

9. RECYCLING AND MATERIAL AND ENERGY RECOVERY		SL=30min O=oral P=poster
Authors Address	Title	
U. Arena , M.L. Mastellone Dept. of Environmental Science, Second Univ. of Naples, Via Vivaldi, 81100, Caserta, Italy Umberto.Arena@unina2.it	The role of some process variables in the operation of fluidized bed pyrolysers of plastic wastes	O 9/M/14.30
A.Buekens VUB, Chemische Ingenieurstechnieken, Pleinlaan 2, B-1050 Brussel, Belgium abuekens@vub.ac.be	Pyrolysis of biopolymers: The case of sewage sludge	O 9/M/14.45
A. Hornung Institut für Chemische Technik der Universität Karlsruhe, Kaiserstr. 12, D-76128 Karlsruhe, Germany ahornung@mail.ict.uni-karlsruhe.de	Thermal treatment of halogenes containing plastic wastes	SL1 9/M/15.00
R.-E. Grützner Alliedsignal polymers GmbH, Breitscheidstr, 137, D-07407, Rudolstadt, Germany egbert.gruetzner@alliedsignal.com	Potenzial of modified polyamide for mechanical recycling	O 9/M/15.30
Y. Sakata Dept of Applied Chemistry Faculty of Engineering Okayama university 3-1-1 Tsushima Naka , Okayama 700-8530, Japan yssakata@cc.okayama-u.ac.jp	Degradation of mixture of plastics and ion exchange resins	O 9/M/15.45
P. Scarfato*, L. Incarnato*, L. Di Maio*, G.Gorrasi*, D. Acierno** *Dept. of Chemical and Food Engineering, Univ. of Salerno Via Ponte don Melillo, 84084 Fisciano (SA), Italy **Dept. of Materials and Production Engineering, Univ. of Naples P.le Tecchio 80, 80125 Napoli, Italy	Blown films of PET recycled by reactive extrusion: properties and structure	O 9/M/16.00
Y. Sato, Y. Kodera, T. Kamo National Inst. for Resources and Environment, Energy Resources Dept., 16-3 Onogawa, Tsukuba, Ibaraki, 305-8569, Japan yoshiki@nire.go.jp	Evaluation of solvent quality for the liquid-phase monomer recycling of thermosetting resins	O 9/M/16.15
A. Jansson, K. Moller, T. Gevert SP Swedish National Testing and Research Inst. Chemistry and Materials Technology Brinellgatan 4, Box. 857, SE-501 15, Boras, Sweden anna.jansson@sp.se	Possibility to upgrade recycled polymers	O 9/M/16.45
C. D. Papaspyrides*, C. N. Kartalis*, R. Pfaendner** *Laboratory of Polymer Technology, Dept. of Chemical Engineering, National Technical Univ. of Athens, Zographou, Athens 157 80, Greece **Ciba Spezialitätenchemie Lampertheim GmbH, Chemiestrasse, D-68623 Lampertheim, Germany	Mechanical recycling of PP garden chairs via restabilization	O 9/M/17.00
T. Kamo, Y. Kodera, Y. Sato National Inst. for Resources and Environment, Energy Resources Dept., 16-3 Onogawa, Tsukuba, Ibaraki, 305-8569, Japan Jkamo@nire.go.jp	Effects of solvents, and additives on liquid-phase cracking of polyvinylchloride	O 9/M/17.15
H.-J. Radusch, D. Scharnowski M. Luther Univ. Halle-Wittenberg, Inst Materials Science, Polymer Engineering D-06099 Halle [Saale) Germany hans-joachim.radusch@iw.uni-halle.de	Recycling of dynamic vulcanizates	O 9/M/17.30
J. M. N. van Kasteren, M. J. P. Slapak Centre for Environmental Technology, Faculty of Chemical Engineering, Eindhoven Univ. of Technology PO box 513, MB 5600 Eindhoven, The Netherlands j.m.n.v.kasteren@tue.	Hydrothermal recycling of PVC-waste in a bubbling fluid bed reactor	O 9/M/17.45
T. Spychaj, E. Fabrycy, St. Spychaj Polymer Inst Technical, Univ. of Szczecin, 70-322, Szczecin, Poland stasia@mailbox.tunit.szczecin.pl	Waste PET- derived substances as crosslinking agents for reactive resins	O 9/Th/9.00

