



061.3  
I8  
1981

# PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON LOW DIMENSIONAL CONDUCTORS BOULDER, COLORADO, U.S.A. 9-14 August, 1981

## CONTENTS-PART B

In these contents pages, the numbers relate to the page numbers within square brackets appearing on each text page.

Contents-Part A	III
Introduction	VI
Articles	
<b>(TMTSF)<sub>2</sub>X and Superconductivity</b>	
K. BECHGAARD: (TMTSF) <sub>2</sub> X Salts: Preparation, Structure and Effect of the Anions	357
E. M. ENGLER, R. GREENE, P. HAEN, Y. TOMKIEWICZ, K. MORTENSEN and J. BERENDZEN: Chemistry and Electrocrystallization of Organic Metals and Superconductors	371
C. S. JACOBSEN, D. B. TANNER and K. BECHGAARD: Optical Properties of Some (TMTS(T)F) <sub>2</sub> X compounds	381
K. IWAHANA, H. KUZMANY, F. WUDL. and E. AHARON-SHALOM: Raman Scattering from TMTSF Salts	395
J. C. SCOTT: Magnetism of the (TMTSF) <sub>2</sub> X Family of Organic Conductors	405
J. C. SCOTT, E. M. ENGLER, W. G. CLARK, C. MURAYAMA, K. BECHGAARD, and H. J. PEDERSEN: NMR Studies of (TMTSF) <sub>2</sub> PF <sub>6</sub>	417
F. WUDL: A Spin-Charge Separation Hypothesis Based on the Structure of the Salts (TMTSF) <sub>2</sub> X (X = PF <sub>6</sub> , AsF <sub>6</sub> )	423
P. M. CHAIKIN, M. YICHOI, P. HAEN, E. M. ENGLER and R. L. GREENE: Magnetotransport and Non-linear Effects in (TMTSF) <sub>2</sub> PF <sub>6</sub>	435
E. M. CONWELL and N. C. BANIK: High Electric Field Transport in (TMTSF) <sub>2</sub> PF <sub>6</sub> [Bis-Tetra-methyltetraselenafulvalene Hexafluorophosphate] at Low Temperatures	451
J. F. KWAK, J. E. SCHIRBER, R. L. GREENE and E. M. ENGLER: Magnetotransport in (TMTSF) <sub>2</sub> PF <sub>6</sub> and (TMTSF) <sub>2</sub> ClO <sub>4</sub> Under Pressure	467
L. J. AZEVEDO, J. E. SCHIRBER, R. L. GREENE and E. M. ENGLER: Low-Temperature Electron Spin Resonance in (TMTSF) <sub>2</sub> PF <sub>6</sub> in the High Pressure Metallic Phase	479
J. P. POUGET, R. MORET, R. COMES, K. BECHGAARD, J. M. FABRE and L. GIRAL: X-Ray Diffuse Scattering Study of Some (TMTSF) <sub>2</sub> X and (TMTTF) <sub>2</sub> X Salts	485

