

IASSAR Committee on Stochastic Methods in Structural Engineering.

Minutes from meetings of the Umbrella Committee in Krakow (May 11, 1998) and San Diego (May 19, 1998).

Attendance by:

Krakow:

Armen Der Kiureghian, Ove Ditlevsen, Dan Frangopol, Rob Melchers (IASSAR Executive Committee member), Palle Thoft-Christensen.

Guest: Rüdiger Rackwitz.

San Diego:

Larry Bergman, George Deodatis, Armen Der Kiureghian, Ove Ditlevsen, Roger Ghanem, Mircea Grigoriu, Ahsan Kareem, Lambros Katafygiotis (representing Wilson Tang), Sankaran Mahadevan (new member of SC3), Gerhart Schuëller, Kazimierz Sobczyk, Pol Spanos.

Agenda of the meetings:

1. Welcome.
2. Suggestions to and approval of the agenda.
3. Short communications.
4. Subcommittees:
 - 4.1 Reports from subcommittees by chairmen (or representatives) being present.
 - 4.2 After the first 10 years of the existence of the IASSAR committee it may be time to make status. It is reasonable to ask questions about the activity level in the subcommittees, and perhaps to decide that some topics should be reformulated or possibly be closed down.
5. New activities:
 - 5.1 Discussion on whether there should be formed a subcommittee on “Structural Safety and Reliability” (suggested by professor Shinozuka referring to the name of ICOSSAR).
 - 5.2. Perhaps it would be worth-while to look at the educational situation in an international setting. This could be the topic of a new subcommittee on education on the undergraduate level, the graduate level, and education of the industrial profession. Possibly it could be useful to produce undergraduate texts, examples and exercises to be communicated via the internet. The input to such an educational subcommittee should essentially be produced in the existing subcommittees.
 - 5.3. To make it easy to communicate the works of the subcommittees, it might be useful if IASSAR gets a home page on the internet. Clearly the cheapest possibility is to adjoin the home page to a university institute, e.g. the institute of the chairman. However, it may be more convenient if the home page is an independent IASSAR home page with an address that does not change with the chairman.

6. Recommendations of new committee members.
7. Other matters.

Minutes:

Only essential communications and suggestions to decisions are included in the following minutes from the two meetings.

Krakow meeting:

Point 5.1: Rather than forming a new subcommittee it was suggested to include component reliability in SC3.

Point 5.2: It was suggested that the topic of education should be treated by the subcommittees and not in a new committee.

Point 5.3: The possibility of communicating written material from the subcommittees via a home page was supported as worth trying, even though there were warnings about the work of maintaining such a home page. As a start the home page could give links to the home pages of the committee members. It was expressed that it would be very useful if currently updated lists of key references within the subcommittee topics could be available on the home page.

San Diego meeting:

Point 4.1: The chairman of SC1 (Gerhart Schuëller) reported that the 5th meeting of SC1 took place in Kyoto 25.11.1997. It was decided there to subdivide SC1 in three Working Groups: 1. Influence of Stochastic Computational Methods on the Development of Design Codes (chaired by Ghanem), 2. Parallel Computing (chaired by Spencer and Bergman), 3. Monte Carlo Simulation (chaired by Pradlwarter and Deodatis). Next meeting of SC1 will take place in Santorini on June 15, 1998.

Point 4.2: Even though SC1 by far has been the most active of the subcommittees it should not be forgotten that all the subcommittees have the role of running special sessions at the ICOSSAR conferences and also that the members make reviews for ICOSSAR. Spanos emphasized that the subcommittees should be broad enough to be able to suggest prize winning candidates. Schuëller replied that the prize matter has been discussed in the Executive Committee and that it was decided that the procedure will be different in the future. Ditlevsen was satisfied by the message that the prize issue becomes removed from the subcommittees.

Point 5.1 and further topics under 4.2: As at the Krakow meeting it was suggested that SC3 should include component reliability. The name of the committee could then suitably be SC3: "Structural Reliability and Optimization".

It was suggested that SC2 on Stochastic Dynamics and SC5 on Systems Identification and Structural Control should be fused into one subcommittee: SC2 "Stochastic Dynamics, Identification and Control".

Moreover it was suggested that SC4 on Stochastic Fatigue, Fracture and Damage Analysis should be made broader by including stochastic material models including random field descriptions. A suitable name could be SC4: "Stochastic Constitutive Material Models Including Damage and Fracture".

It was decided that OD should discuss these matters with the respective SC chairmen via e-mail in due time for decisions to be made at the Santorini meeting or the Notre Dame meeting.

Points 5.2 and 5.3: As for the Krakow meeting. With respect to the educational question Der Kiureghian suggested that initiatives be taken for conference sessions with the potential users from engineering practice.

Point 6: New member of SC3: Sankaran Mahadevan (suggested by Shinozuka). Arvid Naess has joined SC2.

May 26, 1998
Ove Ditlevsen