term. Thank you Brian and Bob for your service and your many contributions to the Society!

Lastly, I would like to thank the membership for making ICS a vibrant society, and extend a special welcome to all our new members. I encourage you to get involved in the society activities!

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