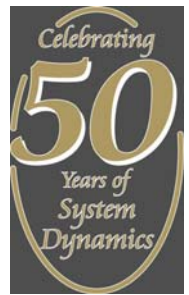




System Dynamics NEWSLETTER



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FROM THE PRESIDENT *Qifan Wang*

Dear Colleagues,

I am very honored to write this letter as the 2007 President of the System Dynamics Society. I am looking forward to working with the officers and members of the Society to promote the development of the field, and celebrate our 50th anniversary.

The 50th anniversary should not only serve as a time to reflect on the history of system dynamics, but also mark the beginning of its future development; 2007 is both a golden anniversary and a year for planning the future. Moving forward, I hope we can start discussions, and through the Boston Conference, detail some actionable plans for the future development of both the Society and the field. If we pay attention now, we can make a difference in the development of system dynamics throughout the world. It is my goal as President to bring these plans together and help get us started on the exciting work of the next fifty years.

Our target should be to enable important applications that bring to all of humanity the highest possible quality of life. To do this we need to increase our ability to address the problems of complex systems and

thereby make system dynamics one of the most important analytical methodologies.

I think our plan for achieving this goal should, as a minimum, address the following topics:

*** Gradually increase the balance in the Society between developed and developing countries.** For example, in both China and India we should aim to have between 100 and 200 members within ten years. Longer term, each of these countries should have at least as many members as the United States.

*** Encourage and guide a variety of system dynamics conferences and workshops to be held in developing countries and regions.**

For example, in 2005 a number of System Dynamics Chapters and other organizations from the Asia Pacific region jointly organized the Shanghai SD-MS International Conference with very good results. The China Chapter, together with other Chapters and academic organizations, will hold this conference again this October, with the intention of making it a regular event held every other year. It will be expanded into a multi-

President, continued on page 2

Policy Council Nominations for 2008

During the winter 2007 Policy Council meeting the following were nominated as officers and members of the Policy Council, to take office in 2008:

• *President Elect*
(2008)

Erling Moxnes (Norway)

• *Vice President–Finance*
(2008-2010)

David Andersen (USA)

• *Vice President–Chapter Activities* (2008-2010)

Tim Haslett (Australia)

• *Policy Council Members*
(2008-2010)

Enzo Bivona (Italy)

Burak Güneralp (Turkey)

Imrana Umar (USA)

Lars Weber (Germany)

The Nominating Committee submits a single nomination for each position to be filled in the pending election.

However, members may submit other nominations for these offices and positions, provided that:

Nominations, continued on page 2

President *continued from page 1*

disciplinary conference: Systems Science; Management Science; and System Dynamics.

*** Continue to search for additional tools and applications to enhance our ability to study complex systems.** For example integrating system dynamics with game theory will allow us to better explore many major social, political, economic, ecological and other problems our world faces.

*** Encourage more system dynamics scholars to address the issue of sustainable development and complex systems in developing countries.** For China, an important open question is what effect the extremely fast growth over the past three decades has had on social, economic and ecological relationships. In order to answer this a research project is under way; we expect to see a real analysis using system dynamics modeling soon.

*** Pay greater attention to the development of “the sciences of complexity.”** A delegation from the China Chapter will conduct a bilateral meeting with the Santa Fe Institute in conjunction with the development of this work after the 2007 Boston conference. Also, I hope more people from our Society will become involved in these activities and that we might pursue holding a bilateral academic meeting with the Santa Fe Institute in the future.

*** Promote system dynamics education in high schools and primary/elementary schools in developing countries and use system dynamics to enhance the quality and creativity of mankind.** Over the last four years, Nanjing, China has made gratifying achievements with the encouragement of some of my friends experimenting in a few schools. They have twice participated in the International

System Dynamics Conference. A delegation of eight teachers and students who participated in the 2005 Boston Conference was received by Professor Forrester. At the 2005 Shanghai conference there was a special session on high school education reform.

