

15th TAPPI European PLACE Conference 2015

Nice, France
11-13 May 2015

ISBN: 978-1-5108-5999-9

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2015) by the TAPPI Press
All rights reserved.

Printed by Curran Associates, Inc. (2017)
For permission requests, please contact the TAPPI Press



at the address below.

TAPPI Press
15 Technology Parkway South
Peachtree Corners, Georgia 30092

Phone: (800) 332-8686
Fax: (770) 446-6947

memberconnection@tappi.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

INVESTIGATION OF THE STABILITY OF A POLYMER COATING PROCESS	1
<i>J. F. Agassant, Y. Demay, A. Kallel</i>	
CERTIFIED RENEWABLE POLYOLEFINS A NOVEL APPROACH FOR ACHIEVING SUSTAINABILITY GOALS	16
<i>Judith Bosch</i>	
ASPECTS ON THE SUSTAINABILITY OF PACKAGING MATERIALS	27
<i>Marek Hauptmann</i>	
NEW HIGH EFFICIENCY EXTRUSION COATING LDPE'S –TECHNOLOGY PROGRESS AND BENCHMARK WITH AUTOCLAVE GRADES	46
<i>Bernard A. Fehr</i>	
PERFORMANCE POLYMERS FOR VALUE-ADDED HEAT-SEALABLE POLYPROPYLENE FILMS	57
<i>Thomas Cugnon</i>	
HIGH PRESSURE POLYETHYLENE FROM TUBULAR REACTORFOR EXTRUSION COATING	67
<i>Mattias Bergqvist, Auli Nummilla-Pakarinen</i>	
DIE BUILD UP ISSUES IN EXTRUSION-TAILOR MADE FLUOROPOLYMERS AS A USEFUL AND EFFICIENT PROCESSING AIDS	75
<i>Samuel Devisme</i>	
PROCESS BASICS IN EXTRUSION COATING	87
<i>Michael Schroder</i>	
HOW TO START UP AND COOL DOWN YOUR EXTRUSION COATING EQUIPMENT EFFICIENTLY?	116
<i>Mikko Peltovuori</i>	
WHAT'S NEW @ DOW	132
<i>Apurva Shah</i>	
EXXONMOBIL POLYMERS IN EXTRUSION COATING FOR ENHANCED SEALING PERFORMANCEAND PACKAGE INTEGRITY	136
<i>Linda Van Den Bossche</i>	
ADVANTAGES OF BUTT SPLICING IN EXTRUSION COATING	142
<i>Michael Sellers</i>	
FLEXPACK®-THE NEW GENERATION	148
<i>Mario Höllsteiner</i>	
PRECISION IN FOCUS-INNOVATIVE INSPECTION AND MEASUREMENT SOLUTIONS	153
<i>Hans Örley</i>	
IMPROVED MEASUREMENT OF OXYGEN AND WATER VAPOR BARRIERS	159
<i>Andreas Roos</i>	
ELTEX® PF METALLOCENE RESINS FROM ATO Z-LESS IS MORE	164
<i>Jacques D'heur</i>	
RELIABLE PARTNER FOR SOPHISTICATED PRODUCTS	168
<i>Günther Spaeth</i>	
EXTRUSION COATING EDGE BEAD REDUCTION	174
<i>Andre Thelen</i>	
INNOVATION COUNTER -QUEO PLASTOMER PRODUCTS FOR HIGH PERFORMANCE EXTRUSION COATING AND SEALING	183
<i>Auli Nummilla-Pakarinen</i>	
APPLICATION OF ADVANCED RHEOLOGY TECHNIQUES TO EXTRUSION OPTIMIZATION	189
<i>Christine Ronaghan</i>	
ACTIVATION ENERGY TO PREDICT THE ADHESION OF LDPE TO ALUMINIUM FOIL IN EXTRUSION LAMINATION	200
<i>Per-Ake Clevenhag, Claes Oveby</i>	
SEALING-TOOL DESIGN AND FINITE-ELEMENT-PROCESS SIMULATION	214
<i>Sascha Bach</i>	
CAN WE PREDICT POUCH DROP TEST PERFORMANCE AND SHELF APPEARANCE WITH COMPUTER MODELING AND EXPERIMENTAL VALIDATION?	245
<i>P. Sandkuehler, S. Bensason, C. Wocke, P. Shembekar, A. Siddiqui</i>	

