



# System Dynamics NEWSLETTER

Volume 15 – Number 2

December 2002

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## FROM THE PRESIDENT



Jim Hines gives the President's address in Palermo.

### Palermo Conference a Success

363 participants from 46 countries enjoyed Sicilian hospitality at this summer's International System Dynamics Conference, our largest research conference yet. Activities included well over 300 scheduled presentations, a full day of workshops, exhibits, the second annual Modeling Assistance Workshop with in-depth discussion of specific modeling problems, the Consultant's Roundtable, and many special social occasions. Read on to find just a sampling of events, both serious and not-so-serious, at Palermo...

*continued on page 7*

### Membership Directory Goes Online

The new System Dynamics Society Online Directory is up and running! More than three-quarters of our membership is listed already, and many members have added information to their entries to show their area of specialization, chapter affiliation, and even a photo.

*continued on page 2*

FROM THE  
EXECUTIVE DIRECTOR

**A Special Thanks to Our  
Volunteers**

Our volunteer force this year numbered over 250, most helping with the conference. Thank you. Volunteering not only helps the Society; it also benefits you.

Volunteering gives you the ability to become more engaged in your professional community. The Society offers many volunteer opportunities and leadership roles, and all members are encouraged to participate. Society volunteers lead our committees on the Policy Council, organize the conference and the scientific program, review papers for the journal and the conference, run the PhD Colloquium (exclusively by student volunteers), organize Roundtable discussions, maintain the website, and much more.

By volunteering, you are inserting yourself into key networking opportunities so that you are a team member, not an observer. Volunteering allows you to meet and interact with colleagues in a meaningful and distinguished way. What you gain through these enjoyable experiences will increase your personal development and professional skills. The community is still small enough that you can indeed have a considerable and comfortable place; this experience is career enhancing.

Get the most out of your relationship with the Society, not only with the benefits you receive but also by helping to cultivate a growing and nurturing community by volunteering. Seize the opportunity to be at the heart of the activities by taking an dynamic role in the Society.

It is truly my pleasure to work with all our volunteers. If you'd like to learn more, please feel free to contact me.

*Roberta*

The System Dynamics Newsletter is published two times a year by the System Dynamics Society.

*Editors:* James H. Hines, Jr., Roberta L. Spencer, Jennifer Rowe

*Photography:* Dean Christensen, conference photographer, and conference attendees

*Layout and Design:* Jennifer Rowe

**Diane Taylor Bids Wiley Farewell**

Members who have met Diane Taylor, responsible for overseeing Wiley's Business & Management publications for the past 18 years, will perhaps be surprised to learn that she has actually reached the normal retirement age for staff there and formally retired at the end of October. Her colleagues presented her with a sculpture by one of her favourite artists.

Diane was the face behind the Wiley stand at our conferences and the many who have met her will testify to her unfailing courtesy and unflappable manner. Often my attendance at both OR and SD conferences meant I would catch up with her twice in some summers. She will be sadly missed and is replaced by Steve Hardman whom I look forward to working with.

*Brian Dangerfield, Executive Editor, System Dynamics Review*

**Special Member  
Benefit Offered by  
Wiley**

As a System Dynamics Society member you are entitled to receive a 15% discount on Wiley books when you order direct online.

Get your 15% discount online at <[www.wiley.com](http://www.wiley.com)> (or <[www.wiley.com](http://www.wiley.com)> for US customers). At the shopping cart simply enter promotion code WAZ under 'discount offer' and the discount will be applied to your order.

Recent back issues of the *Review* are available to members at <[www.inter-science.wiley.com/societies/sds](http://www.inter-science.wiley.com/societies/sds)>. You will need a registration key provided by Wiley; to receive one, please email <[fpidduck@wiley.co.uk](mailto:fpidduck@wiley.co.uk)>.

**Directory** *continued from page 1*

If you have not yet responded to the Society office regarding inclusion of your own entry, please do so! You must specifically give your consent to be included in the directory.

When you send your "yes" or "no" answer to the office, you are given a username and password. You are then able to use the website to update your contact information, add to your entry, and search the directory by name, location, and interest area.

**System Dynamics Society**

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## NEWS AND NOTES

**John Sterman is 2002 Winner of Forrester Award**

John accepts his award from John Morecroft, chair of the awards committee, at the conference in Palermo.

The Jay Wright Forrester award for the best contribution to the field of System Dynamics during the preceding five years was presented this year to **John D. Sterman** of the MIT Sloan School of Management for *Business Dynamics: Systems Thinking and Modeling for a Complex World* (McGraw-Hill, 2000).

**Dana Meadows Prize Awarded in Palermo**

This year's winner of the Dana Meadows Prize for the best student paper presented at the annual conference was **Aldo A. Zagonel** of the University at Albany.

Aldo's paper was entitled "Model Conceptualization in Group Model Building: A Review of the Literature Exploring the Tension Between Representing Reality and Negotiating a Social Order."

