

**THE POLYMER
PROCESSING SOCIETY**

**EUROPEAN REGIONAL
MEETING**

**FINAL PROGRAM
AND
ABSTRACTS**



**PALERMO - ITALY
September 15-18 / 1991**

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POLYMER PROCESSING SOCIETY

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PERIOD AND VENUE

The meeting will take place from Sunday 15th September to Wednesday 18th September 1991 at Torre Normanna Hotel (Altavilla Milicia), 20 km. from Palermo. Tel. 091/951322.

An excursion to Agrigento will be arranged for September the 19th.

THE POLYMER PROCESSING SOCIETY (PPS)

The PPS was founded on March 28-29, 1985 in Akron, Ohio (USA). The audience of Founding Meeting, more than 200 experts from all over the world, of both industrial companies and universities, enthusiastically approved the objective of the new society. Since then the annual meeting has grown and in recent years it attracts over 500 international participants from industries, universities and institutes interested to polymer processing research and developments.. The goal of the PPS, as embodied in its constitution, is to foster scientific understanding and technical innovation in polymer processing by providing a discussion forum for the world-wide community of engineers and scientists in this field. The thematic range of the PPS encompasses all formulation, conversion and shaping operations applied to polymeric systems in the transformation from their monomeric forms to commercial products.

In addition to the international annual conferences, the PPS activities include the arrangement of regional and local meetings, publication of a journal, and sponsorship of educational seminars.

Membership in the PPS is open to all researchers in the field, and to all individuals who feel the activities of the society advance their professional development. The benefits for members consist of obtaining the official PPS journal free of cost, and in the opportunity to attend the Annual Meetings at a reduced fee. At present, the annual membership dues amount to \$50 US.

TO NON - MEMBERS : You are invited to join the PPS. If you wish we can have the difference between member and non-member registration fees applied to your membership for one year (US-\$ 50). As a member you will also receive the official PPS Journal, the "International Polymer Processing", free of charge. If you cannot attend the meeting, you may use the enclosed form to enrol as a member.

GENERAL INFORMATIONS

Conference site

At about 20 km from Palermo the Torre Normanna holiday centre stands on a green, rocky plateau on to the blue Sicilian sea. Torre Normanna's fully equipped beach and small natural bays can easily be reached from the plateau by two fast lifts. The centre has two swimming pools. Sailing, windsurf, tennis, bowling, minigolf, bow-shot, aerobic and gym are also freely available.

How to get there

By plane: Punta Raisi Airport, Palermo.
By ship: Port of Palermo
By train: Palermo Central
By motorway: from Messina or Catania (A20, A19) turn at Altavilla Milicia or Trabia (2km from Torre Normanna)
Taxis will be easily available from Palermo for those who won't make use of our scheduled transfers (approximately Lit. 60000 to Torre Normanna). A public bus service is available from Punta Raisi Airport to the centre of Palermo.

Welcoming and Transfer service

On Sept. 15th a special information desk will be open from 12 am. to 10 pm. at Punta Raisi Airport in order to assist participants upon arrival. Transfers by coach will be arranged according to the following schedule:

On Sept. 15th from Punta Raisi Airport to Torre Normanna Hotel:

2:30 pm. 6:15 pm. 10:00 pm

On Sept. 19th from Torre Normanna Hotel to Punta Raisi Airport:

6:45am. 11:00 am. 2:30 pm

On Sept. 15th from piazza Ruggero VII (known also as piazza Politeama) in Palermo centre to Torre Normanna Hotel: 5:00 pm., this coach will stop in front of the entrance of Politeama theatre.

Passport and visa

A valid passport is required to enter Italy; an identity card is enough for citizens of Austria, Malta, Sweden, Switzerland and EEC member countries. Entry formalities for other countries may be obtained from the Italian Consular offices in the participants country.

Climate

In the middle of September, climate in Palermo is usually very pleasant: sunny and warm (25°C/28°C). Light clothing and swimsuits will thus be useful, formal dress will not be required.

Travel agency

A travel agency desk will be open at the Hotel during the meeting for any information you may need.

REGISTRATION FEES

Early registration (before June 1st, 1991)

PPS Members:	Lit. 250000
Non-members	Lit. 310000
Students:	Lit. 100000

Late registration (after June 1st, 1991)

PPS Members:	Lit. 300000
Non-Members:	Lit. 360000
Students:	Lit. 100000
One day registration:	Lit. 150000
Accompanying persons	Lit. 100000

The registration fee covers: welcoming and transfer service, get together party, Banquet, book of extended abstracts, three days of attendance and coffee.

The registration fee for accompanying persons includes: welcoming service, get together party, free participation to the social program including the banquet.

Hotel Accommodation

Participants are recommended to stay at Torre Normanna Hotel or Holiday centre. transfers from other Hotels will not be arranged.

	Single Lit. 123.000	Double Lit. 110.000	Triple Lit. 100.000
Hotel Torre Normanna (air conditioned)			
Holiday Centre Torre Normanna (not air conditioned)	Lit. 110.000	Lit. 98.000	Lit. 88.000

The rates are per person per day including full board with wine, mineral water and special service.

Participants are kindly requested to complete the enclosed registration and accommodation form. It should be sent within June 1st 1991 to Eurocongressi s.r.l. - Via Libertà 147 - 90144 Palermo, together with one night deposit for each room to be reserved.

SOCIAL PROGRAM

Sunday 15 th September	16:00-20:00 Registration 19:00 Get together party
Monday 16 th September	9:00-13:00 Half day visit of Solunto, Villa Palagonia and Sightseeing of the coast
Tuesday 17 th September	14:15-19:00 Visit of Monreale: the Cathedral and the Cloister
Wednesday 18 th September	8:15-13:00 Half day visit of Palermo including: the Church of San Giovanni degli Eremiti, the Palatine Chapel, the Cathedral, the Martorana Church. 8 p.m. Banquet

Visits to Solunto and Palermo have mainly been organaized for accompanying persons, they are however open to active participants upon payment of a small fee as specified in the registration form.

POST CONGRESS EXCURSION

Thursday 19 th September	8:00-18:00 Full day archeological excursion to Agrigento: visit of the Valley of the Temples and the National Archeological Museum. (minimum 25 persons).
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SOLUNTO

Monday 16th Sept. 9.00-13:00

Phoenician colony founded in the eighth century, B.C. on the slants of Monte Caputo about 15 km from Palermo. Later became Greek and than Roman colony and was destroyed in the 4th century, A.C.. Ellenistic Roman.ruins were found in the 9th century.

