BED SORE BIOMECHANICS

STRATHCLYDE BIOENGINEERING SEMINARS

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Proceedings of a seminar on Tissue Viability and Clinical Applications organised in association with the Department of Biomedical Engineering, the Institute of Orthopaedics (University of London), Royal National Orthopaedic Hospital, Stanmore, London, and held at the University of Strathclyde, Glasgow, in August, 1975

Edited by

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in association with

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PREFACE

Bioengineering activities at the University of Strathclyde were initiated by the formation of a Medical Research Council Biomechanics Group in 1962. This has grown into the Bioengineering Unit, a research and postgraduate teaching department of the University housed in the Wolfson Centre.

The success of broad-spectrum symposia held in 1964 and 1972 has led to the establishment of the 'Strathclyde Bioengineering Seminars', an annual series the proceedings of which will be published by Macmillan Press. Each Seminar will explore in depth a clinically significant problem area within the Unit's activities.

The series was opened in August 1975 with a Seminar on the 'Biomechanics of Tissue Viability and Clinical Application to the Prevention of the Pressure Sore'. This particular Seminar was organised in association with the Department of Biomedical Engineering, Institute of Orthopaedics (University of London), Royal National Orthopaedic Hospital, Stanmore, London. Participation was gratifying: 207 attended, consisting of representatives from Australia, Canada, Denmark, England, France, India, Iraq, Israel, the Netherlands, Scotland, Sweden, the United States and Wales. In this context the organisers gratefully acknowledge the contribution of the National Fund for Research into Crippling Diseases towards travelling expenses of invited lecturers.

The details of the Scientific, Technical and Working Group Sessions are given in the contents list. There was also an Exhibition of Related Medical Engineering Equipment in which 19 firms and organisations participated (see list on page *xxi*). A visit to the Wolfson Centre was part of the programme, during which a variety of displays showing research projects in progress in the Bioengineering Unit were on show.

All the papers presented, together with additional contributions and the discussions, are printed complete in this volume, grouped in the six sections shown in the list of contents.

The organisers acknowledge with gratitude their sense of indebtedness to the Greater Glasgow Area Health Board for their support of the Seminar and for the very enjoyable open-air reception at the Wolfson Centre given by them in association with the University of Strathclyde, for participants and guests. They also wish to record their grateful thanks to the Institute of Orthopaedics, University of London, and to the Biological Engineering Society of the United

Kingdom for their support and co-operation in assembling the programme and publicising the Symposium.

All the work connected with the Symposium as regards advance information, registration, accommodation arrangements, correspondence and the day-to-day running of the meetings was carried out by the staff of the Bioengineering Unit with the unstinted co-operation of the University Administration.

The Directors of the Armour Pharmaceutical Co. Ltd very kindly provided the pre-Seminar Dinner Reception, and by courtesy of the Bank of Scotland and Messrs. Arbuckle Smith & Co., banking and travel agent facilities were made available to participants at the Seminar.

The organisers gratefully acknowledge the co-operation and whole-hearted assistance of all concerned.

R. M. KENEDI

University of Strathclyde, Glasgow, Scotland
August 1975

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