Runners-up, in alphabetical order, were:

**David Cooke**, University of Calgary, "A System Dynamics Analysis of the Westray Mine Disaster"

**Paulo Gonçalves**, MIT Sloan School of Management, "When Do Minor Shortages Inflate to Great Bubbles?"

**Abhijit Mandal**, London Business School, "Creating Competitive Advantage through Dynamic Resource Interactions"

**IN MEMORIAM**

*Barry Marshall Richmond*

1946 - 2002

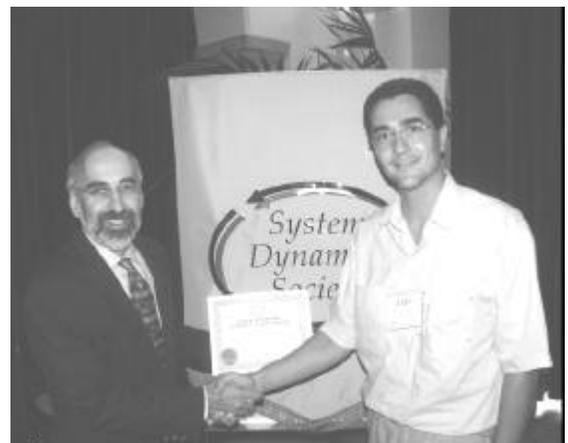
Founder and Managing Director,  
High Performance Systems

Jay Wright Forrester Award  
recipient for  
STELLA® software, 1989

"Barry worked endlessly to make people aware of interdependent relationships and long-term consequences of their actions, striving to make everyone better systems citizens.

His expertise was respected worldwide."

*Nancy Maville*



Aldo Zagonel receives the Dana Meadows Prize from John Sterman.

**Ignacio Martinez-Moyano**, University at Albany, and **Gary Wadhwa**, Adirondack Oral & Maxillofacial Surgery, "Modeling the Impact of Knowledge-Based Innovations: The Case of Best Practices Implementation in a Small Health Care Private Practice"

**2003**

**Elected Officers  
of the Society**

På I. Davidsen  
*President*

Robert L. Eberlein  
*President Elect*

James H. Hines, Jr.  
*Past President*

Jay W. Forrester  
*Founding President*

David W. Packer  
*Secretary*

David F. Andersen  
*VP Finance*

John D. W. Morecroft  
*VP Publications*

Ginny Wiley  
*VP Chapter Activities*

Michiya Morita  
*VP At Large*

James M. Lyneis  
*VP Meetings*

Brian C. Dangerfield  
*System Dynamics Review*

**Policy Council**

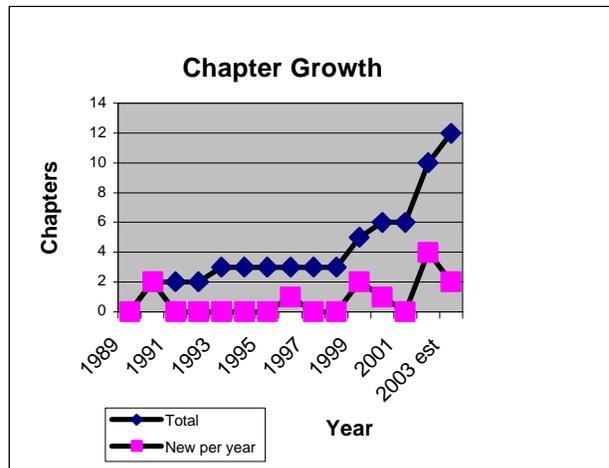
Carol Frances  
Mohammad Mojtahedzadeh  
David W. Peterson  
Habib Sedehi  
(2001-2003)

Andreas Groessler  
Taehoon Moon  
Kevin O'Neill  
Qing Rui Xu  
(2002-2004)

Deborah Campbell  
David C. Lane  
Scott F. Rockart  
Etiënne A.J.A. Rouwette  
(2003 - 2005)

**2002 A Tremendous Year for Chapter Growth**

Chapters provide a convenient way to gather for those who hold a substantial place for system dynamics in their professional or educational life. The chapters promote regional meetings and get-togethers, making opportunities for personal contacts, learning about what others are doing, and of course, having some fun. Our Society is international and chapter meetings offer a vehicle to build networks. Chapters are one way the field of system dynamics seeks to be inclusive, to reach out to other disciplines and to draw more people into the circle of system dynamics. We currently have ten chapters: Australasia, China, Egypt, Hellenic, Italy, Japan, Korea, Latin America, United Kingdom and a Student Chapter. If you are interested in how to form a chapter, please contact Ginny Wiley, VP Member and Chapter Activities, at <ginnyw@pegasuscom.com>. Our sincere thanks and congratulations



go to Nan Lux (VP Members and Chapters, 1999-2002) who has been instrumental in chapter development. To see what the chapters are doing, please see the Chapter News in this issue, beginning on page 6.

**Policy Council Holds Summer Meeting in Palermo**

Minutes of the 28 July 2002 Meeting of the Policy Council and the 31 July 2002 General Business Meeting can be found in their entirety by clicking the "Governance" button on the System Dynamics Society website. Please visit the website to learn about the business discussed and to view the complete reports and information presented.

Motions approved at the Policy Council Meeting:

- Proposed 2003 budget
- Conference Program Guidelines Proposal
- Program Chair/Conference Chair Team Proposal
- Best wishes to Jack Pugh for quick recovery
- Egypt Chapter of the System Dynamics Society
- Hellenic Chapter of the System Dynamics Society, HCSDS
- Task Force report and its recommendations on Special Interest Groups and Local Interest Groups
- Higher Education Special Interest Group of the System Dynamics Society
- Appointment of committee to look into the appropriate mandates for all VPs

Motion tabled:

- Proposal to Amend Society Policies relating to VP Positions

## NEWS AND NOTES

## AWARDS

**Nelson Repenning** is the winner of the Thomas P. Hustad Award for the best paper to appear in Journal of Product Innovation Management in 2001 for his paper "Understanding Fire Fighting in New Product Development" (18, 5: 285-300). Nelson is Associate Professor in the System Dynamics Group at the MIT Sloan School of Management. You can read the paper and Nelson's other work at <web.mit.edu/nelsonr/www/>.