*** Encourage more publication of work done in developing countries in the *System Dynamics Review*.**

*** Coordinate the functions of the officers of the Society and Chapters and SIGs so that we can have more impact around the globe, and across disciplines.**

Many of the above examples are from China, and relate to the activities of the China Chapter of the System Dynamics Society. This is what I know the most about, as I have been with the China Chapter since it was founded more than a decade ago. My hope is that all of the existing Chapters, and many yet to be formed, can participate in the spread and development of the field. Mike Radzicki, as President, emphasized the importance of Chapters and SIGs in the future of the Society, and the field. From both the perspective of a Chapter, and now that of the President of the Society, I heartily agree with Mike’s sentiments. Our diversity should be the source of our strength.

In closing, I would like to extend my hope that our global village will be more peaceful, trustful, secure and developed in the coming 50 years. Finally, I want to acknowledge the outstanding contributions made by the Society’s former Presidents—Mike Radzicki, Graham Winch, Robert Eberlein, Pål Davidsen and all that have come before. I pledge to do the best I can to live up to their high standards by offering my enthusiasm and best efforts in working together with you in the coming months.

Nominations *continued from page 1*

- each such nomination is accompanied by a petition signed by twenty-five members in good standing;
- each nominee is a member in good standing;
- written evidence is submitted to the effect that each nominee has agreed to stand for election; and
- such nominations reach the Secretary within five weeks after publication of nominations received from the Nominating Committee.

If no nominations are received by the Policy Council from the membership at large, the slate of candidates submitted by the Nominating Committee, and approved by the Council, will be deemed elected. For more information on Nominations and Elections, please see the Policies of the System Dynamics Society under “Governance” on our website.

Notes from the Policy Council

The System Dynamics Society is governed by its Policy Council, which meets twice a year, during the conference and again in the winter. This year for the second time the winter meeting of the Policy Council is being held electronically over a two-month period; in fact, the meeting is still in session as this newsletter is being written.

Ongoing business and discussions at this year’s electronic meeting include reports by all officers and committees, publication reports, conference reports, and some new items. All the reports given, and more detailed notes on the discussion at this meeting and previous meetings, will be available on the Society website. Just click on “Governance.”

2007 Conference

Boston, Massachusetts 50th Anniversary Celebration

The Society is attentively making plans for the upcoming conference in Boston. The conference promises strong participation and a full program of high quality contributions. As always, there will be a PhD colloquium, Modeling Assistance Workshop, Thursday workshop day, and other associated events. A wide variety of papers are being submitted for what promises to be a memorable meeting!

Some quick reminders:

- March 26th is the paper submission deadline. Workshops and session proposal are also due.
- Presenters must register by June 6th.
- June 21st is the deadline for accommodations booking and early conference registration fee increase. Forms can be found on the conference website. Please register early using the versatile web-based submission system.
- A limited number of partial conference scholarships for accepted authors are available this year. To apply, use the "Request a Scholarship" button on your user menu page in the submission system.
- The Printed Abstract Proceedings will be distributed at the conference. The full proceedings, including complete papers, will be available on the Society website; no CD will be distributed.

Featured plenary speakers in 2007 will include **Jay W. Forrester**; Professor Forrester will talk about the future of system dynamics. Watch for future announcements regarding a variety of anniversary events celebrating fifty years of system dynamics. Other special events, panel discussions and sessions with founders of the field

of system dynamics are being planned.

The **Navigator Program** is a one-on-one program for first-timers. First-timers and veteran attendees will be brought together based on topics of interest. The veteran attendee will provide information to help the first-timer maneuver through the conference resourcefully. If you are a first-timer and would like to benefit from this program, please check the box on the registration form. If you would like to volunteer as a navigator, please contact the Society office.

Nominations are invited for the **Jay W. Forrester Award**, the **Dana Meadows Student Paper Prize**, and the **System Dynamics Society Applications Award**, new in 2007. The Applications Award will be presented as often as once every two years for the best "real world" application of system dynamics conducted within 10 years of the submission deadline. Please refer to the Society website for more details on all awards.

Innovations in 2007

Poster Symposium and Buffet All posters will be presented on Monday evening, together with a "Neighborhoods of Boston" buffet dinner. Converse with the authors and have a bite to eat. Attendees will vote for their favorite posters; the winners of this (admittedly unscientific) poll will be announced the following morning. The Poster Symposium will be held in the ballroom and will last for several hours to provide ample time for authors and attendees to meet. Guests who purchase the Social Program Ticket are welcome.

