



NEWSLETTER

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2010 Congress Explores OR Solutions to Emerging Challenges

Everything is set for the November 5 ORSP Fourth National Conference— this was announced by Congress Chair Dr. Iris Martinez as she gave details of the program which will consist of a morning plenary and afternoon parallel paper presentations. Three plenary speakers have confirmed their attendance. Dr. Cielito Habito, Director of the Ateneo Center for Economic Research and Development, will speak on the use of Mathematics to assess issues such as national competitiveness. Dr. Fidel Nemenzo, President of the Southeast Asian Mathematical Society and the Mathematical Society of the Philippines and Professor of the Department of Mathematics of UP Diliman will touch on timely concerns about information security and integrity, particularly on how

Mathematics can be used as a tool for these. A panel that seeks to address how the applications of Operations Research can be related to emerging challenges will feature industry, government and academe discussants. Jaime “Bing” del Rosario, former President and Country Managing Partner of Accenture Philippines, will chair this panel.

All these sessions will tackle the theme of how OR has and can *Provide Solutions to Emerging Challenges*. Participants get the opportunity to discuss and share ideas as to where and how OR can provide innovative solutions to existing and new problems brought about by the changing political landscape, growing social concerns, emerging industries and recent business trends.

The conference will be held in the heart

of an “emerging” business district in Quezon City, Eastwood Cyberpark.

Venue is the newly-opened Richmonde Hotel. Slots are limited and will be on a first-come, first-served basis. Accepted abstracts of registered authors will be published in the publication of the National ORSP

Conference with ISSN 2094-6031 . ♦



Congress Chair
Martinez



Habito



Nemenzo



Del Rosario

TIP Hosts ORSP Technical Forum



Dante Garcia

Rex Briones

Dhesirey Beryl Sio

The Technological Institute of the Philippines (TIP) hosted the ORSP Technical Forum on “OR: Diverse Tools for Wide Ranging Applications” last July 3. In her opening remarks, the President of TIP, Dr. Elizabeth Q. Ahoz, warmly welcomed the 400 participants who were ushered in by TIP students from the main gate to Seminar Rooms A/B. Three guest speakers were on hand to provide experiences on the use of different OR tools for a variety of applications. Dante Garcia of the University of Sto. Tomas Graduate School talked about “Data Envelopment Analysis:

The Philippine Experience”; Rex R. Briones of the San Miguel Corporation discussed

“*Application of Mathematical Programming in San Miguel Corporation*” and Dhesirey Beryl K. Sio, a graduate student from De La Salle University-Manila focused on “*The Use of Discrete Event Simulation in Designing Kanban Systems for High Volume Manufacturing.*”

TIP faculty member and ORSP Board Director Co-Chairing the Student Affairs Committee, Jaypy Tenerife, mobilized the entire TIP community for the event. All participants commented on

the orderly and systematic registration, snack distribution, and gathering feedback at the end of the sessions. Grateful recipients of the memorable brand of TIP hospitality are the ORSP Board members and participants from San Miguel Corporation, Ginebra San Miguel, Social Security System, Adamson University, Asia Pacific College, Ateneo de Manila University, Colegio De San Juan De Letran, De La Salle University-Dasmariñas, De La Salle University-Lipa, De La Salle University-Manila, Mapua Institute of Technology, San Sebastian College-Recoletos de Cavite, St. Dominic College of Asia, Tarlac State University, TIP Manila, UP Diliman, UP Los Baños, University of Sto. Tomas and Wesleyan University. ♦



TIP team with ORSP Board: all smiles after the successful forum!

2009 National Conference:

Confab Paves the Way for an Annual National Meet



The organizers: Beng Hui, Loma, Tenerife, Robielos, del Rosario, Tan, de Guzman U, Miranda and Domingo

The Operations Research Society of the Philippines held its 3rd national conference at the Dusit Thani Hotel, Makati City Metro Manila on November 13, 2009. With the theme “OR: Paving the Way to Recovery”, the whole-day conference brought together a total of 210 OR practitioners, academicians, post baccalaureate and undergraduate students who explored the finest gifts that Operations Research can offer in times of great challenges, such as thriving in a season of natural calamities like Typhoon *Onboy*.