Lit. 10000 per person, free for registered accompanying persons

MONREALE

Tuesday 17th Sept. 14:15-19:00

It is about 8 Km from Palermo and rises on the slopes of the Monte Caputo (300 m above the sea-level). It has been forming in late Middle Ages about the Ancient Benedectine Abbey and the "Basilica S. Maria la Nuova", known all over the world because of its mosaic inside (6340 sq.m. area).

Lit. 10000 per person, free for registered accompanying persons

PALERMO**Wednesday 18th Sept. 8:15-13:00**

Rich in natural beauty, artistic wealth and traditions, Palermo has a very remote history. The ancient Phoenicians, who first colonized her, called her "ZIZ" which means flower. The Greeks saw her as a wide and hospitable bay and called her "Panormus" (all port). She kept this name throughout the Roman domination, which began in 264 B.C. when the Romans captured her from the Carthaginians. Thus, in 831 the Arabs seized an already ancient city with a mixed population.

In 1072, with Roger, the Arab rule was overthrown by the Norman wave. At this point various architectural styles began to blend. The result of this fusion is the Arab-Norman style of architecture. During this period it became Capital of a Kingdom. The reign of Frederic II of Swabia witness the birth and evolution of that famous Sicilian school of poetry.

Now it is the turn of the Angevins and Aragoneses to take possession of the beautiful city. From the Spanish to Bourbon domination, great but different civilization followed each other and it was just that gave Palermo its most outstanding imprint, such as its composite architecture, its picturesque dialect, its varied and deep-rooted popular traditions.

Lit. 10000 per person, free for registered accompanying persons

AGRIGENTO, post congress excursion Thursday 19th Sept. 8:00-18:00

Agrigento, the ancient Akragas, was founded in 583 B.C. and has preserved innumerable art treasures such as celebrated Valley of the Temples where the majestic ruins of 200 Greek temples are; among these is the Temple of Concord, which has been almost perfectly preserved in its Doric style of the fifth century B.C.. There is also the temple of Juno Lucina with its 25 columns still standing.

The materials that comes from the excavation is gathered in the National Archeological Museum.

Lit. 30000 per person (lunch is not included)

CORRESPONDENCE

All correspondence concerning the scientific program should be sent to:

PPS Meeting c/o S. Piccarolo, Dipartimento di Ingegneria Chimica
del Processi e dei Materiali, Viale delle Scienze, 90128 Palermo -
ITALY, Tel. 091- 6567225/6567282/6567111, Fax. 091-599766

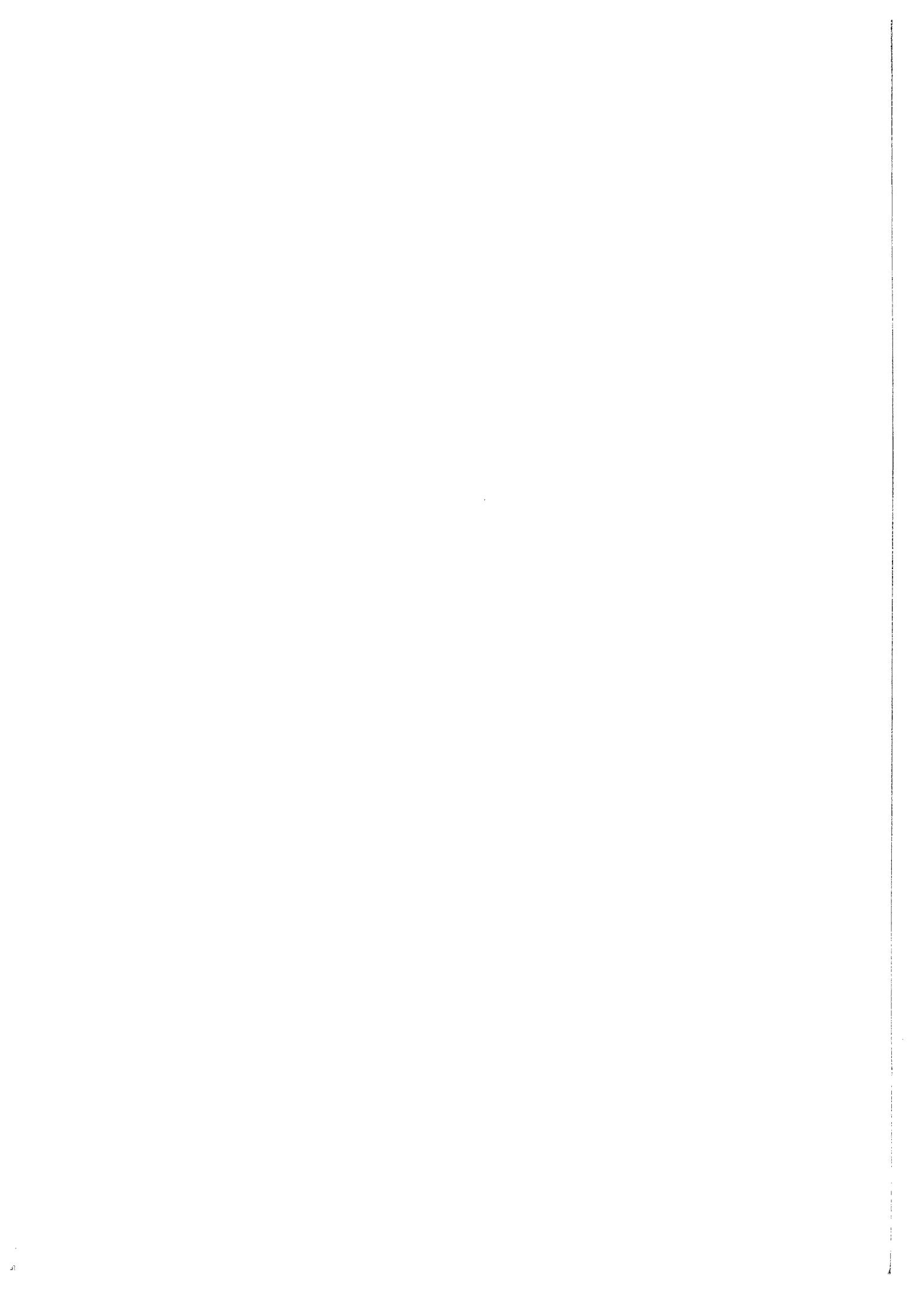
All correspondence concerning registration (meeting fees, hotel accommodations, excursions) should be sent to:

Eurocongressi s.r.l., Via Libertà 147, 90144 PALERMO - ITALY,
tel. 091/346484-302655, Fax. 091/341533, Telex 910339 EUROCO

IMPORTANT DATES

Deadline for reception of abstracts: May 15th, 1991

Deadline for regular registration: June 1st, 1991



General Schedule

TECHNICAL PROGRAM

Language

The official language is English. No arrangement will be provided for simultaneous translation.

