SPE RECYCLING DIVISION presents

ARC 2000

Where Innovative Ideas Merge with Reality

7th Annual Recycling Conference Proceedings Book

November 8-9, 2000
Dearborn Michigan
ARC 2000 TECHNICAL PROGRAM

Wednesday, November 8

ELECTRONIC TRACK
Moderator: Dennis Denton, Denton Plastics

9:30-10:00 am  "Printer Cartridge Recycling"
Mark Schaffer, Canon Virginia, Inc.

10:00-10:30 am  "Recycle Plastics Content in Plastics Applications"
Dr. Inder Wadehra, Jay Ray Kriby, Steve Ching, O.D. Pitts
IBM

Break

10:45-11:15 am  "Stakeholder Dialogues on Recycling Engineering Thermoplastics: A Collaborative Effort to Build A Plastics Recycling Infrastructure For Electronics"
Cynthia Murphy, University of Texas
Patty Dillon, Tufts University

AUTOMOTIVE TRACK
Moderators: Michelle Mikulec, Visteon Automotive
Ted Jacobs, Hematite, Division of Pavaco Plastics Group

9:30-10:00 am  "From Carpet to Car Parts"
Steve Dunkle, Wellman Company

10:00-10:30 am  "Recycled TPO Skins for Automotive Interior Trim"
Carlos Vieira, TMG Automotive,-SA, Portugal

Break

10:45-11:15 am  "Physical Properties Effects Due to Recycled Content in MultiLayer Structures for Thermoforming"
Tim Skillman, Equistar Chemicals, L.P.

11:15-11:45 am  "Why Recycle? Demand Driven Recycling of Engineered Thermoplastics"
Mathew A. Torosian, B & M Plastics and Richard Kaskel, Jr., B&M Plastics, Inc.
Wednesday, November 8

CONSUMABLES TRACK
Moderator: Ron Walling, Advanced Materials Center

9:30-10:00 am    "PET Recycling from EREMA"
                 Manfred Hackl, EREMA GmbH, Austria

10:00-10:30 am    "Advanced PET Bottle to Bottle Recycling Process"
                 Andreas Christel, Buehler Ltd., Switzerland

Break

10:45-11:15 am    "Processing Cost Improvements for PET Washing Plants"
                 Curt Cozart, Aldo Previero Sorema
                 Common Sense Solutions, Monroe, NY

RECYCLING TECHNOLOGY TRACK
Moderator: John Caron, General Motors, Design for Environmental Group

1:45-2:15 pm     "Vision Sort Automatic and Flexible Sorting of Plastics"
                 Dr. Volker Rehmann, Real Vision Systems GmbH, Germany

2:15-2:45 pm     "New High Capacity Systems for the Automated Separation of
                 Plastic Bottles with Multiple Indentification and Sorting Capabilities"
                 Garry R. Kenny & Felix Hottenstein, Gregg Roe & Arthur Doak, MSS, Inc.

Break

3:15-3:45 pm     "The Break Through for the Separation of Mixed Plastics"
                 Peter Behnse, TLT Turbo Laminate Trenntechnik, Frankfurt, Germany

3:45-4:15 pm     "A New Approach to Recycling of Cable Residues"
                 Dr. Robert MeierStaude & Dr. Rainer Koehnlechner
                 Hamos GmbH, Penzberg, Germany
Wednesday, November 8

AUTOMOTIVE TRACK
Moderators: Michelle Mikulec, Visteon Automotive
Ted Jacobs, Hematite Manufacturing

1:45 pm-2:15 pm  "The V Stat Triboelectric Separator-Plastics/Plastic Separation A Reality"
Eric S. Yan, John Elder, & Timo Niitti, Outokumpu Technologies

2:15-2:45 pm  "Electrostatic Separation Mixed Plastics"
Dr. Robert MeierStaude & Dr. Rainer Koehnlechner
Hamos GmbH, Pensberg, Germany

Break

3:15-3:45 pm  "Value Added Automotive PP Compounds with Post Consumer Plastics (PC)"
Dave Parashar
M. Powell, P. Dave Cymbalski, L. Blades, B. McLaughlin, D. Chundury, Ferro Corporation

3:45-4:15 pm  "Commingled & Polluted Plastics Direct Injection up to 3,000 Pounds Per Hour Per Machine"
Antonio Samakovlija, Samsa APA, Mozzanica, Italy

CONSUMABLES TRACK
Moderator: Ron Walling, Advanced Materials Center

1:45-2:15 pm  "Perspectives on Plastic Recycling Today"
Jerry Powell, Resource Recycling Magazine

2:15-2:45 pm  "Houston Curbside Recycling Update"
Norman Lee, Attractive Design, Ltd.

