## THE 1976 INTERNATIONAL CONFERENCE ON SYSTEM DYNAMICS

Geilo, Norway, August 8 – 15, 1976

In 1974 the Resource Policy Group was established in Oslo, Norway as one of the first centers of system dynamics research outside the US. The initiator was Jorgen Randers, who had spent the preceding 4 years in the System Dynamics Group at MIT. By the spring of 1976 the Resource Policy Group had grown to some 7 full time system dynamicists. In Bergen, Norway Leif Ervik was in full swing in his effort to establish the second Norwegian system dynamics center. Ervik had spent 2 years in the Dartmouth SD group, and thus the Norwegian centers were tightly coupled to the American SD effort.

The Norwegian centers were largely financed by the Norwegian, Swedish and Danish technical research councils. The councils were used to the idea of "summer schools" to advance science, and thus the idea emerged that it might help further the field of SD to organize an international conference on Norwegian soil. The decision to go was made by Randers and Ervik in the winter of 1975-76 and the mountain resort of Geilo (a political compromise: mid-way between Oslo and Bergen) was chosen as the venue. Bente Jones and Carsten Tank-Nielsen in the Resource Policy Group did an enormous amount of work in order to organize the conference, and a scientific committee did a great job in obtaining 37 papers from scientists from Canada, Denmark, France, Germany, Netherlands, Norway, Sweden, UK, and the US. Impressively, these papers were published in a pre-conference document dated May 27, 1976 and mailed to all conference participants for perusal prior to the actual conference August 8 -15, 1996. The picture below indicates there were more than 70 participants.

The chair(?) of the Norwegian Research Council, Finn Lied gave the opening address, and a week of serious (some would even say furious) methodological debate followed. The tone of the conference can be sensed in the carefully written preface to the final proceedings: "To some extent [this] volume illustrates what practicing system dynamicists consider "best system dynamics practice" in the analysis of the behaviour of social systems. But the field is still young, and a common view does not yet exist on several methodological questions. The [volume] also presents a range of issues that are still debated among system dynamics professionals." These words were sober code for the rather intense disagreements among the British and German and US schools of system dynamics practice which existed at the time.

Many of the papers were significantly revised during and after the conference discussion, and somewhat later, in 1977, the final proceedings – with the title The System Dynamics Method - appeared with 30 papers. Interestingly these proceedings were further refined over the next several years, to finally appear in MIT Press in 1980 as **Elements of the System Dynamics Method** (edited by Jorgen Randers, and consisting of 14 papers from the conference). This volume was still being sold in 2006 - 26 years later - as a useful overview of methodological issues in SD. The discussions in Geilo certainly covered the core issues of system dynamics! And with the typical vigour and enthusiasm of a young field – for a full week!

There was also time for fun. The participants hiked in the mountains outside Geilo. And during the conference dinner, a "Transient International Consortium at Geilo (TICAG)" headed by

John Seeger of MIT wrote and presented **The System Dynamics Song** to the tune of "The Boy Scout Marching Song" by Tom Lehrer:

Close the loop	Close the loop
that's the system's marching song	Ah, but never rate to rate
Close the loop	Close the loop
as you model right and wrong	Watch it blow or oscillate
Be holistic:	
use the knack –	When parameters are murky and dimensions
and if you ever get an output	are defiled
feed it back	When your smoothing turns out jerky and
	your client's getting riled
Close the loop	Here's the answer
and if others tell you 'nay'	Here's the story
Call for help	Here's the scoop.
Call for Jorgen, Dennis, Jay	Close the loop!
economics, social science and LP	
cannot criticize because the are so feedback free	
Close the loop	
Our dynamic paradigm	
saves the world	
in the very nick of time	
if your model gains no actions	
do not fear	
There'll be new political factions	
in a year	

Not only the TICAG, but many others sensed the need for a continuing forum for SD discussion. This was signalled by a surprising and most welcome letter of thanks to the conference organisers from Jay Forrester, where he argued -- in the fall of 1976 -- that the Geilo conference had been an important step forward for the institutionalization of field of system dynamics.