Symposia

Symposia	Organizers
1. Reactive processing	M. Lambla, J.M. Kenny
2. Polymeric composites	J.L. Kardos, L. Nicolais
3 Liquid Crystalline Polymers	J. Mewis, G. Marrucci
4 Moulding Technologies	H. Fritz, S.F. Bush, G. Titomanlio
5 Polymer blends	J.G. Fatou, D. Acierno, E. Martuscelli
6 Novel aspects in traditional processes	J.F. Agassant C.V. Folonari
7 Recycling of Polymers	O. Laguna F.P. La Mantia

PRESENTATION:

Forty minutes will be allowed for key-note lectures, and twenty minutes for each oral presentation including time for discussion. Each session room will be provided with both slide and overhead projectors. Slides should be in frame of 50x50mm.

Posters should be put up at beginning of the morning and removed in the afternoon of the same day, poster boards will be 100 cm height by 120 cm width.

ABSTRACTS BOOK

The abstracts book includes the summaries of key note and contributed papers (oral and posters). For additional copies contact

G.Titomanlio, Dipartimento di *Ingegneria Chimica dei Processi e dei Materiali*, Viale delle Scienze, 90128 Palermo - ITALY,
Tel. 091- 6567223/6567282/6567111., Fax. 091-599766

Program at a glance

	9:00 9:20	Opening {Room Rinaldo}		
Monday 16 th September		Room Rinaldo	Room Angelica	Room Beatrice
	9:30 13:00	Symposium 3 Papers 3-01...3-08	Symposium 1 Papers 1-01...1-08	Symposium 4 Papers 4-01...4-08
	16:00 17:40	Symposium 3 Papers 3-09...3-13	Symposium 2 Papers 2-01...2-08	Symposium 6 Papers 6-01...6-08
	18:00 19:20	Symposium 5 Papers 5-01...5-03		

		Room Rinaldo	Room Angelica	Room Beatrice
Tuesday 17 th September	9:00 11:40	Symposium 5 Papers 5-04...5-09	Symposium 1 Papers 1-09...1-14	Symposium 7 Papers 7-01...7-06
	11:40 12:40	Posters P1...P30 {Area Ruggero - Rolando}		

		Room Rinaldo	Room Angelica	Room Beatrice
Wednesday 18 th September	9:00 12:00	Symposium 5 Papers 5-10...5-17	Symposium 2 Papers 2-09...2-15	Symposium 4 Papers 4-09...4-14
	12:00 13:00	Posters P31...P59 {Area Ruggero - Rolando}		
	16:00 17:40	Symposium 5 Papers 5-18...5-22	Symposium 2 Papers 2-16...2-19	Symposium 7 Papers
	18:00 19:20	Symposium 6 Papers 6-09...6-11	Symposium 1 Papers 1-15...1-18	7-07...7-14

Monday 16th September Morning Session

Monday 16th September Morning Session

		Room RINALDO	Room ANGELICA	Room BEATRICE
9:00 9:20		Opening (Room RINALDO)		
9:30 10:10	3-01kn Multicomponent Blends on a Base of Liquid Crystalline Polymers <u>Kudchikhin V.</u> , Bilbin A., Zabugina M., Semakov A., Zakharyan R.; Academy of Sciences Moscow USSR	1-01kn Reactive Polymer Blending (RPB) by Free Radical Processes <u>Narkis M.</u> : Technion Haifa Israel	4-01kn Important Trends in Injection and Blow Molding Technology <u>Kamal M.R.</u> : McGill Univ. Montreal CANADA	
10:10 10:30	3-02 Structure and Rheology of Aramid Solutions: Relation to the Aramid Fibre Modulus <u>Picken S.J.</u> , van der Zwaag S., Northolt M.G.: AKZO Res. Lab. Arnhem The Netherlands	1-02 Grafting of Monomer Mixtures onto Polypropylene <u>Elat J.L.</u> , Lambla M.; E.A.H.P. France	4-02 The Slip-Link Model: A Constitutive Equation for General Biaxial Extensions of Polymer Melts In Blow Molding and Similar Polymer Processes <u>Wagner M.H.</u> , Schaeffer J.; IKT Univ. Stuttgart Germany	
10:30 10:50	3-03 Thermotropic Polymer Composites <u>Sutela E.</u> : Tech. Res. Cent. of Finland Tampere Finland	1-03 Silane Crosslinking of PE: Optimization of the Graft-Polymerization Step and Investigation of the Material Properties <u>Ullsch S.</u> , Fritz H.G., Karpf M.; IKT Univ. Stuttgart Germany	4-03 Chain Disentanglement In Polyethylens Mouldings through Compressive Deformation In a Hot Press <u>Bayer R.K.</u> , Aria F.; Baiba Calleja F.J.; IWT Univ. Kassel Germany, * Ist. Est. Mat. CScI Spain	
10:50 11:20				Break

11:20 11:40	3-04 Rheological, Microscopic and Conoscopic Investigation of the Behavior of Polymeric LC upon Sudden Changes in Shear Rate Moldenaers P., Picken S.J., Berghmans S., Mewis J.; K.U. Leuven, Belgium, AKZO Res. Lab. Arnhem The Netherlands	1-04 Functionalization of PVC by Grafting of Plasticizing In a Twin Screw Extruder Cassagnau P., Bert M., Michel A.; CNRS France	4-04 Flow Transfer Behavior from Screw Chamber to Cavity During the Injection Molding Process Michaeli W., Roberts T.; I.K.W. Aachen Germany
11:40 12:00	3-05 The Effect of Relaxation Behavior In Fiber Structure Development In Thermotropic Liquid Crystalline Polymers Nobile M.R., Frigione M.E., Incarnato L., Acierno D.; Univ. Salerno Italy	1-05 Self-toughened Polypropylene by Reactive Extrusion Quiongying C., Weibing X., Fritz H.G.*; Hefei Univ. China, *IKT Univ. Stuttgart Germany	4-05 Melt Temperatures in Injection Molding Campbell G.A., Donatula N.; Clarkson Univ. USA
12:00 12:20	3-06 Velocity Profiles In Simple Shear Flow of Liquid Crystalline Polymers Riti J.B., Thoelen E., Vanrussel L., Navard P., Sardi I.*; Grizzuti N.; CEMEF France, *Univ. Napoli Italy	1-06 Modification of Gelatin by Radio-Chemical Graft Copolymerization Method Indrejeet K., Barsola R., Misra B.N., Gupta A.; H.P. Univ. India	4-06 Computation of Residual Stresses in Injection Molded Products Using a 2-D Description of the Geometry Boutouf E., Vincent M., Agassant J.F.; CEMEF Sophia-Antipolis France
12:20 12:40	3-07 In-situ Composites based on Thermoplastic and Thermotropic Liquid Crystalline Polymers Greveraert G., Groeninxck G.; Kath. Univ. Leuven Belgium	1-07 Safety and Optimization of Batch Polymerization Reactors Maschio G., Bello T.; Univer. Messina Italy	4-07 Orientation Induced by Cooling Stresses Wimberger-Friedl R., Bruun J.G.; Philips Eindhoven The Netherlands
12:40 13:00	3-08 Mechanical/Thermal Pretreatment of LCP-melts and Its Influence to the Rheological Behavior of these Polymers Geiger K.; IKT Univ. Stuttgart Germany	1-08 Continuous Reactive Process of Caprolactam Beretta C.A., Morandi C., Vezzoli A.; CSI Montedison Italy	4-08 An Adaptive Command on Injection Molding Machine to Improve Injection Parts Dimensional Quality Pabiot J., Ryckebusch M., Devos P.; Ecole des Mines de Douai France