The annual UK Chapter student prize has been awarded to **Lazaros Petrides** of Salford University. Lazaros' work looked at the economic impact of the implementation of a minimum wage.

## DEGREES

**Lieutenant Colonel J. Robert Bois**, "Decisions within Complex Systems: An Experimental Approach Using the Strategem-2 Computer Game," University at Albany, June 2002.

**Kathryn Taylor**, "A system dynamics model for planning and evaluating shifts in health services: the case of cardiac catheterisation procedures in the NHS," London School of Economics, University of London, June 2002 (Supervised by Brian Dangerfield, University of Salford).

## PUBLICATIONS

Kai R. T. Larsen, Claire McInerney, Corinne Nyquist, Donna L. Silsbee and **Aldo A. Zagonel**. "Learning Organizations: A Primer for Group Facilitators" in *Group Facilitation: A Research and Applications Journal* Number 4 (Spring 2002).

## ANNOUNCEMENTS

A new user-friendly modelling and mapping software, **MyStrategy**, was released in mid-October. Using MyStrategy, one can map the strategic architecture of a specific problem or organisation and sketch expected/actual performance onto time charts; these same charts may also contain simulated results, enabling a visual comparison between expected/actual and simulated performance. MyStrategy is based on the Strategy Dynamics approach, which blends system dynamics with the resource-based view of a firm. Queries should be directed to Andrea Albertson at <andrea@strategydynamics.com>.

The UK Chapter of the International System Dynamics Society announces the **5th Annual 2003 Conference**, Harrogate, UK 6th - 7th February 2003. Keynote speakers include David Andersen, Professor of Public Administration, Public Policy, and Information Science at the Rockefeller College, University at Albany, USA; Andre Hare, Head of Economic and Operational Research Division, Department of Health, UK; Steve Brewis, Strategy Manager, BT, UK; and Lars Finskud, Director, Vanguard Brand Management, UK. For more details contact the Conference Organiser, Theodora Kennedy, tel: +44 (0)20 8650 8327, fax: +44 (0)870 127 0906, e-mail: <uksds@clara.co.uk>.

## ANNOUNCEMENTS

Linda Booth Sweeney and Dennis Meadows have just completed their unique text, **The Systems Thinking Playbook**. The book fully describes thirty short exercises (5-20 minutes each) that convey principles related to paradigms, causal loop diagrams, reference modes, and system dynamics. This is learning by doing!! The entire book comprises over 260 pages of material. Each chapter includes detailed instructions for introducing, conducting, and de-briefing one game. This is a wonderful, practical, tool kit for professors, consultants, and trainers.

Normally the book costs \$70 plus postage. Through a special arrangement with the System Dynamics Society all Society members can order this unique reference at a reduced price of \$45, which includes US postage. Shipment outside the US is extra. Fax your order to +1 603 862 4140, or contact Sabina Foote at <ipssr.games@unh.edu>. You must mention your membership in the Society in order to get your discount. In addition to your e-mail address, telephone number, and full mailing address, provide a VISA or Mastercard credit card number that may be billed for the cost of the book and international, airmail postage. American Express and Discover cards can not be used. You may request an estimate of the postage costs, before you order, by calling +1 603 862 2244 or e-mailing Sabina. This offer expires April 30, 2003.

NEWS AND NOTES

ANNOUNCEMENTS

Every one is invited to the first **System Dynamics Conference organised by the Latin America Chapter**. The intention of the conference is to propagate system dynamics among the Latin American community and to prepare papers to the XXI System Dynamics Conference in New York. The Conference will be held in Monterrey, Mexico, and is being organised by Gloria Perez at the Instituto Tecnológico de Monterrey. The deadline for abstracts is January 17; The conference will take place April 11-13. More information at: [www.mty.itesm.mx/dia/deptos/iis/congresods.html](http://www.mty.itesm.mx/dia/deptos/iis/congresods.html).

*PLEASE SEND IN YOUR NEWS AND NOTES FOR THE NEXT ISSUE!*

**President's Message** *continued from page 1*

CHAPTER NEWS

**Australasia**

Our main item to announce is the forthcoming 8th Australian & New Zealand Systems (ANZSYS) Conference to be held on the 10th to 12th December 2002 at the Mooloolaba International Outrigger Hotel in Queensland. The conference theme is "Management Approaches to Complex Systems" and the conference will be hosted by the Faculty of Business of the University of the Sunshine Coast, Queensland, Australia.

This conference will provide opportunities for members of the system dynamics community to mix and exchange ideas with the wider systems community in Australasia. All participants will be most welcome. Further details are provided on the web site: [www.usc.edu.au/news/conf\\_sem/anzsys/default.html](http://www.usc.edu.au/news/conf_sem/anzsys/default.html).

Unfortunately we have mislaid our notes from the business meeting at Palermo, but we can report that it was an excellent conference, enjoyed by all members of our chapter. We did have an informal chapter meeting at the Aboriginal Internet Cafe in Palermo, but once again our notes got washed away after a continuous supply of Australian XXXX beer. We tried applying concepts from MIT's beer distribution game to control the situation, but some of our members had trouble balancing the inflows and outflows! All that remains from the meeting are the following fragments:

- agenda
- next meeting - Durbin or Dublin
- Rod's shout

*continued on page 10*

**Society Sponsors**

Adirondack Oral & Maxillofacial Surgery PC

Amber Blocks Ltd.

Cognitus Ltd.

Frank Davidson

Decision Dynamics, Inc.

Delsys Research Group, Inc.

