Contents

Preface

Biography of Robert Pertsch Gilbert

1. Elliptic and related equations

E Kreyszig Class P operators, the minimal surface equation and the Weierstrass representation	1
J Püngel and H Florian Differentialtransformationen bei quasilinearen Gleichungen zweiter Ordnung	14
R Heersink On associated operators in the theory of Cauchy-Kovalevskaya problems	23
H-J Fischer and E Lanckau On the representation of solutions to linear partial differential equations of mixed type	29
E I Obolashvili and M Reissig Reproducing kernels and uniqueness classes for the Cauchy problem in classes of generalized analytic functions	35
W Tutschke A simplified construction of generalized analytic functions in several complex variables	45
W Sprössig and K Gürlebeck Application of quaternionic analysis on generalized non-linear Stokes eigenvalue problem	52
R Delanghe, F Sommen and Y Soucek Residues in Clifford analysis	61
2. Complex analysis	
W Koepf Parallel accessible domains and domains that are convex in some direction	93

K-J Wirths Semi-dual functions and nonvanishing entire functions	106
D J Hallenbeck Radial growth of subharmonic functions	113
P A McCoy Polynomial expansions of analytic functions by function theoretic methods	122
3. Riemann-Hilbert boundary value problems	
L von Wolfersdorf On the theory of the nonlinear Hilbert problem for holomorphic functions	134
D-Q Dai On the Riemann-Hilbert boundary value problem for nonlinear elliptic equations in the plane	150
G C Wen and P-Q Li Numerical method for the Riemann-Hilbert problem of nonlinear elliptic complex equations of first order	156
W Lin and D-Q Dai The Riemann-Hilbert boundary value problems associated with linear and semilinear pseudoparabolic systems of two space variables	165
M Z Li On nonlinear boundary value problems for a class of first order overdetermined elliptic system in a bicylinder	178
A Dzhuraev On the Moisil-Theodorescu system	186
Z Xu Helmholtz equations and boundary value problems	204