On Wednesday evening the "**Beer Game World Championship**" is scheduled. Whether you have led the game or never played, be sure to come. Have fun while learning how to facilitate the game. The game

will be followed by a workshop debriefing on Thursday.

Diagram Slam All conference participants are invited to compete to create the most entertaining, innovative, beautiful and/or outrageous stock-flow/causal-loop diagram. The topic area will be announced Wednesday morning with entries due later that day. After the evening Beer Game event, five finalists will present their results in front of the conference audience to determine the winner.

System Dynamics Talent Show

Prepare an individual or group system-dynamics-themed song, poem, joke, dance or other creative offering for this informal event on Tuesday evening. Talent optional; walk-ons welcome....

Guided Tours at MIT Walk around the Institute and campus, past the Barta Building—the founding home of Whirlwind—and visit the MIT Museum. Tours will be available on Sunday and Thursday.

For updated details on the 2007 conference, please visit www.systemdynamics.org

Call for Photos (and other bits of history)

We are looking for event photos, documents of historic significance, or any kind of artifact of interest to display at the 2007 conference as part of our celebration of the first fifty years of the field. There have been many remarkable occasions during the past fifty years, some momentous and some amusing. Do you have any photos, documents, articles, or stories of notable early system dynamics events?

Please send us your photos! If you have an item that could be copied and displayed, please send it to the Society office. Items may be in electronic form or hard copy. Credit will be given to contributors.

Conference Site Selection in a Nutshell *By Andreas Größler and Jim Lyneis, past and present VP Meetings*

The Society has a long tradition of international conferences in diverse locations. Nowadays, the workload for organizing and running conferences is shared by local hosts, Society officers, and the home office. The conference is an important source of income to the Society; thus, it is a basic task of Society officers and the Policy Council to manage the risks associated with running the conference while encouraging participation of the diverse international community.

This article outlines the Society’s objectives and site selection policy. We have available a more comprehensive set of guidelines with accompanying spreadsheets to use in the proposal process. Anyone interested in hosting a conference is invited to make an informal query to the VP Meetings and/or to attend the prospective hosts’ get-together during the summer conference.

Objectives and General Agreements

The following are the objectives the Society wants to achieve by organizing an annual international conference (based on Policy Council consensus and discussions):

1. The primary objective is to provide a high quality experience for attendees. The conference should foster presentation of the best work in the field; opportunities for academics and practitioners to learn about the field and network with others; and encouragement to students and others new to the field.
2. Conference sites should be in a location easily accessible to the centers of system dynamics activity, at a time when many can attend. The last two weeks in July have worked best.

3. Conferences will generally rotate between North America and Europe. We will look at occasionally holding a conference in another location roughly in proportion to membership, and subject to an acceptable proposal from someone in the region.

4. There is a fixed alternative default site, currently Boston, should no local proposals meet the Society’s requirements.

5. While the idea of linking with the conference of a larger organization offers some potential cost savings and attractiveness to academics with limited travel budgets, it was felt by the Policy Council that the price in terms of loss of flexibility and independence was too great. However, this does not preclude local hosts proposing such a linked conference.

6. The Society encourages Chapters or other local organizations to hold regional or national conferences.

Timetable for Proposing a Conference Site

Spring, Conference Year Minus 3: VP Meetings issues a “Call for Conference Pre-Proposals.”

Prospective bidders are advised of proposal selection guidelines and selection criteria. An expression of interest at this point does not imply any commitment but provides a first opportunity to give the potential host some feedback. Expressions of interest should be sent to the VP Meetings with a copy to the home office.

Summer Policy Council Meeting, Conference Year Minus 3: Formal pre-proposals are due May 31 for presentation and discussion at the summer PC meeting. The result is feedback on concerns regarding the proposal, additional information required, and likelihood of success. If the pre-proposal discussion looks mutually interesting, then the

Society will ask the potential host to prepare a detailed proposal.