M. M. LEE, J. P. STOKES, F. M. WIYGUL, T. J. KISTENMACHER, D. O. COWAN, T. O. POEHLER, A. N. BLOCH, W. W. FULLER and D. U. GUBSER: Synthesis and Study of Electrochemically Grown Salts of Organic $\pi$ -Donors	501
D. JEROME: Organic Superconductors: A Survey of Low Dimensional Phenomena	511
R. L. GREENE, P. HAENJIS, Z. HUANG, E. MIENGLER, M. Y. CHOI and P. M. CHAIKIN: Some Properties of the (TMTSF) <sub>2</sub> X Superconductors	539
H. J. SCHULZ: Interchain Coupling in Quasi-One-Dimensional Superconductors: Homogeneous Coupling and Cross-Linking	555
S. S. P. PARKIN, D. JEROME and K. BECHGAARD: Pressure Dependence of the Metal-Insulator and Superconducting Phase Transitions in (TMTSF) <sub>2</sub> ReO <sub>4</sub>	569
D. U. GUBSER, W. W. FULLER, T. O. POEHLER, J. STOKES, D. O. COWAN, M. LEE and A. N. BLOCH: Resistive and Magnetic Susceptibility Transitions in Superconducting (TMTSF) <sub>2</sub> ClO <sub>4</sub>	581
B. HOROVITZ, H. GUTFREUND and M. WEGER: Competition Between SDW and Superconductivity in (TMTSF) <sub>2</sub> X Compounds	591
S. S. P. PARKIN, F. CREUZET, M. RIBAULT, D. JEROME, K. BECHGAARD and J. M. FABRE: Superconductivity in the Organic Charge Transfer Salts: (TMTSF) <sub>2</sub> X and (TMTTF) <sub>2</sub> X	605
A. FOURNEL, C. MORE, G. ROGER, J. P. SORBIER, J. M. DELRIEU, D. JEROME, M. RIBAULT, K. BECHGAARD, J. M. FABRE and L. GIRAL: One Dimensional Organic Superconductivity in (TMTSF) <sub>2</sub> PF <sub>6</sub> and (TMTSF) <sub>2</sub> ClO <sub>4</sub> Detected via Tunnel Spectroscopy	617
K. BECHGAARD, K. CARNEIRO, O. EG, M. OLSEN, F. B. RASMUSSEN, C. JACOBSEN and G. RINDORF: Superconductivity in (TMTSF) <sub>2</sub> ClO <sub>4</sub> at Zero Pressure	627
H. SCHWENK, K. NEUMAIER, K. ANDRES, F. WUDL and E. AHARON-SHALOM: Meissner Anisotropy in Deuterated (TMTSF) <sub>2</sub> ClO <sub>4</sub>	633
K. MURATA, H. ANZAI, K. KAJIMURA, T. ISHIGURO and G. SAITO: Superconducting Transition of (TMTSF) <sub>2</sub> ClO <sub>4</sub> in Magnetic Fields	639
K. MACHIDA and T. MATSUBARA: Possibility of Coexistence of Spin Density Wave and Superconductivity in Organic Conductor (TMTSF) <sub>2</sub> PF <sub>6</sub>	645
T. SUGIYAMA: Phase Transitions of a Quasi-One-Dimensional Fermi Gas	655
S. FLANDROIS, C. COULON, P. DELHAES, D. CHASSEAU, C. HAUW, J. GAULTIER, J. M. FABRE and L. GIRAL: On the Structure and Properties of TMTTF and TMTSF Salts: Experimental Evidence for the Importance of Interchain Couplings	663
J. M. WILLIAMS, M. A. BENO, E. H. APPELMAN, J. M. CAPRIOTTI, F. WUDL, E. AHARON-SHALOM and D. NALEWAJEK: New (TMTSF) <sub>2</sub> X Derivatives: A Change in the Selenium Network Dimensionality Derived From the Molecular and Crystal Structures of (TMTSF) <sub>2</sub> (FSO <sub>3</sub> ) [T = 298K, 123K] and (TMTSF) <sub>2</sub> (BrO <sub>4</sub> ) [T = 298K]	675
J. P. STOKES, T. J. EMGE, W. A. BRYDEN, J. S. CHAPPEL, D. O. COWAN, T. O. POEHLER, A. N. BLOCH and T. J. KISTENMACHER: (TMTSF) <sub>2</sub> (2,5-TCNQBr <sub>2</sub> ): Structure and Physical Properties	683
D. R. P. GUY, E. A. MARSEGLIA, S. S. P. PARKIN, R. H. FRIEND and K. BECHGAARD: Thermal Expansion in TMTSF-DMTCNQ & (TMTSF) <sub>2</sub> PF <sub>6</sub>	693
A. ISIHARA, M. MUKAI and S.-J. LEE: Effects of a Magnetic Field on the Dielectric Constant and Conductivity of 2D Metals	699
H. P. FREDRICKSEN, M. LEVY, M. ASHKIN and J. R. GAVALER: Possible Ultrasonic Evidence for the Existence of Vortex-Antivortex Pairs	707