Jay W. Forrester

General Motors Corporation

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Hewlett-Packard Company

High Performance Systems

HVR Consulting Services Ltd.

ITP Consultores

Minase BV

Massachusetts Institute of Technology, System Dynamics Group

Mohaseboon Financial and Business Consultants

Nijmegen School of Management, Nijmegen University

Pegasus Communications

Powersim Solutions

Project Performance Corporation

Proyectos Comerciales de México, SA de CV, una empresa de Grupo Proyectos

PwC Consulting

Rockefeller College of Public Affairs and Policy, University at Albany

University of Salford, Centre for Operational Research and Applied Statistics

Ventana Systems, Inc.

Ventana Systems UK



Conference Co-Chair Carmine Bianchi at the conference opening.

### Ackoff and Senge Give Keynote Address

The keynote speakers for the conference were Russell L. Ackoff and Peter M. Senge. Ackoff spoke about the evolution of the concept of a corporation. He shared his views on the progress of the concept of organization from mechanistic to organismic to social systemic. In fact he suggested that the next natural step is to view the organization as a community, i.e. a social system that exists primarily to serve its members. He also discussed the implications of viewing an organization as a community, such as the corporate objectives (growth vs. development), management (maximizing the shareholders' value vs. optimizing the need and desires of all the corporate stakeholders including the employees), and function of the organization in the society.

Ackoff concluded his remarks by stressing the point that a community is a system of parts  
*continued on page 14*

## Palermo Conference a Fine Success

### System Dynamics and Strategy Topic of Opening Plenary Session

The conference's opening plenary session, chaired by Kim Warren, constituted a candid discussion regarding the interaction of system dynamics and strategy. Geoff Coyle presented "Setting Strategic Agendas: The Use of Qualitative Methods in Highly Politicised Contexts," co-authored with John

Powell. The authors argue that "classical" system dynamics is fundamentally unsuited to the generation of truly strategic options, and propose an innovative form of qualitative analysis, better suited, in their view, to deal with the issue of power in strategy settings. An alternative view presented by Alan Graham, entitled "On Positioning System Dynamics as an Applied Science of Strategy," contends it is time to reposition the field, and moreover, that this repositioning is rather straightforward, and a matter of choice.  
*continued on page 14*



Peter Senge and Russell Ackoff continue their discussion while Habib Sedehi listens in.

### Palermo Conference Sponsors

Ackoff Center for Advancement of Systems Approaches (ACASA)  
Adirondack Oral & Maxillofacial Surgery  
Alitalia  
Amber Blocks Ltd.  
Amia (Waste Management Company of Palermo)  
Assindustria  
Banco di Sicilia  
Business Dynamics  
Cantine Settesoli Scarl  
Center for Technology in Government (CTG), University at Albany  
CUSA-System Dynamics Group  
Comune di Palermo  
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Georgia-Pacific Corporation  
Global Strategy Dynamics Ltd.  
High Performance Systems, Inc.  
HVR Consulting Services Ltd.  
IBM  
John Wiley & Sons Ltd.  
KBS (Knowledge Based Simulation)  
PA Consulting  
Pegasus Communications  
Powersim  
Powersim Solutions  
Sicilia Dreams Travel Agency  
SoL (Society for Organizational Learning)  
SYDIC (System Dynamics Italian Chapter)  
Università Bocconi  
University of Palermo  
Ventana Systems, Inc.



The Special Session panel: Searching for Best Practices in System Dynamics Modeling. From left to right: Ali Mashayekhi, David Andersen, Geoff Coyle, Yaman Barlas, Peter Milling, Bob Eberlein, Jac Vennix, and John Morecroft. Also part of the panel: Erich Zahn, Erling Moxnes, Jack Homer, Jim Hines, and Peter Senge. The session was chaired by George Richardson and Ignacio Martínez-Moyano.

### Parallel Session Explores “Multiple Insights, Multiple Dimensions”

“Governing a Complex Social System with System Dynamics: The Management and Economics of an Airport Hub” was contributed by Elisabetta Marafioti and Edoardo Mollona.

The purpose of this study is to understand the factors of growth of passenger traffic for an airport hub and produce some managerial implications in terms of economic impact on decisions at the same level.

“A System Dynamics Model for the UK Private House Building Supply Chain” was contributed by Séverine Hong-Minh and Jürgen Strohhecker.

The problem considered by this model consists of several basic components, namely customer needs, construction stage, demand amplification, mindset, a functional silo approach and communication and learning. These issues bring a need for change which has pros (environmental regulations, increase in brownfield site development, shortage of skilled labor) and cons (profit on land resale, difficult entry to market for foreign companies, high-level demand).

*continued on page 9*



Above: Ignacio Martínez-Moyano, volunteer coordinator, and the local planning team: Gianliborio Marrone, Gian Battista Montemaggiore, and Enzo Bivona.



Poster sessions “al fresco” under the tents attracted great interest from conference-goers, even on the day the poster boards blew over.

**Letters**

“This may be the one and only conference where people arrived by all modes of transportation: sailboat, ferry, train, car, plane, motorcycle, and even a classic Vespa scooter.”

*The Conference Organizing Team*

“Hey, you forgot to include bicycle, I came biking from Sevilla (had a conference there) by my new HPV bicycle.

Cheers -- and thank you for organising a splendid conference.”

*Klaus-Ole Vogstad*



Social time at the Conference Banquet...see more photos at <[www.systemdynamics.org](http://www.systemdynamics.org)>



“The team really did hit a home run this year...I have no idea how you pulled it off so flawlessly...much appreciated.