Winter Policy Council Meeting Conference Year Minus 2: Full proposals are due November 30 for discussion and vote at the winter PC meeting.

Spring, Conference Year Minus 2: Site visit by Executive Director with the intent to identify any major issues, negotiate a contract with the conference venue, and finalize a budget with the local hosts.

Summer Policy Council Meeting Conference Year Minus 2: Discussion of formal proposals and selection of conference site. Budgets must be available.

Guidelines for the Submission of Proposals

Conference venues will be selected on the basis of the objectives and general agreements specified above. Conference pre-proposals and proposals should explicitly address these criteria:

1. *Unique/attractive features of proposed conference venue.* What makes this particular venue attractive to the system dynamics community? Is there a concentration of system dynamics practitioners, or related disciplines?
2. *Travel cost and accessibility (travel time and mode).* Proposals should include an estimate of airfare and other travel costs.
3. *Meal and accommodation costs for attendees.* Proposals should provide an estimate of the costs of hotel for four nights and independently purchased meals as required based on specific conference arrangements.
4. *Program Features.* Appropriate conference themes, special sessions, etc. should be indicated. Proposals also should identify a Program Chair, subject to the approval of the Policy Council.

Site Selection, continued on page 5

Site Selection *continued from page 4*

5. *Direct Conference Costs.* The registration fee for the conference pays for: (a) the costs of using the venue and providing onsite events (including any facility charges, AV equipment, posters, and required local transportation); (b) the costs of mandatory and optional program features; (c) head office activity preparing for and managing the conference; and (d) a surplus to contribute to other Society costs.

6. *Facility Characteristics.* We are looking for a conference site that can handle from 400 to 550 participants with a large plenary room and breakout rooms.

7. *Manageability of Risk.* There are three major sources of risk for the Society in any conference: (a) attendance; (b) local direct costs; and (c) home office administrative costs of managing local arrangements.

8. *Local Host.* The local host must be clearly identified as part of the conference proposal. Other than preparing the pre-proposal, proposal, and other documents, the primary contribution of the local host is fundamental organizing activity: finding a shortlist of conference sites, researching and arranging local options (for example, alternative housing for students, different modes of transportation, entertainment activities), and providing administrative support before, during and after the conference.

Creation of the Energy SIG *By Luc Van Den Durpel*

The energy sector is receiving increasing interest worldwide due to the growing perception that energy plays a crucial role in abating climate change while also facilitating sustainable development for our society.

Given the early interest within the Society on energy issues, and given

the growing importance of developing a holistic view on energy policy and energy developments, the creation of a Special Interest Group (SIG) on "Energy" was proposed at the Nijmegen Conference in 2006 and was subsequently approved by the Policy Council. We thank the Policy Council members for their support.

The prime objective of the Energy SIG is to further the development of a holistic view on energy policy and energy systems using systems thinking and system dynamics tools. Areas of interest are the development and application of system dynamics in energy systems technology development modeling; technology assessment; energy impact on sustainable development; energy economics; investment analysis; energy market modeling; energy regulations and policies; environmental impact assessment and strategic environmental assessment; renewable energy technology and economics; energy-environmental policy design and assessment; and institutional questions related to energy, sustainable development and environment protection.

The Energy SIG will:

- Develop and stimulate activities aimed at information exchange among system dynamics practitioners;
- Collect and disseminate specific information for use by the SIG members;
- Stimulate further research in and applications of system dynamics in the energy sector;
- Gather and share methods and models used in the study of the areas of interest;
- Organize special sessions at conferences and other events;
- Promote cooperation and joint sessions with other energy-related organizations during conferences and other events;

- Stimulate cooperation and exchange with other Society SIGs;
- Contribute study, research, and activities to the discussion of sustainable development questions, including the role of energy and environmental impacts.

The Energy SIG is currently chaired by Andrea Bassi and Luc Van Den Durpel and counts from the early start some 23 members.

All Society members interested in joining the Energy SIG or in receiving additional information are cordially invited to contact Andrea at <ab@millennium-institute.org> or Luc at <vddurpel@listo.be> and to visit the Energy SIG website at www.systemdynamics.org/sigs/energy.