Monday 16th September Afternoon Session

Monday 16th September Afternoon Session

	Room RINALDO	Room ANGELICA	Room BEATRICE
16:00 16:20	3-09 Synthesis, Processing and Properties of Semirigid Thermotropic Liquid Crystal Polymers Pedretti U., Roggero A., Città V., Lamantia F.P., Magagnini P.L., Enimercerche Italy, *Univ. Palermo Italy, *Univ. Pisa Italy	2-01 Viscoelastic Studies of Polymer Composites Consolidation Seleris J.; Univ. of Washington Seattle USA	6-01 Comparison of a New Extrusion Theory with Data from a new Laboratory Extruder Campbell G.A., Sweeney P.A., Felton J.N.; Clarkson Univ. USA
16:20 16:40	3-10 Characterization of Blends of Poly(Phenylene Sulfide) with a Liquid Crystal Copolyesteramide Mirkova L., DePetris S., Paci M., Pracella M., Magagnini P.L.; *Bulg. Acad. Sci. Bulgaria, CSPI Pisa Italy, *Univ. Pisa Italy	2-02 Fundamentals of Stamp Forming of Continuous Carbon Fiber / Powder Impregnated Thermoplastic Composites Hou M., Eriedrich K., Savadori A.; Univ. Kaiserslautern Germany, *ENIMONT Italy	6-02 A Model Describing Melt Congestion in Counter-Rotating Twin Screw Extruders Eielder L., Poltersdorf B.; Techn. Hochs. "Carl Schorl." Leuna-Merseburg Germany
16:40 17:00	3-11 X-ray Analysis of Annealed Thermotropic Liquid Crystalline Polymers Yanetake K., Sadin J.; Univ. Tampere Finland, *Univ. Yamagata Japan	2-03 A Novel Method and Material for the Processing of GMT Ericson M., Berklund L.; Univ. Linkoping Sweden	6-03 The CEMEXTRUD Software Package; a Useful Tool to Optimize Single Screw Extrusion Vergnes B., Wey E., Agassant J.F.; CEMEF France
17:00 17:20	3-12 Defects Morphology In Thermotropic Polymers DeNeve T., Navard P., Kleman M.; * DGA/CREA France, CEMEF France, *Lab. Phys. Sol. France	2-04 Optimization and Control of the Processing of High Performance Composite Materials Kenny J.M., Trivisano A., Nicolais L., Inserra S.; Voto C.; Univ. Napoli Italy, *Alenia Salpa Italy	6-04 Analysis and Complex Design of the Extrusion Head for Multilayer Polymer Films Friedman M.I., Skachkov V.V.; Sci.-Techn. Dept "Plastics" Moscow USSR
17:20 17:40	3-13 The Effect of Thermotropic LC Polyesters on the Mechanical Properties of thin Poly(ethylenterephthalate) Film Kim Y.S., Chung I.J.; Korea Adv. Inst. of Sci. & Tec. Korea	2-05 Sensor-Model In-situ Control of the Resin Transfer Molding Composite Process Kraubach D.E., Loos A.C.; Coll. of Wil. & Mary Williamsburg USA, *Virg. Pol. State Univ. USA	6-05 Microstructure Orientation in Polymer Products by Extrusion through Convergent-Divergent Dies Masca L., Zhao J.; Univ. of Technology Loughborough England

Monday 16th September Afternoon Session

Break	
17:40 18:00	5-01kn The Rheology of Liquid Crystal Polymer Blends Collyer A.A.; Sheffield Polyt. England
18:40	2-06kn Reliable Composites for Medium to High Volume Applications Require Reliable Manufacturing Processes Habon J.C.; U.S. Air Force Dayton USA
18:40	2-07 The Application of Micro-Wave Heating to Composite Manufacture Methven J.M., Ghaffariyan S.R.; UMIST England
19:00	5-02 Formation and Stability of LCP Fibres In a Thermoplastic Elastomeric Matrix Verhoogt H., Willems C.R.J., van Dam J., Posthumus deBoer A.; Delft Univ. of Techn. The Netherlands
19:00 19:20	5-03 Blends Based on Engineering Polymers: The Effect of Inclusion of Thermotropic Liquid Crystalline Polymers on the Physical Properties of the Matrix Acierno D., Nobile M.R., Marino G.; Univ. Salerno Italy
6-06kn Single and Twin Screw Extrusion - Solved and Unsolved Problems	6-07 Finite and Boundary Element Methods for 3D Extrusion Problems Tanner R.L., Beverly C.R.; Univ. of Sydney Australia
6-08 Low Molecular Weight Polypropylene Fibres	6-08 A Study on the Influence of Curing and Environmental Exposure on Ultimate Properties of Carbon/Epoxy Laminates Erassine R., Locatelli L., Pavan A.; Polit. Milano Italy