Will definitely be in New York next year...and we'll be talking it up here in the frozen north...will make sense to many of our local clients and colleagues just from a cost perspective.”

*Bob Walker*

“I appreciate your work very much at the conference. We enjoyed Palermo very much. Thank you to Habib Sedehi and the conference organizing team.”

*Hironori Kurono*

**Parallel** *continued from page 8*

“The Effectiveness of Using E-Collaboration Tools in the Supply Chain: An Assessment Study with System Dynamics” was contributed by Oscar Rubiano Ovalle and Adolfo Crespo Marquez.

This study assesses the possible impact of new communication technologies on a generic supply chain, and specifically on the electronic components business, with a system dynamics model and supply chain integration path using the necessary e-collaboration tools.

*Ahmet Ilker Soydan*

**Theme to “The Godfather” (“Padrino”)**

This song is for the problems we in modeling take home with us and stay awake nights worrying. Why won't it work? Is it a quirk or could there be a nasty virus festering?

Complexity shown error free can often seem like prophecy.

Here's a parameter that won't do what it should. I validated every stock and flow I could, but though I've tried, I cannot hide from the conclusion that my model's just no good.

If you surmise (that) arrays can surprise, then realize the problem's size

before considering another causal loop, or it will turn your data into doggie poop. Ignore its lies and clients' cries for “minor” changes and gymnastics through a hoop.

Whenever structure and behavior do not jibe and oscillations change in ways you can't describe, be not afraid of choices made; perhaps Jay Forrester is open to a bribe.

(He'll make you an offer you can't refuse!)

*This banquet entertainment was composed by David Pfeiffer and performed by Vittorio Raimondi and David.*

CHAPTER NEWS

**Australasia** *continued from page 6*

- Confirmation of last meeting
- Shayne's shout
- Breeges smoking
- invite Tahiti, Tonga, Fiji & Samoa to join Australasian chapter
- close meeting

Outside of meeting at the International SD & ANZSYS conferences, the tyranny of distance in Australasia seems to beat us. While Mark (in Sydney) & John (in Melbourne) did make some progress with their group telephone meetings, they have proved hard to sustain on two fronts: firstly it seems difficult to get people to take a lead as discussants, and secondly, the relatively simple logistics have proven difficult to sustain. This may well be a reflection of difficulties in the consulting industry over the past year (most participants came from this sector).

Just a few words from the New Zealand part of the chapter: we are still located southeast of Oz, and currently hosting the yachting challenge series for the right to compete with NZ for the Americas Cup! We are looking forward to retaining the Cup for a further 3-4 years! Meanwhile system dynamics activity down under continues to gain healthy momentum upwards.

*John Barton and Bob Cavana*

**China**

Approximately 500 people are studying system dynamics nationwide currently, which requires us to strengthen our team to stimulate the development of the

field. Universities such as Fudan, Shanghai Polytech, Jiang Xi, and Zhejiang have made great efforts to cultivate newcomers. Constructing an academic team means not only to enlarge in numbers but also to make the team younger and better.

The Seventh Chinese National Conference, along with the academic meeting of the Special Committee of System Dynamics of the China System Engineering Institute, was held in November 2001 at Nanchang University in cooperation with Tell-How Scientific and Technologic Co. Ltd. Over 100 representatives from more than 20 units of the whole country attended. The theme of the conference was "Management, Decision and Analysis of Dynamic Systems." More than 60 papers were presented. The videocassette of Jay W. Forrester's speech at the 2001 International System Dynamics Conference in Atlanta was shown, and Prof. Chen Jing introduced the Atlanta conference.

The conference had several interesting characteristics:

- A large amount of information. Twelve reports were arranged totally at the meeting, including both theoretic study and applicable study. Many new ideas, thoughts and questions were proposed.
- Two meetings held at the same time. This is helpful to the subjects' combination, and meaningful to complex study.
- Representatives from every field: professors, members of study institutes, and managers of enterprise. Especially, 20% of the representatives from the whole country were younger. Representatives communicated

with each other warmly both in meetings and individually.

- Held jointly by school and enterprise. This is helpful to the operation of the enterprise.

The 2002 conference will be held at Zhejiang University. The theme is "Changing Management and Dynamics Organization in the 21<sup>st</sup> Century."

In January 2001, the Tongji New Century Development Institute was established as a research base for system dynamics at Tongji University in Shanghai. It is open to widely attract scholars and experts from the international system dynamics field and is involved in many projects, such as the economic long wave in China.

*Qifan Wang*

**Egypt**

On 25 October 2002, the Egyptian System Dynamics Chapter hosted a day to announce the establishment of the Chapter in Egypt. People from different sectors were invited to attend the day and the schedule included poster presentations, a model demonstration, a Chapter presentation, and open discussion.

The Chapter presentation indicated the mission, objectives and the structure of the Chapter. In order to encourage new members, ESDC is offering the following benefits:

- A free system dynamics orientation course
- Free simulation software - evaluation license
- Free system dynamics advice

70-80 people attended the different activities and showed a

*continued on page 11*

## CHAPTER NEWS



Ibrahim Hussney of the Egypt Chapter, at the Palermo meeting of the chapter

### **Egypt** *continued from page 10*

high level of interest in joining the chapter. The discussion included different topics related to the objectives of the chapter and the responsibility of the members and the roles of the chapter and the international society.

The poster presentations included different topics about the textile industry, the furniture industry in Egypt, and Small-Medium Enterprise projects built using system dynamics.

In addition, a hands-on presentation about the Model for SMEs was given with open discussion.

*Walid Badr*

### **Hellenic**

The Hellenic Chapter of the System Dynamics Society has recently completed the constitution proceedings and put in action a number of projects as a first start for a future long-term plan which is being processed.