An hour-long session on the Art of OR teaching was dedicated to OR teachers before the opening ceremonies and plenary. Dr. Leonardo Liongson delivered the opening plenary talk entitled “*Dam Operations and its Effects on Environment and Community*”. Dr. Benito L. Teehankee graced the closing plenary session with his discussion on “*The Analytic Hierarchy Process: Capturing the Quantitative and Qualitative Criteria for Balanced Decision-Making*.” All

41 papers were scheduled in parallel tracks grouped into these eight themes: Theory and Applications of Developmental Analysis, Supply Chain Management, Optimizing the Schedule, Operations Research in Human Factors and Medical Applications, Mathematical Modeling and Environment, Operations Research in Education, OR Tools for Strategy and System Dynamics. Also featured in the parallel sessions are junior OR analysts who shared their experiences as “newbies” in the workplace. OR faculty members also shared their experiences in using technology for teaching OR. Also featured were tutorials and demonstrations on the use of OR software for industry applications. The conference organizing committee was chaired by Rex Aurelius Robielos. IBM, San Miguel Corporation, Zuellig Pharma and Philamlife were the congress sponsors. The event was capped by an hour of fellowship over cocktails and games. The success of the event paved the way for the decision to hold the national conference on an annual basis. ♦



Liongson receives token from ORSP President

Teehankee delivers closing plenary

ORSP Student Chapters Hold Annual Congress

The Operations Research Society of the Philippines Federation of Student Chapters and affiliates held its much-awaited annual Student Congress last March 7 at the Leong Hall Auditorium of the Ateneo De Manila University. With the theme “*Raising the Saddle Point*”, the event was opened by Prof. Dennis Beng Hui of De La Salle University. His inspirational talk used the saddle point as a metaphorical tool to draw out courage that spells a lot of difference.

Subgame: (The Game of Substance!) was featured for the first time in the history of the congress. It is an anything-goes talent competition that highlighted the varied competencies of OR,

industrial and management engineering students of the country. The first prize was awarded to the performers from the University of Sto. Tomas.

A regular segment of the annual student congress is the student paper competition. Four research papers were presented. No winner was declared.

The OR Quiz had the judges on their toes, with a lot of questions and protests lodged by the contestants. Questions for the OR Quiz were prepared by Francis Miranda and Edwin Loma, **UP Dili-man, Ateneo de Manila University and De La Salle University** bagged the gold, silver and bronze medals, respectively.

President's Corner by Alleli Domingo

We do have a role to play in nation-building.

The Asian Institute of Management (AIM) Policy Center launched a yearly policy forum aimed at engaging key leaders of the community to explore ways to promote Philippine development. ORSP was invited to this year's forum, which was held at the SMX Convention Center last July 16. Forum theme was “State of Philippine Competitiveness 2010: Competing in a Changing Climate”. Discussions revolved around competitiveness issues and recommendations to guide legislative agenda.

AIM President Dr. Edilberto de Jesús, in his talk about the development approach to competitiveness, emphasized that while competitiveness implies elements of productivity, efficiency and profitability, it is not an end by itself, but rather, a tool for achieving targets. Competitiveness is a powerful means to raise living standards and increase social welfare.

Productivity, efficiency and profitability are concerns that are addressed by operations research. Of all the competitiveness factors, the rankings revealed that it is infrastructure that has seriously deteriorated. Among the crucial elements of infrastructure are education, scientific and technological infrastructure which are vital to all the highly competitive countries.

At this time when the Philippines is lagging behind other Asian economies in the competitiveness rankings, ORSP has a role to play. Our technical forum series and national conferences contribute to an increased awareness level on the applicability of OR tools in various endeavors. Let us find ways to help formulate new strategies to make science and technology work to improve the country's competitiveness. ♦

For lunch, the host student chapter from Ateneo designed a cluster-based food distribution, successfully shortening the time needed to serve hundreds of participants. Three new student chapters joined the Federation congress for the first time, namely the Asia Pacific College, De La Salle University-Dasmariñas, and St. Dominic College. ♦

Of Emeralds, Blue Pearls and Amber *by Elise del Rosario*

In the course of my travels for OR conferences in the past year, the emeralds of India, the blue pearls of New Zealand, and the amber of Lithuania fascinated me no end. Their rich radiance, however, paled in comparison to the wealth of wisdom I imbibed from all the OR people I met, and from taking in the uniqueness of all the places I visited.



APORS: with Tatsuo Oyama and Jonathan Caulkins

Jaipur, India, 8th Triennial Conference of Association of Asia Pacific Operational Research Societies (APORS), December 6-9, 2009: With the theme *Operations Research for Emerging Economies*, the conference was hosted by the OR Society of India and held at the campus of the Jaipuria Institute of Management. APORS is held every three years—the last one was organized by ORSP and held at the Dusit Hotel in 2006. As IFORS President, I helped light the ceremonial candle which was meant to bring the conference to an auspicious start. The inaugural session featured the IFORS Distinguished Lecture (IDL) by Jonathan Caulkins. A professor of OR and Public Policy at Carnegie Mellon, Caulkins specializes in mathematical modeling and systems analysis of social policy problems, particularly pertaining to drugs, crime, violence, and prevention. His talk, entitled *Providing a Scientific Basis for Managing Illegal Drug Problem* showed how OR provides tools for estimating the cost-effectiveness of different broad strategies for controlling drug use. I came next in the plenary, with my talk on *Operations Research: Delivering Results for Wide-Ranging Needs*. I drew from my experience the wide variety of problems that were successfully solved through the use of OR. Other plenary talks were: *In Search of a Country Specific Development Model for a Emerging Economy* (Subir Chowdhury), *Social Systems Analyses and OR* (Tatsuo Oyama), *Real Options and Capital Projects* (M. Rammohan Rao) and *Sustainable Development and OR Models*

(Subhash Datta).