Tuesday 17th September, Morning Session

Tuesday 17th September Morning Session

	Room RINALDO	Room ANGELICA	Room BEATRICE
9:00 9:40	5-04 kn Flow of Polymer Blends In Dynamic, Steady-State and Extensional Flow Field Ultrack L.A.; NRCC Canada	1-09kn Reactive Processing of Composite Materials - Some Pitfalls and Prognostications Kardos J.L.; Washington Univ. St-Louis USA	7-01 kn Post-Consumer Recycling Wippler C.; EAHP France
9:40 10:00	5-05 LCP Based Blends: "Universal Grade" Polymers LaMantia F.P., Valenza A., Magagnini P.L.; Univ. Palermo Italy, *Univ. Pisa Italy	1-10 Chemorheology of Reactive Matrices of Composite Materials Nicolais L., Maffezzoli A., Trivisato A., Kenny J.; Univ. Napoli Italy	7-02 Reclamation of Polymers to Materials and/or Energy from Discarded Motor Cars and Commercial Vehicles Wolpert V.M.; Hunters, Holly Hill, East Sussex, England
10:00 10:20	5-06 Formation of Oriented (Fiber-like) Domains In Simple Shear Flow. Transient Behavior of Immiscible Polymer Blends Lyngaae-Jorgensen J., Ultrack L.A., Valenza A., Sondergaard K.; DTH Denmark, *NRCC Canada, *Univ. Palermo Italy	1-11 Rheokinetics of Anionic Polymerization of Lactams for RIM Process Kulichikhin S. G., Malkin A.Ya.; Res. Inst. of Plast. Moscow USSR	7-03 Ecobalances: a Key to better Environmental Material Choices Fussler C.R., Cattubba E.; Dow Plastics Switzerland
10:20 10:40			Break

Tuesday 17th September, Morning Session

10:40	5-07 Crystallization and Structure Formation Under Flow McHugh A.J., Tree D.A., Guy R.K.; Univ. Illinois USA	1-12 About Estimation of Temperature-Conversion Fields In Articles During Non-isothermal RIM Process	7-04 Post Consumer Plastics Recycling, A Systematic Approach towards Solving a Major Problem
11:00		Malkin A. Ya., Beghishev V.P.*; Res. Inst. of Plast., *Inst. Org. Chem. Moscow USSR	Fox R.; Plas/Tech Ltd. England
11:00	5-08 FT-IR Study to the Elucidation of Specific Interactions In Functionalized Polyolephins / PVC Blends Bertani R., D'Alessio A., Ruggeri G., Pracella M., Aglietto M., Benedetti E.; Univ. Pisa Italy	1-13 Rotational Moulding of Reactive Plastics	7-05 Some Results of Plastics Recycling In Poland
11:20	Crawford R. J., Harkin-Jones E.; Queen's Univ. of Belfast N. Ireland	Crawford R. J., Harkin-Jones E.; Queen's Univ. of Belfast N. Ireland	Zerniewicz M.; OBR "Metalchem" Poland
11:20	5-09 Entanglements In Miscible Blends and In Random Copolymers Lombardini P., Rossi A.G.; Montedipe Cen. Ric. Enimont Italy	1-14 Simulation of the Curing Phase In Thermoset Injection Molding	7-06 Recycling: Technical and Economic Aspects
11:40	Schulze U., Schnabel R., Bohme P.; Weise J.; Reher E.O.; Techn. Hochs. "Carl Schorl." Leuna-Merseburg, *Math. Plas. Graf. Germany		Previero A.; Sorema Italy
11:40		Posters 1 - 30 (Area RUGGERO - ROLANDO)	
12:40			

Wednesday 18th September, Morning Session

Wednesday 18th September		Morning Session	
	Room RINALDO	Room ANGELICA	Room BEATRICE
9:00 9:20	5-10 Predicting Polymer Blend Miscibility: Dispersive Versus Specific Interactions Wakker A.; Koninklijke/Shell Lab. The Netherlands	2-09 Advanced Semicrystalline Polymer Matrix Composites Seferis J., Kenny J.M., Nicolais L.*; Univ. of Washington Seattle USA, * Univ. of Naples Italy	4-09kn Modelization of the Injection Molding Process Vincent M., Agassant J.F.; CEMEF Sophia-Antipolis France
9:20 9:40	5-11 The Effect of Shear Flow on Miscibility of Polymer Blends Hindawi I.A., Higgins J.S., Fernandez M.L.; Imperial College England	2-10 Specialty Processable Forms of Thermoplastic Based Composites Torre L., Velisaris C., Seferis J., Kenny J.M.*; Nicolais L.*; Univ. of Washington Seattle USA, * Univ. Napoli Italy	4-10 Injection Molding with thin Heating Elements Jansen K.M.B., Flaman A.; Delft Univ. of Techn. The Netherlands
9:40 10:00	5-12 Novel Crystalline Syndiotactic Polystyrene-Poly(Phenylene Oxide) Blends Guerra G., DeRosa C., Petraccone V., Conradini P.; Univ. Naples Italy	2-11 Fiber-Matrix Interactions In J-Polymer / Carbon Fiber Composites: Effect of Processing Conditions Marom G.*; Migliaresi C., Wagner D., Incardona S.; Univ. Trento Italy,*Univ. Jerus. Israel,*Weiz. Inst. Sci. Israel	4-10 Injection Molding with thin Heating Elements Jansen K.M.B., Flaman A.; Delft Univ. of Techn. The Netherlands
10:00 10:20	5-13 Elongational properties of polymer blends Marin G., Andriatsarafara A.; LPMI Univ. PAU France	2-12 Molecular Mobility Phenomena In Poly(ether-ether-ketone) PEEK DeCandia E.*; Michele A., Russo R., Vittoria V.; ITPR-CNR Arco Felice Italy, Univ. Salerno Italy	4-11 Influence of MWD and Structural Parameters of PP Grades on Injection Molding Behavior and Properties of Manufactured Items Medri A., Tattari D.; Hilmont Ferrara Italy
10:20 10:40			Break
10:40	5-14 The Connection between ...		

Wednesday 18th September, Morning Session

10:40	5-14 The Competition between Crystallization and Demixing In Polymer Blends with Miscibility Gap Li Y., Schmeidler L., Stein M., Jungnickel B.J.: Deut. Kunst. Inst. Darmstadt Germany	2-13 Influence of the Permeability of Unidirectional Reinforcements from Fiber Geometry Lundstrom T.S., Gebart B.R.; SICOMP Pitea Sweden	4-12 Compounding of Thermoplastic Starch with Twin-Screw Extruders Wiedman W.: Werner & Pfleiderer Germany
11:00	5-15 Some Factors affecting the Properties of Elastomer Blends Fouche P.M., McGill W.L.: Univ. Port Elisabeth South Africa	2-14 Predicting Wear Resistance of Equipment for Processing Polymer Composites Petrenko S.D., Gladchenko A.N., Zverlin V.G., Scachkov V.V.: R&D Inst. "UkrNipplastmash" USSR	4-13 Injection Moulding of Long Fiber Reinforced Thermoplastics: Direct Incorporation of Roving Strands Truckenmuller E., Fritz H.G.: IKT Univ. Stuttgart Germany
11:20	5-16 Effect of EPR Structure and Elastic Properties on the Physico-Mechanical Impact Strength and Processability of PP/EPR Blends Milani E.: Montedipe Cen. Ric. Enimont Italy	2-15 Studies on Carbon Fibers Reinforced Polysiloxanes for Skull Prostheses Jin R., Huang S., Eyerer P.: IKP Univ. Stuttgart Germany, *Hefei Univ. China	4-14 About Theory of low-pressure Moulding of Plastics with Cloth Impregnating Petrosyan A.Z.: Pedagogical Inst. Kirovokan USSR
11:40	5-17 Rheological Studies on Polycarbonate/ Acrylonitrile Butadiene Styrene Blends Babbar I., Mathur G.N.: H.B. Techn. Inst. Kanpur India		
12:00		Posters 31 - 59 (Area RUGGERO - ROLANDO)	
13:00			