Very soon after its formation, the Chapter organized a successful conference at a hotel near the Acropolis, Athens. The theme of the conference was "Complexity, Chaos and Systems Dynamics in Business Management: from Theory to Practice." Almost 50 individuals attended.

One of the major activities of the Hellenic Chapter is to promote system dynamics in the Greek schooling system, starting with K-12 education. Over the past year, the Hellenic Chapter in cooperation with the Environmental Studies Department of the University of the Aegean has gone through a number of negotiations and succeeded in setting up further dialogue with the Ministry of Development (General Secretariat for Research & Technology) for the implementation of a pilot project for the introduction of systems thinking and system dynamics in schools.

In acknowledgement of Stafford Beer's work and contribution to the field of system dynamics and in sympathy and compassion for his loss, the Hellenic Chapter initiated the preparations for setting up a 10-day workshop under NATO's Science for Peace Program. The workshop aims at promoting Beer's work, disseminating acquired knowledge, and contributing to the formation of international scientific contacts.

For further information and updates on the Hellenic Chapter's activities, please consult our website at [www.aegean.gr/hcsds](http://www.aegean.gr/hcsds), which will shortly be available.

*George Papaioannou*

### **Italy**

The diffusion of system dynamics in Italy has been boosted this year by the International System Dynamics Conference, both in academia and industry.

New activities based on system dynamics have been started in Italian Universities. Among them:

- The Master Programme coordinated by Carmine Bianchi, on "Managing Business Growth through System Dynamics & Accounting Models," University of Palermo, Faculty of Political Sciences. The programme will start in January 2003.
- The Master Programme in Project Management organised by the University of Sannio, Faculty of Engineering (July 2002, Benevento) during which the role of system dynamics as process analysis methodology was particularly emphasised by Habib Sedehi.

Among other significant activities planned for the year 2003 and started by people belonging to the Italian Chapter, there will be a special session on "Modelling and Simulation," promoted by Edoardo Mollona at Bocconi University, during the EURAM Conference that will take place in Milan in March 2003.

*Habib Sedehi*

### **Japan**

Vice President Akira Yamauchi, director of national meeting affairs, hosted the regular chapter meeting at Kansai University on March 16<sup>th</sup> (Sat), 2002. Twenty attendants studied two presentations and enjoyed the social gathering. Kansai is the middle part of Japan including Kyoto, Osaka, Nara and Kobe. It takes two and a half hours by the Tokaido Shinkansen from Tokyo to Osaka.

The Second Management Forum and the First Tutorial Session for K-12 were held in spring at Ichigaya Campus of Chuo University.

*continued on page 12*

### CHAPTER NEWS

#### **Japan** *continued from page 11*

In July, four study groups started: the Business Model Study Group, the Education Material Development Group, the Environment Model Study Group, and the Model Validation Group. These project-based groups are expected to study for one year.

The monthly research meeting and the national model meeting closed up the long record started by Professor Toshiro Shimada and Professor Saburo Kameyama. Dr. Norihiro Matumoto, director of general affairs, shifted them to the JSD Research meeting almost every month, mainly supporting the activities of the study groups.

In Palermo, one presentation paper and four posters were accepted from Japan. Mr. Toru Suetake, director of accounting affairs, gave the Japanese Chapter Report.

*Hironori Kurono*

#### **Korea**

We held 2002 Spring and Summer academic conferences (February 20 and August 10, respectively) at Hanyang University. Eight papers were presented and discussed. In November, we will hold the Autumn academic conference at Chung-Buk University. We also have a plan to hold an international conference by inviting a few Chinese and Japanese scholars here to Korea in February 2003.

*Tae-Won Sohn*

#### **Latin America**

A year and a half after its creation we can report important progress in the Latin American Chapter of the System Dynamics Society.

About 15 representatives from Latin America (Colombia, Mexico, Venezuela, Argentina and Brazil) attended the Palermo conference. The Chapter met twice during the conference and decided that the LAC will be focusing on promoting the diffusion of the field in the sub-continent. In this direction several actions are being undertaken: conferences, implementing a website, re-installing an electronic list and promoting publications in Spanish.



The Latin America Chapter met at the conference in Palermo.

A major event, the first Latin American Conference, will take place in Monterrey 10-12 April 2003. Important attendance is expected from delegates of many of the Latin American countries, but note that non-Spanish speakers are also welcome to attend as a special session in English will be organized.

The first Colombian mini-conference was held in Medellin, Colombia, in November 2002. A very active system dynamics electronic list in Spanish is back online, and a web page is being put in place.

Finally, congratulations to Carlos Jaime Franco, the first PhD graduate from a Colombian University in the field of system dynamics and one of the first in the Latin American sub-continent.

*Isaac Dyner*

#### **Student**

The students of system dynamics met during the conference in Palermo for the first time as the Student Chapter of the System Dynamics Society. The aim of the chapter is to intensify the communication between the students of system dynamics and form an environment in which activities can be organized for the benefit of the students.

The PhD colloquium that has been organized by students for the

last three years is a very good example of such activities. The aim of the PhD Colloquium is to give PhD students the opportunity to receive feedback from experienced academics on how to overcome problems in their research.

The 3rd PhD colloquium took place in Palermo and was organized by Ignacio Martinez and Peter Otto. There were nine presentations by PhD students from different universities around the world covering a wide range of topics. A number of experts in the field attended the colloquium and commented on the work presented. Information on the 4th PhD Colloquium will soon be available at the conference website. If you are interested in joining the student chapter, please contact Özge Pala at <o.pala@nsm.kun.nl>.