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<p>X. Liu*, A. Boldizar*, M. Rigdahl*, H. Bertilsson**</p> <p>*Dept. of Polymeric Materials Chalmers Univ. of Technology 41296 Gothenburg, Sweden liu@polymm.chalmers.se ** Artimplant AB, Hulda Mellgransgata, 5, 41232 Västra Frölunda, Sweden</p>	Mono-sandwich injection molding with recyclates as core materials	O 9/Th/9.30
<p>Md. A. Uddin, K. Ikeuchi, A. Muto, K. Murata, Y. Sakata</p> <p>Dept. Of Applied Chemistry, Faculty of Engineering, Okoyama Univerisity, 3-1-1 Tsushima Naka , Okoyama 700-8530, Japan alazhar@cc.okoyama-u.ac.jp</p>	Thermal degradation of halogen containing Polymers into fuel oil	O 9/Th/9.45
<p>J. M. Vergnaud</p> <p>Faculte de Sciences et Techniques, Laboratoire de Chimie des Materiaux et Chimie Industrielle, 23, rue du Doc. Paul Michelon, 42023 Saint-Etienne, cedex 2, France verganud@univ-st-etienne.fr</p>	Recycling old polymer packages in new food packages. Advantages and Drawbacks. Prediction of the time of food safety	O 9/Th/10.00
<p>K. Khait*, E. G. Riddick*, J. M. Torkelson**</p> <p>*Polymer Technology Center, Dept. of Chemical Engineering **Dept. of Materials Science and Engineering, Northwestern Univ. 1801 Maple Avenue Evanston, Illinois, 60201-3140, USA kkhait@northwestern.edu</p>	Novel green recycling technology for mixed plastic waste	O 9/Th/10.30
<p>A. Krzan</p> <p>National Institute of Chemistry, Laboratory for Polymer Chemistry and Technology; Technical Center for Polymer Recycling, Hajdrihova 19, POB 3430, 1001 Ljubljana, Slovenia andrej.krzan@ki.si</p>	Microwave irradiation use in polymer modification – case of polymer depolymerization	O 9/Th/10.45
<p>A. Greco*, M. Frigione*, A. Maffezzoli*, D. Acierno°</p> <p>* Dept. Ingegneria dell'Innovazione, Univ. of Lecce, Via Arnesano, 73100, Lecce, Italy °Dept. Of materials and Production Engineering, Univ. Of Naples Federico II, 80125 Naples, Italy alfonso.maffezzoli@unile.it</p>	Rotational moulding technique applied to recycled HDPE	O 9/Th/11.00
<p>A. S. F. Santos, R. C. Santana, J. A. M. Agnelli, S. Manrich</p> <p>Dept. of Materials Engineering-DEMa, Federal Univ. of Sao Carlos –UFSCar Washington Luiz Rod., Km 235, CEP 13565-905, Sao Carlos, SP, Brazil pasfs@iris.ufscar.br</p>	Degradation of HDPE and PP blend deriving from municipal plastics waste (MPW)	O 9/Th/11.15
<p>P. Scarfato*, L. Incarnato*, M.R. Milana**, R. Feliciani**, D. Acierno***</p> <p>*Dept. of Chemical and Food Engineering, Univ. of Salerno Via Ponte don Melillo, 84084 Fisciano (SA), Italy **Istituto Superiore di Sanità, Viale Regina Elena 299, 00161 Roma, Italy ***Dept. of Materials and Production Engineering, Univ. of Naples P.le Tecchio 80, 80125 Napoli, Italy</p>	Effect of contamination and repeated recycling on structure and migration of food grade PP	O 9/Th/11.30
<p>P. Straka*, J. Buchtele*, V. Kriz*, J. Kovarova**</p> <p>* Inst. Of Rock Structure and Mechanics, ASCR, V. Holesovickach 41, 182 09, Prague 8, Czech Republic ** Inst. Of Macromolecular Chemistry, ASCR, 182 09, Prague 8, Czech Republic straka@irms.cas.cz</p>	Treatment of waste plastics with coal	O 9/Th/11.45
<p>W. Sulkowski, J. Ossowski, B. Makaruch, A. Sulkowska, W. Bajdur</p> <p>Dept. Of Enviromental Chemistry and Technology, Univ. of Silesia, ul.Szkolna 9, 40-006, Katowice, Poland sul@tc3.ich.us.edu.pl</p>	The possibility of polyolefines thermodestruction	O 9/Th/12.00

W. Mormann, D. Spitzer Laboratorium für Makromolekulare Chemie, Universität Siegen, A. Reichwein Str. 2, D-57068, Siegen, Germany mormann@chemie.uni-siegen.de	Ammonolysis for chemical recycling	O 9/Th/12.15
F. Cavaliere, F. Padella, S. Bourbonneux, C. Romanelli ENEA, C.R., Casaccia, Via Anguillarese 301, 00060 Roma, Italy francesca.cavaliere@casaccia.enea.it	Mechanochemical recycling of mixed plastic waste	P 9/Th/01
