Contents of *Technology and Health Care*
Volume 3

No. 1

Editorial introduction

Research in Europe
Methods and applications of stress research
U. Lundberg

Original Papers
Recent developments in the field of physical load measurements
G.M. Hägg
Comparison of lung radiography and counting of exposure time to magnetopneumography for estimation of total lung dust retention in arc welders
P. Högestedt, R. Kadefors and P.-E. Näslund
Improving the ensemble average of visual evoked potentials. I. Theory of correction by spectral phase difference methods
J.M. Thijssen and M.H.M. Cuypers
Improving the ensemble average of visual evoked potentials. II. Simulations and experiments
M.H.M. Cuypers and J.M. Thijssen
OSCILLO-oscillating air mattress in neonatal care of very preterm babies
N.W. Svenningsen, C. Wittström and L. Hellström-Westas
Determination of RBC flow clogging via micropore filters
P. Th. Bassios, A.A. Michail and D. Koutsouris

Technical Note
A comparative study of pulsed Nd:YAG and CO₂ laser effect on aortic valves
D. Yova, K. Kassis, E. Agapitos, N. Kavantzas, D. Koutsouris and A. Serafetinides

Calendar
Guide for Authors

No. 2

Research in Europe
Multicenter German reference data base for peripheral quantitative computer tomography
P. Schneider, S. Butz, B. Allolio, W. Börner, K. Klein, R. Lehmann, K. Petermann, G. Tysarczyk-Niemeyer, Chr. Wüster, C. Zander, R. Ziegler and Chr. Reiners

Review Article
Medicine in virtual environments
A.C.M. Dumay
Original Papers

Interpretation of multimodal medical images using connectionist and variational methods
L. Brunie, F. Leitner, F. Berthommier, P. Cinquin and J. Demongeot

Interpretation of diagnostic implications of fluorescence parameters for atherosclerosis in fibrous, calcified and normal arteries
D. Yova, H. Gonis, C. Politeopoulo, E. Agapitos, N. Kavantzas and S. Loukas

The role of thermal feedback in electrosurgical tissue heating
D.J. Curcie and W. Craelius

Measurement of tear electrolyte concentration and turnover rate using a flexible conductimetric sensor
K. Mitsubayashi, K. Ogasawara, K. Yokoyama, T. Takeuchi, T. Tsuru and I. Karube

A generic environment for linear and nonlinear ECG processing
S. Tombros, G. Tsilikis, S. Marakas, E. Protonotarios, D. Koutsouris and P. Toutouzas

Calendar

No. 3

Special Issue: Mechanics of the circulatory system

Mathematical modeling of arterial blood flow and correlation to atherosclerosis
K. Perktold and G. Rappitsch

The effect of wall roughness on velocity distribution in a model of the carotid sinus bifurcation – analysis of laser and ultrasound doppler velocity data
K. Kalazynski and D. Liepsch

Analysis of the effects of measurement errors on the evaluation of propagation coefficients, in rubber tubes and canine aorta in vivo
C.D. Bertram and J. She

The dynamics of pulsatile flow in distensible model arteries
D.W. Liepsch and R. Zimmer

Forward and backward waves in the arterial system: nonlinear separation using Riemann invariants
F. Pythoud, N. Stergiopulos and J.J. Meister

Determination of displacement, stress- and strain-distribution in the human heart: a FE-model on the basis of MR imaging
P. Schmid, M. Stuber, P. Boesiger, O.M. Hess and P. Niederer

No. 4

Obituary — Professor F.T. de Dombal

Publisher’s note

Regular papers

An expert diagnostic system based on neural networks and image analysis techniques in the field of automated cytogenetics
M.S. Beksaç, S. Eskizmirliler, A.N. Çakar, A.M. Erkmen, A. Dağdeviren and C. Lundsteen

In vitro testing of a left ventricular assist device. Study of the effect of its control strategy on energetic relationships inside the left ventricle

A device for the measurement of malleoli diastasis
M. Torre, F. Di Feo, C. Giacomozzi and V. Macellari

Optoelectronic techniques for patient repositioning in radiotherapy
G. Baroni, G. Ferrigno and A. Pedotti

Laparoscopic and thoracoscopic surgery in infancy and childhood, the Münster/Gent experience

A method for predicting the utilization of medical technology in neonatal care
J.D. Scalon, M.F.V. Melo and R.B. Panerai
Technical Note
The CARDIO-LOGOS system for ECG training and diagnosis
Ph. Bourlas, E. Giakoumakis, D. Koutsouris, G. Papakonstantinou and P. Tsanakas 279

Author Index 287
Keyword Index 289
Contents of *Technology and Health Care* Volume 3 291