

Scand J Work Environ Health 1989;15(1):3 Issue date: 1989

by Ilmarinen R



The problems associated with the thermal climate of the work environment, particularly those of temperature extremes, have multiplied in recent years. Efforts to reduce energy needs have increased the dissatisfaction of occupants with respect to the indoor climate of modern ventilated and air-conditioned spaces. The competition for natural resources has driven humans ever deeper into the earth and under the sea; they nowadays also work offshore or in the polar regions or in space. This rapid technological development has forced humans to live and work in climates differing radically from those in which they were biologically created. The result has been an increase in thermal strain during work and new health hazards.

Environmental ergonomics addresses the problems of sustaining the human ability to work under physiologically stressful conditions. The Third International Conference on Environmental Ergonomics was held in Helsinki, Finland, on 8—12 August 1988. It was planned and carried out through the cooperative efforts of the Finnish Institute of Occupational Health and the Foundation for Scientific and Industrial Research at the Norwegian Institute of Technology (SINTEF), and it was held under the auspices of the Finnish Ergonomics Society and the Nordic Ergonomics Society (NES).

The aim of the Conference was to bring together all professions associated with this field. Scientists, engineers, physicians, manufacturers, and representatives of governments and authorities were invited to present their recent findings and view points, to exchange opinions, and to outline needs for future research and development in the field of environmental ergonomics and in areas closely linked with it. The increasing number of participants from the beginning of this biennial conference series to its third meeting shows the need for maintaining such a forum now and also in the future.

The Helsinki Conference was structured around a number of worldknown specialists invited as keynote speakers for each main sessions. There were also submitted papers and posters. The first three days in Helsinki dealt with heat and cold stress, the effects of environmental stress on human physical and psychological performance, work and protective clothing, modeling and manikins, and standards and measuring methods. This period was followed by two days on board a ferry, where the special topic "Survival at Sea" was discussed.

It has been my pleasure to edit this supplement, which contains the keynote addresses of the first three days of the Conference. Two submitted manuscripts providing important information on the measurement of thermal radiation and the prediction of the wind-chill effect on work clothing have also been included.

I wish to express my warmest thanks to all the companies whose financial support made the organization of the Conference possible. Special thanks are due to all who took part in the Conference and made the program so very interesting. The publication of this supplement has been financially supported by the Finnish Work Environment Fund, which is gratefully acknowledged.

Raija Ilmarinen