

1. Record Nr.	UNINA9910450116503321
Titolo	Adhesion aspects of polymeric coatings . Volume 2 // edited by Kash L. Mittal
Pubbl/distr/stampa	Boca Raton, FL : , : CRC Press, an imprint of Taylor and Francis, , 2003
ISBN	0-429-08797-7 1-280-46544-1 9786610465446 1-4175-7781-9 90-474-0329-0
Edizione	[First edition.]
Descrizione fisica	1 online resource (222 p.)
Disciplina	668.4/9
Soggetti	Adhesion Plastic coating Polymers Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Contents; Preface; Interphase: Formation, characterization and relevance to practical adhesion; Depletion, a key factor in polymer adhesion; Attaining adhesion/cohesion within painted plastics; Scanning electric potential microscopy (SEPM) and electric force microscopy (EFM) imaging of polymer surfaces; The residue (smut) formed on aluminum alloys during hydrofluoric acid etching and its effect on a coating process; Surface modification of metals by silanes; Application of X-ray photoelectron spectroscopy in assessing the adsorption of siloxane polymers onto E-glass fibers Surface modification of polyphenylene sulfide plastics to improve their adhesion to a dielectric adhesive Metal surface conditioning concepts for resin bonding in dentistry; Measurement of internal stresses in polymeric coatings using time resolved fluorescence; Adhesion of an alkyd paint to cold rolled steel sheets: Effect of steel surface composition; Analysis of the wet adhesion of coatings on wood; Modified tape test: Measurement of adhesion of insulator films to low

This volume documents the proceedings of the Second International Symposium on Adhesion Aspects of Polymeric Coatings held in Newark, New Jersey, May 25-26, 2000. Since the first symposium, held in 1981, there had been tremendous research activity relative to the adhesion aspects of polymeric coatings. Polymeric coatings are used for a variety of purposes. Irrespective of the intended purpose of the coating, it must adequately adhere to the underlying substrate, otherwise delamination and other undesirable phenomena occur. So the need to understand the factors which influence adhesion of polymeric coatings and to control it to a desirable level is quite patent. This volume contains a total of 13 papers, which were all properly peer reviewed, revised and edited before inclusion. Furthermore, the authors were asked to update their manuscripts, so the information contained in this book should be current and fresh. The topics covered in this book include: factors influencing adhesion of polymeric coatings; ways to improve adhesion; formation and relevance of interphase in practical adhesion; adhesion/cohesion in painted plastics; imaging of polymer surfaces; effect of substrate residue (smut) on coating process; surface treatment of metals and glass by silanes; surface modification of polyphenylene sulfide plastics; resin bonding in dentistry; measurement of internal stresses in polymeric coatings; effect of steel surface composition on adhesion of paint; wet adhesion of coatings on wood; and modified tape test to measure adhesion of coatings.