Wednesday 18th September, Afternoon Session

Wednesday 18th September Afternoon Session

	Room RINALDO	Room ANGELICA	Room BEATRICE
16:00 16:20	5-18 Modification of Liquid Rubbers to Tough Unsaturated Polyester Resins Bertotti E., Martuscelli E., Musto P., Ragosta G., Scarinzi G.; ITPR-CNR Arco Felice Italy, *Alusuisse Italy	2-16 Kn Fiber Orientation Prediction for Injection Moulded Composites Tucker C.L., Randy S.B.; Univ. Illinois USA	7-07 Quality Assurance In Producing Secondary PP Material Potzschke M., Pfaff R., Heil K.; Metallgesellschaft AG Germany
16:20 16:40	5-19 Morphology and Degradation of PE Blends with Styrene-Isoprene-Styrene Triblock Copolymers David C., Trojan M., Getlichermann M., Dero A.; Univ. Libre de Bruxelles Belgium		7-08 Importance and Practability of Co-Injected, Recycled PET/Virgin PET Containers on the EEC Market Neumann E.H.; Nissei ASB Germany
16:40 17:00	5-20 Effects of Polymer-Filler Interaction on the Properties of Polyurethane Elastomers Filled with Kraft Lignins Lacasse M., Feldman D.; Concordia Univ. Montreal Canada	2-17 Determination of the Weighting Function $g(b, t, v_f)$ for Fibre Orientation Analysis of Short Fibre Reinforced Polymers Moinger B.; IKP Univ. Stuttgart Germany	7-09 Technologies for the Processing of Mixed Plastic Waste Yezzoli A., Lamperti M., Beretta C.A.; CSI Montedison Italy
17:00 17:20	5-21 Synthesis and Structure-Properties of a New Class of Rubber Toughened PMMA Lanza P., Malinconico M., Martuscelli E., Ragosta G., Volpe M.G.; ITPR-CNR Arco Felice Italy	2-18 Mathematical Description of Mixing and Dispersion Processes In Composite Processing Skachkov V.V.; Sci.-techn. Dept. "Plastics" USSR	7-10 The Use of Recyclable Plastics In Motor Vehicles Henstock M.E.; Univ. of Nottingham England
17:20 17:40	5-22 Fracture Resistance of a Nylon-6 / Polypropylene Blend Levita G., Butta E., Marchetti A., Lazzeri A.; Phys. Techn. Prop. Macrom. Syst. CNR Pisa Italy	2-19 Polyphenyl Processing Aids for Glass Reinforced and Mineral Filled Polymers and Alloys Ruelle E.; Monsanto Techn. Center Belgium	7-11 Studies on a New Technology For Urban Plastic Waste Recycling Cermonini F., Castelnovo L.; CRPP MONT. ECO Italy

Wednesday 18th September, Afternoon Session

		Break	
17:40	18:00	6-09kn Polymer Devolatilization Astaria G., Denson C.D.*; Univ. Napoli Italy, *Univ. Delaware U.S.A.	1-15 Intercacial Crosslinking by Free Radical Reactions in Polymer Blends Seadan M., Lambia M., Hu G.H.*; E.A.H.P. France, * Univ. of Pittsburgh USA
18:20	18:40		1-16 Rheo-Kinetics Studies for a DCP-D-RIM System Hendra Ng., Manas-Zloczower L., Shmorthun M.*; Case West. Res. Univ. USA, * B.F. Goodrich Comp. USA
18:40	19:00	6-10 The Influence of Deformation History on the Nucleation Behavior of Polymer Melts Eder G., Janeschitz-Kriegl H., Liebau S.; Univ. Linz Austria	1-17 Polyamide based Composites Produced by Reaction Injection Molding Long S.D., Pittfield A., Coates P.D., Johnson A.F.; Univ. of Bradford England
19:00	19:20	6-11 Two Stage Draw of High Molecular Weight Polyethylene Reactor Powders Orlandi S.*; Wang L.H., Porter R.S.; C.S.F.M.-CNR Italy, Univ. Massachusetts U.S.A.	1-18 Kinetics and Mixing of the Phenolics Reaction Injection Molding Process Bush S.E., Benson C.A.; UMIST England
			7-12 Blends of PE and Polymers Waste: Processing and Characterization LaMantia F.P., Perrone C.*; Univ. Palermo Italy, * IPI Italy
			7-13 Collection, Sorting and Reclaiming of Plastic Bottles In Italy Pieroni M.; IVR Rozzano Italy
			7-14 Refuse Derived Plastics (RDP) for Pavling Applications Tribastone S.; Montedipe Italy