Publications Update

2006 Conference Proceedings The 2006 Proceedings are available on the Society website as open source material. The link is www.systemdynamics.org/conferences/2006/index.htm. As of 2006, CD proceedings are no longer distributed. If you would like a CD, you can create your own from the ISO image available on the website. A printable label including the ISBN is also available.

1995 and 1996 Proceedings The Society is working to digitize all past proceedings and add them to the open source materials on our website. 1995 and 1996 are the latest to be added. Abstracts and titles are fully searchable; papers are scanned as non-searchable .pdf files.

Dynamica The entire ten-year run of *Dynamica* has been digitized, thanks to Laura Taranto, MIT Sloan School of Management. Work is progressing to have this available on the Society website by July 2007, as part of our 50th anniversary celebration. This collection of papers is a great testament to early work in the field.

Announcements

First workshop on System Dynamics and Marketing

Strategy: We will have our first workshop on applications of system dynamics in marketing at Cornell University, Ithaca, May 31 - June 1, 2007, with George P. Richardson as one of the keynote speakers. You are invited to participate at the workshop as a presenter (see call for papers at www.eiasm.org/mis/cellaneous/otherprojects/SDM_Call_for_Papers.pdf) or just attend without presenting. Please email Peter Otto <peteotto@gmail.com> if you would like to receive further information about the workshop program. Looking forward to seeing you in Ithaca!

The **4th System Dynamics (Pre-Boston) Conference Workshop at Fordham University** will be held on Monday, June 11, 2007. If you are interested in attending or speaking, please contact Nicholas Georgantzas. His email address is <georgantzas@fordham.edu>.

Explore Systems Thinking with MIT: The next session of **Business Dynamics: MIT's Approach to Diagnosing and Solving Complex Business Problems** will take place June 18-22, 2007. The program features senior faculty including Jay Forrester, system dynamics pioneer, and Peter Senge, chair of the Society for Organizational Learning (SoL). Join us or send your colleagues for an intensive, hands-on week of system dynamics mapping, modeling, and simulations. Call +1 617 253 7166 or visit mitsloan.mit.edu/dynamics for more details.

Call for Papers: This is an invitation to collaborate with the stream "System Dynamics Modelling" at **EURO XXII, the European Conference on Operational Research**, taking place in Prague, Czech Republic, from July 8 to 11, 2007. The

website is at euro2007.vse.cz/. The purpose of the system dynamics stream is to bring together contributions about the modeling of complex systems based on system dynamics methodology. Please submit your abstract before March 25 to <stefan.groesser@unisg.ch> or via the online submission system at the conference website. Being responsible for the stream, we would very much appreciate your participation! With kind regards from Markus Schwaninger and Stefan Grösser, University of St. Gallen, Switzerland.

Call for Papers: 2007 Multi-Conference on the Applications of Systems Science, Management Science and System Dynamics. October 19 - 21, 2007, Tongji University, Shanghai, China. Theme: The Studies of Sustainable Development and Complex Systems. Papers may be submitted from April 22 to August 15, 2007, to Dr. Bingcheng Wu at <systemdynamics@126.com>. More details are available at www.systemdynamics.cn.

News and Notes

Kathy Taylor and **Brian Dangerfield** have been awarded the 2006 Goodeve Medal by the OR Society in the UK for their paper

"Modelling the feedback effects of reconfiguring health services" (Journal of the Operational Research Society Vol. 56 pp 658-675 (2005)). The paper, based on Kathy's doctoral work, examines the impact of a decision to offer enhanced health care services closer to the patient.

The American Biographical Institute has awarded **Alexander Ryzhenkov** an Official Citation of Honor and World Medal of Freedom for significant accomplishments in economic theory and modeling based on the biography in the International Directory of Distinguished Leadership.

We include "News and Notes" in every issue of the System Dynamics Newsletter. We are eager to hear about your new books, promotions, awards, completed degrees, new products, notable projects, and any other milestones. Please send us your news!

Additionally, if you would like to contribute an article of interest to our community, please send your suggestion to the Society office.

All past newsletters, back to 1988, are available on the Society's "Publications" webpage.

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