*Özge Pala*

## CHAPTER NEWS

Attendees at the 3<sup>rd</sup> PhD Colloquium in Palermo**UK**

During 2002, the UK Chapter held two very successful events. The first, in February, was the annual gathering of the Chapter. This attracted 61 participants. Four speakers gave presentations on system dynamics success stories. Jim Lyneis began by talking about the application of system dynamics in Mastercard. The second presentation was given by Stephen Kerr of BP. Stephen talked about the use of system dynamics to support business planning in a pipeline system. Dennis Sherwood then gave a presentation on his experiences in applying the method in a consulting arena. The final talk was given by Steve Curram of HVR Consulting Services on an analysis of the potential for New Variant CJD to be contracted during surgery. An “applications clinic” then followed which gave participants the opportunity to quiz the speakers.

The second event, held in June, was a one-day seminar on the theme “Embedding Dynamic Thinking in Business”. The speakers were John Morecroft and Kim Warren. The speakers shared their experiences of developing concepts and tools for dynamic thinking.

Other news is that the Chapter is currently developing a web site for members. This should be going ‘live’ soon. Preparation is also well under way for two further events; the next annual gathering in February 2003 and, of course, the SD Society Conference in Oxford in 2004.

*Susan Howick*

## SPECIAL INTEREST GROUPS

**Education**

The Education Special Interest Group was extremely pleased to receive the official approval and encouragement of the Policy Council at the Palermo meeting this summer to move ahead with

the formation of our new group and establishing an agenda. Actually, in response to requests to expand our mandate, the first decision of the new group was to broaden our horizon to include not only higher education but elementary and secondary education as well, thus practicing what we preach, and recognizing that activities in each domain have significant consequences in the other and should generally be recognized as one system.

The Education SIG brings together people interested in developing and applying system dynamics approaches to the planning and management of education institutions, as well as education policy analysis.

We are in the early stages of organizing ourselves, so please let us know if you have done work, or are planning to undertake projects, that could be useful in education management or public policy analysis.

Michael Kennedy has volunteered to spearhead the development of our own Education-SIG website with descriptions of current and planned projects, and an annotated bibliography of references, as well as links to useful resources.

As one of the purposes in forming SIGs is to extend the influence of the System Dynamics Society, the Policy Council agreed at the Palermo meeting that SIGs could invite people who are not members of the Society but who have shared interests to join us. in the work of implementing system dynamics applications of potential value to education executives and policy makers. We encourage you

*continued on page 14*

## SPECIAL INTEREST GROUPS

### **Education** *continued from page 13*

to speak with people who have shared interests and invite them to join us.

If you are interested in helping us form an international network focussed on education applications of system dynamics, please contact either of the chairpersons, Carol Frances (Seton Hall University and Claremont Graduate University) at <cfrances@pe.net> or Michael Kennedy (South Bank University) at <mike.kennedy@sbu.ac.uk>. We look forward to hearing from you.

*Carol Frances*

### **Environmental Dynamics**

The Environmental Dynamics special interest group of the System Dynamics Society has been established. The group focuses on the systems that lay in the heart of the sustainable development issue, namely those that involve human activities and natural environment (also known as “environmental systems”). The intent of the group is to investigate the dynamics, and hence optimize the study and control of environmental systems, at any and all scales.

The ED SIG is powered by its members – already 25 strong and growing! The group has started collecting all relevant work, which is being organized in databases. The first discussion of the group is already on, regarding the activities and instruments of the ED SIG. Anyone interested in environmental dynamics may join the group – details on the website <[www.utad.pt/ed/sig](http://www.utad.pt/ed/sig)>.

*Anastássios Perdicoulis*

### **Keynote** *continued from page 7*

whose properties are derived from the properties designed into the whole. “The whole is not a mere aggregation of separately designed and controlled parts; it is a coming together of the parts into a whole,” he said.

Peter Senge followed Ackoff’s remarks by agreeing with his premise and seeing a great potential in his ideas for the future of human societies. But he was much more reserved as he questioned the inevitability of such movement in corporate thinking and practice. He was specifically hesitant to acknowledge that such a move has taken place in the thinking of American executives. Senge continued his remarks by saying that based on his recent work with Humberto Maturana he thinks the shift from the mechanistic to the living system view is far more profound and challenging than we realize. He suggested that most of the impediments to such a transition lie in our educational systems.

The session was concluded with questioning from the audience. On the whole, and based on feedback received from participants, people enjoyed this session and saw positive implications for the system dynamics community. In fact, a great majority have suggested that future conferences be modeled on the Palermo experience of having someone with authority point out a different but a complementary perspective on the issues that are being addressed by system dynamics practitioners.

*Habib Sedehi*

### **Plenary** *continued from page 7*

Powell and Coyle propose that, as an analytical process, system dynamics does not deal well with the issue of power and influence. Grounded in positivism, system dynamics steers away from *strategic*, in the direction of *operational*, planning. The two authors present a method that adapts influence diagrams to capture, reveal and analyze the interaction of real actors in the system, as they cooperate or compete to control information links and resources. Using a case study, they illustrate how this method can be used to generate action plans at the truly strategic level.

In contrast, Alan Graham portrays the divide between system dynamics and the science of strategy as a function of the initial momentum of the field. According to Alan, there is mutual benefit to be gained from positioning system dynamics as an applied science of strategy. Our method presents an opportunity to close what he refers to as *relevance* and *rigor* gaps that characterize present research and applications in the field of strategy. On the other hand, this repositioning would result in increased opportunities, as well as greater respectability, for system dynamics. It can be accomplished through an explicit articulation of system dynamics as a scientific method of hypothesis testing, and by claiming strategy as an area of competence.