REACTIVE PROCESSING

Organizers: M.Lambda, J. M. Kenny

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- 1-01kn **Reactive Polymer Blending (RPB) by Free Radical Processes**
Narkis M.; Technion Haifa Israel
- 1-02 **Grafting of Monomer Mixtures onto Polypropylene**
Flat J.J., Lambda M.; E.A.H.P. France
- 1-03 **Silane Crosslinking of PE: Optimization of the Graft-Polymerization Step and Investigation of the Material Properties**
Ullsch S., Fritz H.G., Karpf M.; IKT Univ. Stuttgart Germany
- 1-04 **Functionalization of PVC by Grafting of Plasticizing In a Twin Screw Extruder**
Cassagnau P., Bert M., Michel A.; CNRS France
- 1-05 **Self-toughened Polypropylene by Reactive Extrusion**
Quiongying C., Weibing X., Fritz H.G.*; Hefei Univ. China, *IKT Univ. Stuttgart Germany
- 1-06 **Modification of Gelatin by Radio-Chemical Graft Copolymerization Method**
Inderjeet K., Barsola R., Misra B.N., Gupta A.; H.P. Univ. India
- 1-07 **Safety and Optimization of Batch Polymerization Reactors**
Maschio G., Bello T.; Univer. Messina Italy
- 1-08 **Continuous Reactive Process of Caprolactam**
Beretta C.A., Morandi C., Vezzoli A.; CSI Montedison Italy
- 1-09kn **Reactive Processing of Composite Materials - Some Pitfalls and Prognostications**
Kardos J.L.; Washington Univ. St-Louis USA
- 1-10 **Chemorheology of Reactive Matrices of Composite Materials**
Nicolais L., Maffezzoli A., Trivisano A., Kenny J.M.; Univ. Napoli Italy
- 1-11 **Rheokinetics of Anionic Polymerization of Lactams for RIM Process**
Kulichikhin S. G., Malkin A.Ya.; Res. Inst. of Plast. Moscow USSR
- 1-12 **About Estimation of Temperature-Conversion Fields in Articles During Non-Isothermal RIM Process**
Malkin A. Ya., Beghishev V.P.*; Res. Inst. of Plast., *Inst. Org. Chem. Moscow USSR
- 1-13 **Rotational Moulding of Reactive Plastics**
Crawford R. J., Harkin-Jones E.; Queen's Univ. of Belfast N. Ireland
- 1-14 **Simulation of the Curing Phase In Thermoset Injection Molding**
Schulze V., Schnabel R., Bohme P.*; Weise J.*; Reher E.O.; Techn. Hochs. "Carl Schorl." Leuna-Merseburg, *Math. Plas. Graf. Germany
- 1-15 **Interfacial Crosslinking by Free Radical Reactions In Polymer Blends**
Seadan M., Lambda M., Hu G.H.*; E.A.H.P. France, * Univ. of Pittsburgh USA

- 1-16 **Rheo-Kinetics Studies for a DCPD-RIM System**
Hendra Ng, Manas-Zloczower I., Shmorhun M.*; Case West. Res. Univ. USA, * B.F. Goodrich Comp.USA
- 1-17 **Polyamide based Composites Produced by Reaction Injection Molding**
Long S.D., Pitfield A., Coates P.D., Johnson A.F.; Univ. of Bradford England
- 1-18 **Kinetics and Mixing of the Phenolics Reaction Injection Molding Process**
Bush S.F., Benson C.A.; UMIST England

Symposium No. 2

POLYMERIC COMPOSITES

Organizers: J. L. Kardos, L. Nicolais

- 2-01 **Viscoelastic Studies of Polymer Composites Consolidation**
Sefaris J.; Univ. of Washington Seattle USA
- 2-02 **Fundamentals of Stamp Forming of Continuous Carbon Fiber / Powder Impregnated Thermoplastic Composites**
Hou M., Friedlich K., Salvadori A.*; Univ. Kaiserslautern Germany, *ENIMONT Italy
- 2-03 **A Novel Method and Material for the Processing of GMT**
Ericson M., Berglund L.; Univ. Linkoping Sweden
- 2-04 **Optimization and Control of the Processing of High Performance Composite Materials**
Kenny J.M., Trivisano A., Nicolais L., Inserra S.*, Voto C.*; Univ. Napoli Italy, *Alenia Saipa Italy
- 2-05 **Sensor-Model In-situ Control of the Resin Transfer Molding Composite Process**
Kranbuehl D.E., Loos A.C.*; Coll. of Wil. & Mary Williamsburg USA, *Virg. Pol. State Univ. USA
- 2-06kn **Reliable Composites for Medium to High Volume Applications Require Reliable Manufacturing Processes**
Halpin J.C.; U.S. Air Force Dayton USA
- 2-07 **The Application of Micro-Wave Heating to Composite Manufacture**
Methven J.M., Ghaffariyan S.R.; UMIST England
- 2-08 **A Study on the Influence of Curing and Environmental Exposure on Ultimate Properties of Carbon/Epoxy Laminates**
Frassine R., Locatelli L., Pavan A.; Polit. Milano Italy
- 2-09 **Advanced Semicrystalline Polymer Matrix Composites**
Sefaris J., Kenny J.M.*; Nicolais L.*; Univ. of Washington Seattle USA, * Univ. of Naples Italy

- 2 - 1 0** **Specialty Processable Forms of Thermoplastic Based Composites**
Torre L.*, Vellisaris C., Sefaris J., Kenny J.M.*; Nicolais L.*; Univ. of Washington
Seattle USA, *Univ. Napoli Italy
- 2 - 1 1** **Fiber-Matrix Interactions In J-Polymer / Carbon Fiber Composites:
Effect of Processing Conditions**
Marom G.*, Migliaresi C., Wagner D., Incardona S.; Univ. Trento Italy,*Univ.
Jerus. Israel,*Weiz. Inst. Sci. Israel
- 2 - 1 2** **Molecular Mobility Phenomena In poly(ether-ether-ketone) PEEK**
DeCandia F., Michele A., Russo R., Vittoria V.; ITPR-CNR Arco Felice Italy, Univ.
Salerno Italy
- 2 - 1 3** **Influence of the Permeability of Unidirectional Reinforcements from
Fiber Geometry**
Lundstrom T.S., Gebart B.R.; SICOMP Pitea Sweden
- 2 - 1 4** **Predicting Wear Resistance of Equipment for Processing Polymer
Composites**
Petrenko S.D., Gladchenko A.N., Zverlin V.G., Scachkov V.V.; R&D
Inst."UkrNIplastmash" USSR
- 2 - 1 5** **Studies on Carbon Fibers Reinforced Polysulfones for Skull Prostheses**
Jin R., Huang S.*, Eyerer P.; IKP Univ. Stuttgart Germany, *Hefei Univ. China
- 2-16 kn** **Fiber Orientation Prediction for Injection Moulded Composites**
Tucker C.L., Randy S.B.; Univ. Illinois USA
- 2 - 1 7** **Determination of the Weighting Function g(b, t, vf) for Fibre
Orientation Analysis of Short Fibre Reinforced Polymers**
Moginger B.; IKP Univ. Stuttgart Germany
- 2 - 1 8** **Mathematical Description of Mixing and Dispersion Processes In
Composite Processing**
Skachkov V.V.; Sci.-techn. Dept. "Plastics" USSR
- 2 - 1 9** **Polyphenyl Processing Aids for Glass Reinforced and Mineral Filled
Polymers and Alloys**
Ruelle B.; Monsanto Techn. Center Belgium