O. Kuznetsova, L. M. Tchepel, E. V. Prut Division of polymers and composites Inst of chemical physics of Russian academy of sciences Kosygin str.,4, 117977, Moscow, Russia evprut@center.chph.ras.ru	Physical and chemical structure of powders after rubber grinding	P 9/Th/02
J.-N. Reygrobellet, J. M. Lopez Cuesta, A. Crespy Laboratoire Matrices, Matériaux Minéraux et Organiques, école de mines d'Alès, 6 avenue de Clavieres, 30319, Alès Cedex, France Jose-Marie.Lopez-Cuesta@ema.fr	Recycling of unsaturated polyester based matrix composites by incorporation in thermoplastics	P* 9/Th/03
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Z. Krulis, D. Michalkova, F. Lednický, Z. Horák Inst. of Macromolecular Chemistry, AS CR, 162 02 Prague 6, Czech Republic krulis@imc.cas.cz	New recycling methods of commingled polyolefin waste	P 9/Th/05
S. A. Cruz, M. Zanin Univ. Federal de Sao Carlos, Dept. de Engenharia de Materiais, 3R-Núcleo de Reciclagem de Resíduos, Rodovia Washington Luiz, km 235, CEP: 13565-905, Sao Carlos, SP, Brazil psanc@iris.ufscar.br	Electrical performance of recycled HDPE derived from post consumer packaging	P 9/Th/06
S. D. Mancini*, M. Zanin** * Dept. Of Chemical Engineering Federal Univ. of Ceara, Campus do Pici, Bloco 710, Fortaleza-CE, CEP 60455-760, Brazil **Univesidad Federal de Sao Carlos Dept. De Engenharia de Materiais, Via Washington Lui dmza@power.ufscar.br	Monitoring of PET depolymerization by Hydrolysis using titrimetric and gravimetric analysis	P 9/Th/07
U. Klun, A. Krzan National Inst. of Chemistry, Laboratory for Polymer Chemistry and Technology; Technical Center for Polymer Recycling, Hajdrihova 19, POB 3430, 1001 Ljubljana, Slovenia ursa.klun@ki.si	Possible polyamide-6 recycling by microwave degradation and determination of products	P 9/Th/08
M. A. Silva Spinacé, M. A. De Paoli Laboratório de Polímeros Condutores e Reciclagem, Inst. De Química, C.P. 6158, Universidade Estadual de Campinas, Unicamp, Brasile marcias@iqm.unicamp.br	Non isothermal crystallization studies of reprocessed poly[ethylene terephthalate].	P 9/Th/09
A. Uddin Dept. Of Applied Chemistry Okayama Univ. 3-1-1 Tsushima Naka, Okayama, Japan alazhar@cc.okayama-u.ac.jp	Thermal degradation of Halogen containing Polymers into fuel oil	P 9/Th/10
W. Sulkowski*, J. Ossowski*, A. Sulkowska**, W. Bajdur* *Dept. of Environmental Chemistry and Technology, Institute of Chemistry, Univ. of Silesia, ul.Szkolna 9, 40-146 Katowice, Poland, email: sul@tc3.ich.us.edu.pl **Dept. of Physical Pharmacy, Medical Univ. School, Jagiellońska 4, 41-200 Sosnowiec, Poland	Poly(ethyleneterephthalate) wastes utilization	P 9/Th/11
B. Makarucha, W. Sulkowski, M. Moczynski, J. Ossowski, Dept. Of Environmental Chemistry and Technology, Univ. of Silesia, ul.Szkolna 9, 40-006, Katowice, Poland sul@tc3.ich.us.edu.pl	Urethane-rubber compositions. The possibilities of granulated tyres utilization	P 9/Th/12

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F. Bertini, G. Audisio, C. Barbieri Inst. di Chimica delle Macromolecole, NR, Via Bassini, 1 20133 Milano, Italy faber@icm.mi.cnr.it	Polyolefins degradation in the presence of hydrogen donors: the effect of subcritical water on polymers thermal degradation	P 9/Th/16
F. Padella, F. Cavaliere, G. D'Uva, A. La Barbera ENEA, C.R., Casaccia, Via Anguillarese 301, 00060 Roma, Italy franco.padella@casaccia.enea.it	Recycling of scrap tires rubber by mechanochemical devulcanization	P 9/Th/17
