

IASSAR SC2 Meeting Minutes, August 5, 1998, University of Notre Dame

1 Wen called the meeting to order at 7pm. Members C. G. Bucher, G. I. Schueller, K. Sobczyk, W. Wedig, and Y. K. Wen were present. B. Spencer had to attend SC-5 meeting at the same time. O. Ditlevsen, Chair of the Umbrella Committee, attended part of the meeting.

2 The past activity of the committee was briefly reviewed. Suggestions were made to make this committee more "dynamic" including better organization and specific tasks for subcommittees such as in SC-1 by Schueller. Wedig mentioned high-dimensional problems of Focker-Plank equation and stability and entropy problems. Sobczyk mentioned chaotic motions, nonlinear partial D.E. and applications, and stochastic bifurcation. Wen suggested that this committee should not restrict itself to analytical methods. Numerical and simulation based methods should be also emphasized as long as there is no overlap with other SC committees.

3 Ditlevsen suggested the possibility of using internet and home page as an effective means for communications among SC members as well as to public who have an interest in this area. Schueller mentioned the bench mark type of studies with results on internet on comparison of different stochastic dynamic methods. The problems of funding and manpower generally required in such endeavor, however, need to be solved.

4 It was agreed that the committee needs to be more active in organizing sessions in ICOSSAR and international conferences. The next opportunity is the ASCE Engineering Mechanics Conference at Johns Hopkins, June 14, 1999. One suggestion is to organize a panel discussion on "Role of Stochastic Dynamics in Engineering". Members are encouraged to participate and suggest panelists ASAP to Wen to meet the deadline for session abstract. There will be 12 sessions in the general probabilistic methods area in the conference.

5 The attention then turned to possible state-of-art review by this committee. The topics suggested so far are:

- 1 Application of Probabilistic Dynamics in Engineering (Wen)
- 2 Equivalent Linearization and Simulation Methods (Schueller)
- 3 Stochastic Stability (Bucher)

Members are encouraged to suggest other topics. A half-page description of the topic will be collected by Wen and distributed to the members by September 11, 1998. The review will be published as a special issue in either Structural Safety or Probabilistic Engineering Mechanics.

6 The membership was reviewed. Members are encouraged to play a more active role such as signing up on committee activities. Members are also encouraged to bring attention to the chair of young, dynamic researchers in this area.

7 There being no other business the meeting was adjourned at 9:00 pm.

Y. K. Wen