

CONTENTS

THE CHEMISTRY HIGH SOLIDS ALKYD/REACTIVE DILUENT COATINGS	1
HIGH SOLIDS ALKYD RESINS	23
FORMATION AND PROPERTIES OF COLLOIDAL ALKYDS	35
NEW LIGHT STABILIZERS FOR HIGH-SOLID COATINGS	55
THE USE OF SILICONE POLYMERS IN WATER – REDUCIBLE COATINGS	87
LIQUID AND SIZE EXCLUSION CHROMATOGRAPHY CHARACTERIZATION OF OLIGOMERS AND SMALL MOLECULES USED IN COATINGS	101
SOLVENTS IN COATINGS	125
ON THE RELATION BETWEEN PROPERTIES OF ACRYLIC POLYOL AND CROSSLINKING DENSITY IN A TWO-COMPONENT POLYURETHANE PAINT	151
DEGRADATION OF POLYURETHANES IN ORGANIC SOLVENTS	167
A NEW EPOXY RESIN/HARDENER SYSTEM	183
DIFFERENTIAL THERMAL ANALYSIS OF EPOXY RESINS IN A TEMPERATURE RANGE ABOVE 200°C	203
THE UTILITY OF SURFACE ANALYTICAL INSTRUMENTATION FOR COATING PROBLEM SOLVING AND PRODUCT DEVELOPMENT	227
INFLUENCE OF POLYESTER / MELAMINE RESIN NETWORKS ON THE MECHANICAL PROPERTIES AND CORROSION STABILITY OF HIGH-SOLIDS COATINGS	257
INTERFACIAL INTERACTIONS BETWEEN COATINGS AND METALS RELATED TO ADHESION AND CORROSION PROTECTION	277
A NEW TECHNIQUE TO STUDY CORROSION MECHANISMS UNDER ORGANIC COATINGS	309
NEW APPROACHES TO THE PROBLEM OF CORROSION PROTECTION BY MEANS OF ORGANIC COATINGS	325
RECENT ADVANCES IN COATINGS FOR HOUSEHOLD APPLIANCES	351
STEEL SURFACE CLEANLINESS: PREPARATION, CHARACTERIZATION, AND PAINT PERFORMANCE	373
PROTECTION OF STEEL BY BLASTING WITH ZINC-COATED ABRASIVES AND PAINTING UNDER WATER OR IN WET CONDITIONS	395
THE CRITICAL PIGMENT VOLUME CONCENTRATION AND ITS EFFECTS IN LATEX COATINGS	407
THE STRUCTURE OF ADSORBED POLYMER LAYERS ON PIGMENT SURFACES AS RELATED TO DISPERSION STABILITY	423
CONTRIBUTION TO ENERGETIC CHARACTERIZATION OF PIGMENT DISPERSIONS: PIGMENTS AND SOLVENTS	455

CLEAR FINISHES FOR WOOD – AN EXAMPLE OF ONE APPROACH TO PREDICTING PERFORMANCE	479
RADIATION CURED COATINGS FOR LEATHER III: A REVIEW OF RESEARCH AT THE EASTERN REGIONAL RESEARCH CENTER	507
INORGANIC COATINGS, ESPECIALLY TRANSPARENT OXIDE COATINGS PRODUCED FROM ALKOXIDES ⁵¹⁷	