M. V. Pereira Remedio*, M. Zanin*, B. A. N. Teixeira** *Univ. Federal de São Carlos, Departamento de Engenharia de Materiais, **Dept. de Engenharia Civil, Núcleo de Reciclagem de Resíduos. Rod. Washington Luís Km 235. CEP 13 565- 905. Fone: 55 (0XX16) 260 8252. Fax: 55 (0XX16) 261 5404, São Carlos SP; Brazil, pmpr@iris.ufscar.br dmza@power.ufscar.br	Urban waste plastic films recycling considering the washing effluent and recycled materials properties	P 9/Th/18
A. Mendez Prieto Centro de Investigacion en Quimica Aplicada [CIQA) , Blvd E. Reyna 140, Saltillo Coahuila, Mexico adrian@polimex.ciq.mx	PET recycling of mulilayer plastics recycling	P 9/Th/19
F. P. La Mantia*, J.L. Gardette** *Dipartimento di Ingegneria Chimica dei Processi e dei Materiali, Univ. of Palermo, Viale delle Scienze, 90128 Palermo, Italy **Laboratoire de Photochimie Moléculaire et Macromoléculaire, UMR CNRS 6505 Université Blaise Pascal, 63177 Aubière cedex, France lamantia@dicpm.unipa.it, Luc.Gardette@univ-bpclermont.fr	Improvement of the mechanical properties of photooxidized films after recycling	P 9/Th/20
W. Bajdur*, B. Makarucha*, A. Sulkowska**, W. Sulkowski* *Dept. of Environmental Chemistry and Technology, Institute of Chemistry, Univ. of Silesia, ul.Szkolna 9, 40- 146 Katowice, Poland, email: sul@tc3.ich.us.edu.pl, **Dept. of Physical Pharmacy, Medical Univ. School, Jagiellońska 4, 41-200 Sosnowiec, Poland	Effective polyelectrolytes synthesis from expanded polystyrene wastes	P 9/Th/21
W. Bajdur, W. Sulkowski Dept. of Environmental Chemistry and Technology Univ. of Silesia, ul.Szkolna 9, 40-146 Katowice, Poland sul@tc3.ich.us.edu.pl	Polyelectrolytes synthesis from phenol- formaldehyde resins wastes	P 9/Th/22
M. Costa Almeida Universidade Federal de Sao Carlos, Rodovia Washington Luiz, km 232, Cx Postal 676- CEP: 13565-905, Sao Carlos, SP, Brazil malmeida@nit.ufscar.br	Automotive tire recycling technology: Patents search and bibliometric treatment	P 9/Th/23

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<p>N. Tzankova Dintcheva*, F.P. La Mantia*, D. Acierno[^], L. Di Maio[^], G. Camino^o, F. Trotta^o, M.P. Luda^o, M. Paci^{oo} * Dept. of Chemical Engineering and Materials, Univ. of Palermo, Viale delle Scienze, 90128 Palermo, Italy [^] Dept. of Materials and Production Engineering, Univ. of Naples P.le Tecchio 80, 80125 Napoli, Italy ^o Dept. Chimica IFM, Univ. of Torino, Italy ^{oo} Univ. of Pisa, Pisa, Italy</p>	<p>Upgrading of post-consumer recycled film for greenhouses</p>	<p>P 9/Th/26</p>
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<p>T. Grossetete*, V. Verney*, J.-L. Gardette*, J.-C. Marechal[^] * Laboratoire de Photochimie Moléculaire et Macromoléculaire, UMR CNRS 6505, Université Blaise Pascal (Clermont-Fd), F-63177, Aubière Cedex, France [^] CSTB (Centre Scientifique et du Batiment), 24 rue Joseph Fourier, thierry.grossetete@mailhost.univ-bpclermont.fr</p>	<p>Impact of the reprocessing conditions on the photostability of polypropylene wastes</p>	<p>P 9/Th/28</p>
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<p>L. Capizzi, F. P. La Mantia, M. Paci^o, P. L. Magagnini^o, G. Nepote[^], G. Camino[^] Dept. of Chemical Engineering and Materials, Univ. of Palermo, Viale delle Scienze, Palermo, Italy. ^oDept. Ing. Chimica, Chimica Industriale e Scienza dei Materiali, via Diotalvi 2 Pisa, Italy. [^]Dept. Chimica IFM, Univ. of Torino, Italy</p>	<p>Recycling of polyamide wheel covers</p>	<p>P 9/Th/32</p>
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