The two lines of reasoning presented by Geoff and Alan illustrate a creative tension in the field of system dynamics. One approach argues that the quantification that the other approach insists upon is a potential source of deep failure. Meanwhile, the second approach implies that the exclusively qualitative approach of the first does not provide adequate opportunity for a science of strategy.

*Aldo Zagonel*

## 2003 New York City Call for Papers

**Program:** The conference program will consist of plenary, parallel, poster and workshop sessions demonstrating the state of the art in the theory and application of system dynamics.

The conference theme of Economic Dynamics will bring together diverse perspectives on the application of system dynamics to economic problems in order to foster animated debate. Submissions relevant to the conference theme are especially encouraged:

- regional, national and global economic system dynamics models
- policy and outcome contrasts and comparisons for economic and system dynamics approaches to the same problems
- system dynamics approaches to the teaching of economic concepts
- comparisons and syntheses of dynamic computational general equilibrium and system dynamics models
- use of standard economics formulations such as logit choice and options pricing in the application of system dynamics models to real problems

In addition, submission is encouraged for work on all topics germane to system dynamics.

All works submitted will be assigned to three individuals for anonymous peer review. The results of this review will determine whether a work will be accepted for plenary, parallel or poster presentation.

**Submission Format:** Please visit the Society website <[www.systemdynamics.org](http://www.systemdynamics.org)> for details.

**Conference Proceedings:** CD and printed proceedings will be distributed at the conference. Full works for plenary, parallel, poster and workshop presentations will be included on the CD.

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**Volunteers Needed:** For the New York City conference, if you are interested in being on the conference paper review committee, please contact the Society office as soon as possible. Also, we are asking for 2003 conference participants to volunteer to be contributing writers, reporting on conference sessions for the newsletter.

## Nominations Invited for Jay Wright Forrester Award and Dana Meadows Prize

The **Jay Wright Forrester Award** is presented as often as once annually for the best contribution to the field of system dynamics published in the preceding five years. Papers, articles, books, research or consulting reports, theses or other written material that have been published or are in publishable form in the English language in the original or after translation are eligible for consideration. Winners are announced at the annual conference of the System Dynamics Society, where the winner is invited to deliver a talk on the work, which is subsequently published in the System Dynamics Review.

Nominations may be made by anyone, and should include the citation of the nominated work including the title, journal or other publication information, and the year of publication. A short description of the nominated work and its importance is welcome.

Nominations should be sent to Dr. John Morecroft, Chair, Awards Committee at <[jmorecroft@london.edu](mailto:jmorecroft@london.edu)> or London Business School, Regent's Park, London NW1 4SA, England.

The **Dana Meadows Prize** is an award of the System Dynamics Society given annually for the best student paper presented at the annual System Dynamics Conference. Established in 2001, the prize encourages and recognizes high quality student work in the field of system dynamics. In addition to an overall prize winner, several papers may be selected for honorable mention.

To be eligible for the award, authors must be enrolled in a degree program, though they need not be full-time students. The paper can be co-authored with other eligible students. Papers may also be co-authored with non-students (such as faculty advisors or consultants) but only if accompanied by a statement from the advisor that the intellectual content arises from the student's own work. In all such cases the student must appear as the first author and non-students do not receive a share of the prize. Any paper authored by an eligible student and presented at the conference can be considered for the award, whether presented in a plenary, parallel, or poster session.

To be considered for the award, papers must be nominated at the time they are submitted to the conference. Please check the Society website, <[www.systemdynamics.org](http://www.systemdynamics.org)>, for details on the nominating procedure.

The Meadows Prize is generously funded by Jane and Allen Boorstein.

## **XXI International System Dynamics Conference 2003, New York City**

The 21st International Conference of the System Dynamics Society will be held July 20 - 24, 2003, at the Roosevelt Hotel in New York City. The conference is hosted by Worcester Polytechnic Institute, with local co-hosts Amber Blocks Ltd. and Fordham University.

New York is the most exciting city in the world and the Roosevelt Hotel is in the heart of midtown Manhattan. The conference venue is within walking distance of Broadway, Central Park, Grand Central Station, Fifth Avenue shopping, the Metropolitan Museum of Art, the Empire State Building, Rockefeller Center, St. Patrick's Cathedral, the United Nations Building, and other well-known attractions.

We have negotiated a special room rate at the Roosevelt to keep the cost of attending the conference affordable. For more information, please visit the website at <[www.theroosevelthotel.com](http://www.theroosevelthotel.com)>.

New York City can easily be reached by train, plane and car. Limited free parking will be available at the Fordham University Rose Hill Campus in the Bronx.



### **Conference Deadlines and Key Dates**

January 2, 2003	Opening date for presentation submissions and workshop proposals.
February 14, 2003	Submission deadline for early decision.
March 20, 2003	Notification of acceptance for early submission.
March 28, 2003	Final submission deadline. Workshop proposals due.
May 9, 2003	Final notification of acceptance.
May 16, 2003	Deadline for material to be included in the electronic proceedings, session proposals due and presenter registration deadline.
June 20, 2003	Early conference registration deadline.
July 2, 2003	Hotel room registration deadline.
July 20, 2003	Conference Opens in New York City!

For updates, please visit the Society website at <[www.systemdynamics.org](http://www.systemdynamics.org)> or e-mail <[system.dynamics@albany.edu](mailto:system.dynamics@albany.edu)>