A Teaching Effectiveness Workshop was conducted jointly by Jim Cochran, Tom Grossman, and Jill Hardin. The 36 sessions covered 180 papers, dealing mostly with Supply Chain Management and Mathematical Programming applications in Finance, IT, Marketing, Health Care and Manufacturing. The banquet featured musical and dance numbers. It was an enjoyable night of traditional Rajasthani culture, a prelude to the cultural discoveries I was to make as my husband and I joined the ‘Palace on Wheels’ where we journeyed into the glorious past of the state of Rajasthan.

Gold Coast Australia, PCO The Third Global Conference on Power Control & Optimization Innovation in Optimum Technology, February 2-4, 2010: I was invited to co-present a paper on ‘A Review of the Energy Sector in Turkey: An OR Perspective’ with Eren Özceylan, Turan Paksoy, Erik Kropat, and Gerhard-Wilhelm Weber. My other role was to promote IFORS to the participants, most of whom are working



PCO: with Zeev Volkovich and Willi Weber

in the area of energy and electrical engineering. This can be gleaned from the sessions, which included *Computational Electronics: From Semi-classical to Quantum Transport Modeling; Energy Efficiency in Buildings, Industry and Transportation; Dynamic Planning of Active Power Distribution Networks*. ‘Bayesian networks and their application in Bioinformatics’ by Dan Geiger and ‘Discrete Optimization and Location Theory’ by Rainer Burkard were interesting papers.

A few of the papers presented were done by OR practitioners, though I think that an OR analyst with the appropriate background on the application area could have offered OR solutions to the problems presented, another testament to the versatility of our discipline and its applicability to problems that need mod-

elling and mathematical approaches.

The conference venue, Marriott Courtyard Resort at Surfer’s Paradise, makes one think of spending a few more nights at the beaches with the surfers, tourists, and revellers. Unfortunately, there was no time to stay, as our New Zealand post conference tour awaited us.

Lisbon, Portugal, 24th European conference on Operational Research (EURO XXIV), July 11-14, 2010: The IFORS Administrative Committee meeting was to be held here and I was to deliver a talk for the EURO Working Group on Development Workshop. The Workshop is aimed at doctoral students who wish to discuss their research with other academics and practitioners interested in OR for Development. Keynoting the workshop, I delivered a talk entitled *Small Steps to Development* wherein I outlined initiatives in which I had been involved and aimed at helping the development of education and delivery of government services. I was awarded by the organizers with the *EURO OR in Development 2010 Senior Fellow*.

The Lisbon conference venue, Faculdade de Ciências da Universidade de Lisboa (FCUL), had ample facilities for the 700 sessions, 2300 presentations, and 2700 participants coming from 77 countries. The plenary lectures delivered by Harold W. Kuhn (‘A tale of three eras: The discovery and rediscovery of the Hungarian method’) and John F. Nash, Jr. (‘The agencies method for modelling coalitions and cooperation in games’) were well-appreciated by the audience who listened for every morsel of genius that were imparted in the talks.

The beauty of Lisbon has to be seen to be appreciated. But we had to say goodbye to Portugal after the conference to make it to our tour of the Baltics. And yes, Estonia, Latvia and Lithuania would be another post conference story. ♦



EURO: receiving EURO ORD Senior Fellow Award from Honora Smith, Leroy White and Gerhardwilhelm Weber

Welcome Movements for ORSP Officers

ORSP has every reason to celebrate the recent successes of its officers.

Dr. Aura C Matias, Associate Professor, former ORSP President (1997-1998) and member of the ORSP Board of Directors (2005-2008) was appointed as the new Dean of the U.P. College of Engineering. Prior to this, Aura was Chair of the Industrial Engineering and Operations Research, College of Engineering, at UP Diliman. While Deputy Executive Director of the National Engineering Center (NEC) from 1996 to 2002, she led NEC to undertake projects that ranged from climate change mitigation to public utilities and services.

ORSP Board member **Rex Aurelius C. Robielos** was appointed Dean of the School of Industrial Engineering and Engineering Management of the Mapua Institute of Technology effective January. Rex served as Section Manager of the Operations research Group at Analog Devices General Trias. He has been a member of the ORSP Board since 2004. He is the Co-Chair of ORSP's Student Affairs Committee.

