

TABLE OF CONTENTS

O. Introduction and Survey	
H.G. SCHUSTER.....	1
1. Chemical Aspects of Planar Complex One-Dimensional Metals	
K. KROGMANN.....	12
2. The Crystal Structure of $K_2Pt(CN)_4Cl_{0.3} \cdot 3H_2O$	
H.J. DEISEROTH and H. SCHULZ.....	20
3. X-Ray Scattering Observation of the Kohn Peierls Instability in the One-Dimensional Krogmann Salts	
R. COMÈS.....	32
4. Neutron Scattering Studies of Lattice Dynamics and Structural Changes in the One-Dimensional Conductor $K_2Pt CN _4Br_{0.3} \cdot 3D_2O$	
B. RENKER, L. PINTSCHOVIOUS, W. GLÄSER, H. RIETSCHER and R. COMÈS.....	53
5. Microscopic Theory of Quasi One-Dimensional Conductors	
G. MEISSNER.....	71
6. Some Aspects of the Electron-Phonon Coupling in Quasi One- Dimensional Systems	
S. BARISIĆ.....	77
7. Comment on the Peierls Instability	
W. SCHATTKE.....	92
8. Band Structure of $K_2Pt(CN)_4 Br_{0.3} \cdot 3H_2O$	
L. FRITSCHER and M. RAFAT-MEHR.....	97
9. Anharmonic Effects in $K_2Pt(CN)_4Br_{0.3} \cdot 3H_2O$	
S. ROTH and R. RANVAUD.....	108
10. Three-Dimensional Ordering in Weakly Coupled Linear Conductors	
W. DIETERICH.....	126
11. Phonon Dispersion of a Single Chain of Pt Atoms	
R. LIEBMANN, R. SALCHOW, and J. APPEL.....	139

12. The Electronic Properties of TTF-TCNQ	
A. HEEGER and A.F. GARITO.....	151
13. Electromagnetic Excitation Spectrum of the Peierls Phase	
H.G. SCHUSTER.....	184
14. Optical Properties of the One-Dimensional Pt-Complex Compounds	
P. BRÜESCH.....	194
15. Far Infrared Transmission and Reflection Spectra of	
$K_2Pt(CN)_4Br_{0.3} \cdot 3H_2O$	
G. WINTERLING and T.P. MARTIN.....	244
16. Band Structure Calculations for TTF-TCNQ	
G. STOLLHOFF.....	257
17. A Polaronic Fit of Optical Data of $K_2Pt(CN)_4Br_{0.3} \cdot 3H_2O$	
H. HINKELMANN.....	267
18. Transport Properties of the Peierls System	
L. SHAM and B.R. PATTON.....	272
19. Some Fluctuation and Electrodynamic Properties of the	
Peierls-Fröhlich Conductor	
M.J. RICE, S. STRÄSSLER, and W.R. SCHNEIDER.....	282
20. Peierls Instability and Paraconductivity in Pseudo-One-	
Dimensional Conductors	
M.C. LEUNG.....	335
21. Single-Particle States, Kohn Anomaly, and Pairing Fluctu-	
ations in One Dimension	
A. LUTHER and I. PESCHEL.....	342
22. Application of the Equation of Motion Method to the Tomonaga	
Model	
H.U. EVERTS and H. SCHULZ.....	343
23. Some Rigorous Results on the Equilibrium Properties of the	
One-Dimensional Electron Gas Model	
Ph. CHOQUARD and H. KUNZ.....	351

24. Electron Electron Interaction and Instabilities in One
Dimensional Metals

T.V. RAMAKRISHNAN.....361