

# Table of Contents

<b>Unconventional All-Carbon Networks</b> M. Kryszewski	1
<b>Synthesis of Low Band Gap Polymers- A Challenge for Organic Chemists</b> M. Hanack	13
<b>C<sub>70</sub>: Electrical and Magnetic Properties of the First Higher Fullerene</b> L. Firlej	21
<b>Mössbauer Spectroscopy Studies of Fullerites</b> Z. Kucharski, P. Byszewski and J. Suwalski	31
<b>Conjugated Network with Dithienothiophene?</b> Z. Borkowska, J. Plochanski, I. Zadrozna and J. Przyluski	37
<b>Synthesis of a Polyaniline/Inorganic Nanocomposite</b> P.G. Hill, P.J.S. Foot and R. Davis	43
<b>Preparation and Properties of Polypropylene/Polypyrrole Composite</b> M. Omastová, J. Pionteck, S. Košina and L. Häussler	47
<b>The X-Ray Diffraction and Computer Modelling Study of the Molecular Conformation of Poly(3-Alkylthiophenes)</b> W. Luzny, S. Niziol, I. Kulszewicz-Bajer and A. Pron	53
<b>The Structure and Thermal Stability of Mixed Crystals Containig C<sub>60</sub> and Amines</b> P. Byszewski, R. Diduszko and E. Kowalska	61
<b>The Theory of Regular Solution and the Extractibility of Higher Fullerenes</b> J. Fröhner and L. Dunsch	65
<b>Bond Alternation in <math>\pi</math>-Conjugated Materials</b> D. Baeriswyl and E. Jeckelmann	71
<b>Electronic Properties and Bond Alternation in C<sub>60</sub></b> G. Stollhoff and H. Scherrer	81
<b>Influence of Temprature Evolution of the Electronic Band Sturcture on Transport Properties in Doped Regioregular Polyalkylthiophenes</b> P. Barta, P. Dannetun, S. Niziol, W.R. Salaneck, M. Zagorska and A. Pron	91
<b>Electronic Transport in Polyconjugated Materials</b> B. Movaghar	101
<b>Comparison of Graphite Intercalation Compounds and Doped Fullerenes: Superconducting Properties</b> K. Lüders	119
<b>Fractional Quantum Point Contact Conductance Quantization Produced by an Electric Field</b> A.I. Onipko, L.I. Malysheva and Y.A. Klimenko	129
<b>Low Pressure Dependence of the Electrical Conductivity in Doped Polypyrrole</b> V. Skákalová, P. Fedorko, J. Annus, D. Véggh and M. Landl	135
<b>Properties of Junctions Formed by Conductive Polymer Systems</b> J.K. Jeszka	141
<b>Micro- and Nanoelectronic Aspects in Conjugated Systems</b> C.M. Fischer, M. Burghard and S. Roth	149
<b>Raman Spectroscopy of Conjugated Carbon Systems: Polymers, Carbynes and Fullerenes</b> J. Kastner, J. Winter and H. Kuzmany	161
<b>Carbon Onions: Optical Investigation of Electron Beam Irradiated Carbon Materials</b> P. Fedorko, V. Skákalová, O. Foltin, F. Kolenic and V. Šmatko	171
<b>Photoexcitations in Conjugated Polymers</b> W. Graupner and G. Leising	177
<b>Photoconductivity and Photoexcitation Spectra of Acceptor Substituted Poly(3-Butyl)Thiophene</b> Y. Greenwald, G. Cohen, J. Poplawski, E. Ehrenfreund, S. Speiser and D. Davidov	187
<b>Electroluminescence in Conjugated Polymers and Fullerenes</b> A.T. Werner, G. Grem, H.J. Byrne, G. Leising and S. Roth	195

<b>Potentiostatic Pulse Measurements at Conducting Polymers</b> O. Genz and M.M. Lohrengel	207
<b>Localisation of Photoactivated Processes in Poly-Bithiophene</b> T. Morgenstern, U. König and J.W. Schultze	213
<b>Film Initiation and Growth in Electropolymerisation</b> J. Lukkari	219
<b>Polymerization of Thin Pyrrole Films on Poly(Ethylene Oxide) - FeCl<sub>3</sub> Coordination Complex</b> J.F. Rabek, L.Á. Lindén, E. Adameczak, J. Sanetra, F. Starzyk and J. Pielichowski	225
<b>Polymer Films Containing Metal Particles- Nobel Metals in Polyaniline</b> L.M. Abrantes and J.P. Correia	235
<b>Electrochemical and Optical Studies of Metallic Ion Insertion in Polypyrrole Films</b> S. Pruneanu, R. Turcu, M. Brie and G. Mihailescu	241
<b>Poly-1,8-Diaminonaphthalene: Sensor for Heavy Metal Ions</b> K. Jackowska, A. Kudelski and J. Bukowska	247
<b>Electrochromic Polyquinoxaline Oligomers</b> P.J.S. Foot, V. Montgomery and P. Spearman	251
<b>New Model for the Mechanism of Current-Producing Processes in Polyaniline-Type Conductive Polymers</b> V. Barsukov and S. Chivikov	257
<b>Development of Rechargeable Metal-Free Battery of the Novel Electrochemical System "Graphite/HBF<sub>4</sub>/Anthraquinone"</b> I. Barsukov, T. Motronyuk and V. Barsukov	261
<b>Porous Graphite Intercalation System for Rechargeable Batteries</b> I. Barsukov	265