Current ORSP President **Alleli C. Domingo** was designated in January 2010 as Associate Dean of the College of Arts and Sciences, the largest academic unit of UP Los Baños. Alleli was the former Deputy Director of the Institute of Mathematical Sciences and Physics, UP Los Baños.

Meanwhile, the OR Department of San Miguel Corporation was moved from the Corporate Technology Group to Corporate Information and Technology Management (CITM). Past ORSP President **Manuel Agustin** took over the leadership of the group from Agnes Grace Perez, current Board Director.

Appointed VP last January, Manuel M. Agustin heads CITM, composed of: Operations Research (OR), Corporate Information Management (CIM), and Corporate Technology Management (CTM). Joining SMC in 1979, Manny was President of the ORSP from 1992-1994.

The CIM oversees the IT Managers of all SMC business units; OR provides quantitative decision-making support to management; and CTM audits the quality assurance, safety/sanitation, and



Matias

Robielos

Domingo

Perez

Welcome to New Members and Student Chapters

This newsletter issue welcomes new members who have joined from the second half of 2009 to date.

From the **Academe**, **Kathleen B Aviso**



Kathleen B. Aviso



Dennis Cagape

a PhD graduate fellow of De La Salle University Manila, **Den-nis Cagape** is an Instructor at the



Ma. Estrella Natalie Pineda



Jonjon M. Rayala



Francisco L. Villanueva Jr.

College of Eng'g, UP Diliman, **Victor Sherwin Galamgam** is an Instructor at the Pangasinan State University - Urdaneta City Campus, **Bryan Reginald B. Magbutay** of Asia Pacific College, **Ma. Estrella Natalie Pineda** is an IE Program Coordinator at the De La Salle University - Dasmarias, **JONJON M. Rayala** of Mondriaan AURA College, **Francisco L. Villanueva Jr.** is a Professor at the DLSU Graduate School of Business, and three new academe members from DLSU Lipa namely **Noli D. Castro**, **Lorena M. Gomez** and **May G. Macatangay**.

From the **Industry** sector, we welcome back ORSP Past President **Manuel Agustin**, head of San Miguel Corporation Inc. Corporate Information and Technology Management (CITM).

Institutional members joining ORSP include **Holy Angel University** which designated **Cabrera, Melani B.** and **Timbang, Maria Elena Y.**

Five new student chapters were likewise added during the period, namely, **Southern Luzon State University**, **Asia Pacific College**, **St. Dominique College of Asia**, **Mondriaan AURA College**, as well as the **TIP QC**.♦

environmental activities of all SMC facilities.

Previously, current ORSP Board Director **Agnes Perez** headed the OR Department. Effective January she was appointed Executive Assistant to the Senior VP and General Manager of Petron. Though not limited to OR applications in her current role, she relies a lot on her OR training to tackle the issues that cross her desk every day.

The new challenges presented by the appointments of Manny and Agnes speak well of how the OR discipline equips people to perform various roles. ♦

The Philippine Journal of Operations Research (PJOR) CALL FOR PAPERS

The Philippine Journal of Operations Research is the official journal of the Operations Research Society of the Philippines. The PJOR accepts both theoretical and application oriented papers using decision making tools under operations research/management science (OR/MS). The tools covered under OR/MS are as follows, but not limited to;

- Mathematical Programming, i.e. Linear and Integer Programming, Non linear programming, Stochastic Programming, Dynamic Programming, etc.
 - Queuing Theory, Game Theory, Decision Theory,
 - Simulation i.e. Discrete Event, System Dynamics, Agent Based, etc.
 - Data Envelopment Analysis Multivariate Analysis i.e. Structural Equation Modeling
- PJOR accepts papers that demonstrate the use of OR/MS in Manufacturing, Distribution and Logistics, Services i.e. Education, Health Care, and Government, and many more.

Formatting

1. Electronic submission only
 2. All these elements in this order: title, authors with institutional affiliations, abstract, keyword list, body, short author bios with email contact info, references, and endnotes (if any).
 3. APA style references
 4. Endnotes for comments only, not citations. No footnotes at all.
 5. All tables and figures must be on separate pages at the end, numbered and with captions. In the text, all tables and figures must be referred to and all must have call-outs ("Figure 1 about here").
 6. All figures must also be supplied in original file format (ex., .jpg, .eps, .tif, etc.).
 7. If the lead author is Juan Dela Cruz, the main manuscript filename should be delacruz.doc.
 8. Everything must be double-spaced, even references, except tables are not double-spaced
- Word or OpenOffice.org formats are acceptable. All figures must also be supplied in original file format (e.g., .jpg, .eps, .tif, .png). Full papers: 15 printed pages.

Go to www.orsp.org.ph for details on how to submit your paper.♦