Break

3:00-3:30 pm  "Consumables to Lumber Recycling"
Bill Krygsman, Superior Polymers-Canada

3:45-4:15 pm  "Polystyrene Recycling Solutions"
Mike Levy, Polystyrene Packaging Council
Susan M. Ferris, The Blue Parrot
Thursday, November 9

DURABLES/TRENDS TRACK  
**Moderator:** P.M. Subramanian

**9:30-10:00 am**  
"Recycling Plastic Insulation Wastes from Wire & Cable"  
Dr. Jack Milgrom, Walden Research, Inc.

**10:00-10:30 am**  
"Recycling the 'Infrastructure' Plastic"  
Mark Sofman, The Vinyl Institute

**10:45-11:15 am**  
"Novel Technology for Recycling Mixed Plastics Waste; The Transition to Commercial Scale"  
Dr. Klementina Khait, Erin G. Riddick & Professor John Torkelson, Department of Chemical Engineering, Polymer Technology, Northwestern University

**11:15-11:45 am**  
"Blends of Novel Application of Crosslinked Elastomer Scrap in Thermoplastics"  
Dr. Joey Mead & Ross G. Stacer, University of Massachusetts

AUTOMOTIVE TRACK  
**Moderators:** Michelle Mikulec, Visteon Automotive  
**Ted Jacobs, Hematite Manufacturing**

**9:30-10:00 am**  
"Throttle Body Adapter, First Automotive Use for Repolymerized Nylon 6 Resin"  
Kim Davies, Honeywell Engineered Applications & Solutions

**10:00-10:30 am**  
"Recycling Automotive MultiLayer Instrument and Door Panels"  
Mark Lieberman, American Commodities, Inc.

Break

**10:45-11:15 am**  
"Technology for Integral Recycling of Automotive Interior Trim Scrap", Girma Gebreselassie, Lear Corporation

**11:15-11:45 am**  
"Quality System Implementation in Plastics Recycling Organizations"  
Maria Negulescu, LavergneNovaplast
Thursday, November 9

ELECTRONICS TRACK
Moderator: Dennis Denton, Denton Plastics

9:30-10:00 am "Plastics Recycling from End of Life Durables: From Lab to Reality in Eight Short Years"
Michael B. Biddle, MBA Polymers
Michael M. Fisher, American Plastics Council

10:00-10:30 am "Creating Product Value Through Integrating EH&S into the Product Design Process"
Barry Dambach, Lucent Technologies

Break

10:45-11:15 am "Recycling of PC Boards"
Dr. Robert MeierStaude & Dr. Rainer Koehlechner
Hamos GmbH, Pensberg, Germany

11:15-11:45 am "Characterization and Processing of Plastics from Minnesota's Demonstration Project for the Recovery of End Of Life Electronics"
David J Cauchi, Waste Management-Asset Recovery Group
Tony Hainault, Minnesota Office of Environmental Assistance
Brian Riise, MBA Polymers Inc.
Doug S. Smith, Sony Electronics Inc.
David A. Thompson, Matsushita Electronics Corporation of America
(Dr. Michael B. Biddle, MBA Polymers
Dr. Michael M. Fisher, American Plastics Council)

DURABLES/TRENDS TRACK
Moderator: P.M. Subramanian

1:45-2:15 pm "Woodtruder System for Extrusion of Wood Fiber Polymer Composites"
Dave Murdoch, D.S. Dardenne, Davis Standard Corporation

2:15-2:45 pm "A Property Comparision of WoodFilled High Crystallinity Polypropylene vs WoodFilled Polyethylene"
Phil Jacoby & Bill Crostic, BP Amoco Polymers

Break

3:15-3:45 pm "Politics & Plastics Recycling: Clashes Continue in 2000"
Michele Raymond, Recycling Laws International
Thursday, November 9

3:45-4:15 pm "Recovery of Expanded Polystyrene from Coated Patterns Rejected from Lost Foam Casting"
Jeremy Pletka & Jaraslaw Drelich
Michigan Technological University

RECYCLING TECHNOLOGY TRACK
Moderator: John Caron, General Motors Design for Environmental Group

1:45-2:15 pm "Electrostatic Separation of Mixed Plastic Scrap from Automotive Manufacture"
Dr. James Brown
PlasSep Limited, London, Canada

2:15-2:45 pm "Advanced Plastic Flake Sorting Systems for Bottle to Bottle Recycling"
Garry R. Kenny & Felix Hottenstein, MSS, Inc.
Manfred Dausch, Unisensor, Germany

Break

3:15-3:45 pm "Thermokinetic Compounding in the Production of Commingled Plastic Products"
Chris Brough, ReSyk, Inc.

3:45-4:15 pm "Selection of Single Screw Recycling Equipment"
Kevin R. Slusarz & Steven G. Kriger
Davis Standard Corporation