MORE SUSTAINABLE MEAT PACKAGES THROUGH NOVEL SEALANT SOLUTIONS	257
<i>Karlheinz Hausmann, L Ziche, H. Schenck</i>	
PACKAGE STRUCTURE REVIEW, TIE LAYER AND SEALANT SELECTION GUIDE	276
<i>Jim Cooper</i>	
A REVIEW OF COEXTRUSION TECHNOLOGY FOR FLEXIBLE PACKAGING	292
<i>Olivier Catherine</i>	
LIGHTWEIGHTED COEXTRUDED HIGH BARRIER FILMS FOR FOOD PACKAGING APPLICATIONS MADE WITH THE TRIPLE BUBBLE® PROCESS	310
<i>Heiko Schenck, Camille Olry, Karlheinz Hausmann</i>	
FUNDAMENTALS STUDY OF LLDPE/LDPE BLOWN FILMS	333
<i>Rajen Patel</i>	
FILM ON FOIL OR FOIL ON FILM?	346
<i>Pomati Davide</i>	
DEVELOPING ROLL HARDNESS ON CENTRE & CENTRE/SURFACE WINDERS	359
<i>R. Duane Smith</i>	
IMPROVING THE EFFECT OF A NANOSCALE BARRIER COATING ON BOPP FILM PROPERTIES: INFLUENCE OF SUBSTRATE CONTAMINATION, WEB HANDLING AND PRETREATMENTS	387
<i>Johanna Lahti</i>	
ALUMINIUM FOIL AND EXTRUSION COATING –LATEST NEWS ABOUT AN OLD COUPLE FROM THE OLD WORLD	399
<i>Guenter Schubert</i>	
BARRIER CHARACTERISTICS OF METALLIZED PET ON TOP OF PRINT	435
<i>James Macnamara</i>	
INTEGRITY OF ULTRASONICALLY SEALED POUCHES	453
<i>S. Bach, M. Stein, N. Bunk</i>	
FORMULATION OF AN ANTIMICROBIAL COATING CONTAINING NISAPLIN® INTENDED FOR LARGE SCALE PRODUCTION AND INHIBITION OF SPOILAGE MICROORGANISMS	454
<i>M.C. Perna, K.D. Cooksey, P. Gerard, E.J. Rhodehamel, D.O. Darby</i>	
ADVANTAGES OF BUTT SPLICING IN EXTRUSION COATING	455
<i>Michael Sellers</i>	
INVESTIGATION OF SEAL THROUGH CONTAMINATION PERFORMANCE OF POLYOLEFIN SEALANTS	456
<i>Benjamin Stephan, Martin Hill</i>	
HOT TACK OF ALUMINIUM FOIL LAMINATES WITH IONOMERSEALANTS	457
<i>Guenter Schubert, Anja Ulrich</i>	
ENHANCED IN-LINE DETECTION, CLEANING AND REPAIR OF NANO-SCALE DEFECTS IN THIN-FILMS USED FOR FLEXIBLEPHOTOVOLTAIC AND FOOD PACKAGING APPLICATIONS	458
<i>Liam Blunt, Steven Bagshaw</i>	
TAMPERE UNIVERSITY OF TECHNOLOGY, DEPARTMENT OF MATERIALS SCIENCE PAPER CONVERTING AND PACKAGING TECHNOLOGY	459
<i>N/A</i>	
MICRO- AND NANO-SCALE DEFECT DETECTION, CLEANING AND REPAIR TECHNIQUES TO IMPROVE THE QUALITY OF NANOSCALE BARRIER COATINGS	460
<i>Johanna Lahti, Kimmo Lahtinen, Petri Johansson, Mika Sillanpää, David C. Cameron</i>	
DIODE LASER TRANSMISSION JOINING FOR FILMS	461
<i>Gregor Wendt, Ralph Jänchen, Maximilian Brosda, Alexander Olowinsky</i>	
PRODUCTION FLOW COST ENCAPSULATION MATERIALS ON WEATHERABLE SUBSTRATES	462
<i>E. Kucukpinara, S. Kiese, O. Miesbauer</i>	
STANDARD PRACTICE FOR DEFECT DETECTION AND RATING OF PLASTIC FILMS USING OPTICAL SENSORS	463
<i>S. Kuttnick-Conrad</i>	
METAL ADHESION STRENGTH OF METALLIZED FILMS, PEEL TESTS	464
<i>E. Kucukpinar, K. Noller, M. Jesdinszki, N. Rodler, C. Struller, V. Cassio, D. Blondin, H.-C.Langowski</i>	
HOW DOES A BEVERAGE CARTON WORK?	465
<i>Claudia Seeger, Günter Schubert, Otto Plassmann</i>	
OPTICAL IN-LINE QUALITY CONTROL IN LABEL STOCK PRODUCTION	466
<i>Hans Oerley</i>	
IMPROVED MEASUREMENT OF OXYGEN AND WATER VAPOR BARRIERS	467
<i>Andreas Roos</i>	

