TWO-PHASE-MOMENTUM, HEAT AND MASS TRANSFER IN CHEMICAL, PROCESS AND ENERGY ENGINEERING SYSTEMS

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From the 4th to the 9th September 1978, a seminar of the International Centre for Heat and Mass Transfer was held in Dubrovnik, concentrating on Two-Phase Flow Momentum, Heat and Mass Transfer in Engineering Systems. The seminar provided a platform for presentations of the results of research work from laboratories all over the world. One hundred fifty participants from 18 countries took part in the meeting to present and listen to presentations on the following subjects:

- Two-Phase Flow Fundamentals
- Two-Phase Flows of Rigid and Deformable Particles
- Non-Equilibrium Phenomena
- Interface Transport in Liquid Films
- Numerical Studies of Two-Phase Flows
- Heat Transfer and Pressure Drop in Power Generator
- Mist Flows, Sprays and Dispersed Bubble Flows
- Two-Phase Flows and Reactor Safety
- Isothermal Two-Phase Flows in Chemical Systems
- Heat and Mass Transfer in Two-Phase Flow Chemical Systems

Selected papers given at the meeting were published in past conference proceedings presenting a lasting contribution to the subject of the symposium. The above given subtitles of the proceedings characterize the grouping of the papers each being introduced by an introductory article by a well known scientist in the field of two-phase flow momentum heat and mass transfer. The introductory and review papers were followed by new contributions to the subject and demonstrate the state-of-the art at the time of the meeting.

At the meeting, presented papers dealt with two-phase flows in chemical reactors. The atmosphere of this strong part of the seminar is captured by one of the review lectures of the meeting, namely

- Heat and Mass Transfer at Liquid Gas Interphase, by F. Mayinger
- Design of Gas-Liquid-Reactors: Mass Transfer Area and Input of Energy, by
 Nagel, H. Kürten and B.Hegner

A further strong part of the meeting concentrated on two-phase flows in nuclear reactors and this part is well dealt with in the review lecture:

- Liquid Mass Transport in Annular Two-Phase Flow, by G.F. Hewitt

There were many good papers at the seminar, among them quite a number that should be presented in this summary of the meeting. However, limited space does not permit this.

The conference was sponsored by the United Nations Educational, Scientific and Cultural Organisation and generously prepared by the members of the Organizing committee.

The personal participation of the members of the Organizing Committee in the meeting stressed its importance and attracted good scientists from all over the world. Participants from Eastern and Western countries were present to introduce new results of their research and to discuss the outcome of the research of other contributors to the meeting. During the entire seminar, lively discussions took place and good ideas for future research were exchanged.