EVOH, AN EFFECTIVE WAY TO PREVENT THE MIGRATION OF MINERAL OIL AND OTHER HARMFUL ORGANIC SUBSTANCES	468
<i>Cynthia Teniers</i>	
PROTECTION OF DRY FOOD BY USING POLYAMIDE	476
<i>Rolf-Egbert Gruetzner</i>	
NEW BIOBASED BARRIER MATERIAL FOR FLEXIBLE PACKAGING	493
<i>Maria Soliman, Hans Martens, Lucio Baccaro, Renate Tandler</i>	
PRETREATMENTS AND THEIR DURABILITY IN EXTRUSION COATED PRODUCTS	504
<i>Erkki Laiho</i>	
WHY ALL FILMS DO NOT TREAT THE SAME - THE SIGNATURE RELATIONSHIP BETWEEN YOUR FILM AND CORONA TREATERS.....	521
<i>Tom Gilbertson</i>	
OPTICAL IN-LINE QUALITY CONTROL IN LABEL STOCK PRODUCTION.....	533
<i>H. Oerley</i>	
BIOLOGICAL TANNING REACTIONS FOR OXYGEN SCAVENGING.....	550
<i>Astrid Pant, Sven Sangerlaub, Julia Dorn, Matthias Reinelt, Cornelia Stramm</i>	
FORMULATION OF AN ANTIMICROBIAL COATING CONTAINING NISAPLIN® INTENDED FOR LARGE SCALE PRODUCTION AND INHIBITION OF SPOILAGE MICROORGANISMS	560
<i>M. Perna, D. Darby, P. Gerard, J. Rhodehamel, K. Cooksey</i>	
STUDY OF PLASTISOL SPREAD COATING PROCESS	591
<i>Yamina Abdesselam, Jean-Franois Agassant, Yves Demay, Diego Gourdin, Richard Peres</i>	
ALUMINIUM FOIL - A TRADITIONAL BARRIER'S SURFACE IN PACKAGING - LOOKING BEHIND THE CURTAIN.....	606
<i>Guenter Schubert</i>	
NEW ULTRA VERSATILE ADHESIVE FOR EXTRUSION LAMINATION	639
<i>Clio Cocquet</i>	
HIGH EFFICIENCY ADHESIVE FOR SOLVENTLESSLAMINATION.....	671
<i>Eva-Maria Kupsch</i>	
ACID COPOLYMER ADHESIVE - MORE THAN JUST A TIE LAYER.....	682
<i>O. Plassmann</i>	
Author Index	