Symposium No. 3

LIQUID CRYSTALLINE POLYMERS

Organizers: J. Mewis, G. Marrucci



- 3-01 kn Multicomponent Blends on a Base of Liquid Crystalline Polymers**
Kulichikhin V. G., Bilibin A., Zabugina M., Semakov A., Zakharyan R.; Academy of Sciences Moscow USSR
- 3-02 Structure and Rheology of Aramid Solutions: Relation to the Aramid Fibre Modulus**
Picken S.J., van der Zwaag S., Northolt M.G.; AKZO Res. Lab. Arnhem The Netherlands
- 3-03 Thermotropic Polymer Composites**
Suokas E.; Tech. Res. Cent. of Finland Tampere Finland
- 3-04 Rheological, Microscopic and Conoscopic Investigation of the Behavior of Polymeric LC upon Sudden Changes In Shear Rate**
Moldenaers P., Picken S.J.*; Berghmans S., Mewis J.; K.U. Leuven Belgium,
*AKZO Res. Lab. Arnhem The Netherlands
- 3-05 The Effect of Relaxation Behavior In Fiber Structure Development In Thermotropic Liquid Crystalline Polymers**
Nobile M.R., Frigione M.E., Incarnato L., Acierno D.; Univ. Salerno Italy
- 3-06 Velocity Profiles In Simple Shear Flow of Liquid Crystalline Polymers**
Riti J.B., Thoelen E., Vanrusselt L., Navard P., Sardi I.*; Grizzuti N.*; CEMEF France, *Univ. Napoli Italy
- 3-07 In-situ Composites based on Thermoplastic and Thermotropic Liquid Crystalline Polymers**
Grevecoeur G., Groeninckx G.; Kath. Univ. Leuven Belgium
- 3-08 Mechanical/Thermal Pretreatment of LCP-melts and Its Influence to the Rheological Behavior of these Polymers**
Geiger K.; IKT Univ. Stuttgart Germany
- 3-09 Synthesis, Processing and Properties of Semirigid Thermotropic Liquid Crystal Polymers**
Pedretti U., Roggero A., Città V., LaMantia F.P.*; Magagnini P.L.*; Eniricerche Italy, *Univ. Palermo Italy, °Univ. Pisa Italy
- 3-10 Characterization of Blends of Poly(Phenylene Sulfide) with a Liquid Crystal Copolyesteramide**
Minkova L.*; DePetrilis S., Paci M.*; Pracella M., Magagnini P.L.*; *Bulg. Acad. Sci. Bulgaria, CSPI Pisa Italy, °Univ. Pisa Italy
- 3-11 X-Ray Analysis of Annealed Thermotropic Liquid Crystalline Polymers**
Yonetake K.*; Sarlin J.; Univ. Tampere Finland, * Univ. Yamagata Japan
- 3-12 Defects Morphology In Thermotropic Polymers**
De'Neve T.*; Navard P., Kleman M.*; * DGA/CREA France, CEMEF France, °Lab. Phys. Sol. France
- 3-13 The Effect of Thermotropic LC Polyesters on the Mechanical Properties of thin Poly(ethylenterephthalate) Film**
Kim Y.S., Chung I.J.; Korea Adv. Inst. of Sci. & Tec. Korea

Symposium No. 4

MOULDING TECHNOLOGIES

Organizers: H. Fritz, S. F. Bush, G. Titomanlio

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- 4 - 01 kn Important Trends in Injection and Blow Molding Technology
Kamal M. R.; McGill Univ. Montreal CANADA
- 4 - 02 The Slip-Link Model: A Constitutive Equation for General Biaxial Extensions of Polymer Melts in Blow Molding and Similar Polymer Processes
Wagner M.H., Schaeffer J.; IKT Univ. Stuttgart Germany
- 4 - 03 Chain Disentanglement in Polyethylene Mouldings through Compressive Deformation in a Hot Press
Bayer R.K., Ania F.*; Balta Calleja F.J.*; IWT Univ. Kassel Germany, * Ist. Est. Mat. CSIC Spain
- 4 - 04 Flow Transfer Behavior from Screw Chamber to Cavity During the Injection Molding Process
Michael W., ~~Robert T.~~; I.K.V. Aachen Germany
- 4 - 05 Melt Temperatures in Injection Molding
Campbell G.A., Dontula N.; Clarkson Univ. USA
- 4 - 06 Computation of Residual Stresses in Injection Molded Products Using a 2-D Description of the Geometry
Boltout E., Vincent M., Agassant J.F.; CEMEF Sophia-Antipolis France
- 4 - 07 Orientation Induced by Cooling Stresses
Wimberger-Friedl R., Bruin J.G.; Philips Eindhoven The Netherlands
- 4 - 08 An Adaptive Command on Injection Molding Machine to Improve Injection Parts Dimensional Quality
Pabiot J., Ryckebusch M., Devos P.; Ecole des Mines de Douai France
- 4 - 09 kn Modellization of the Injection Molding Process
Vincent M., Agassant J.F.; CEMEF Sophia-Antipolis France
- 4 - 10 Injection Molding with thin Heating Elements
Jansen K.M.B., Flaman A.; Delft Univ. of Techn. The Netherlands
- 4 - 11 Influence of MWD and Structural Parameters of PP Grades on Injection Molding Behavior and Properties of Manufactured Items
Medri A., Tartari D.; Hilmont Ferrara Italy
- 4 - 12 Compounding of Thermoplastic Starch with Twin-Screw Extruders
Wiedman W.; Werner & Pfleiderer Germany
- 4 - 13 Injection Moulding of Long Fiber Reinforced Thermoplastics: Direct Incorporation of Roving Strands
Truckenmuller E., Fritz H.G.; IKT Univ. Stuttgart Germany
- 4 - 14 About Theory of low-pressure Moulding of Plastics with Cloth Impregnating
Petrosyan A.Z.; Pedagogical Inst. Kirovakan USSR

Symposium No. 5

POLYMER BLENDS

Organizers: J. G. Fatou, D. Aclerno, E. Martuscelli

- 5-01kn The Rheology of Liquid Crystal Polymer Blends
Collyer A.A.; Sheffield Polyt. England
- 5-02 Formation and Stability of LCP Fibres In a Thermoplastic Elastomeric Matrix
Verhoogt H., Willems C.R.J., van Dam J., Posthuma deBoer A.; Delft Univ. of Techn. The Netherlands
- 5-03 Blends Based on Engineering Polymers: The Effect of Inclusion of Thermotropic Liquid Crystalline Polymers on the Physical Properties of the Matrix
Aclerno D., Noblie M.R., Marino G.; Univ. Salerno Italy
- 5-04kn Flow of Polymer Blends In Dynamic, Steady-State and Extensional Flow Field
Utracki L.A.; NRCC Canada
- 5-05 LCP Based Blends: "Universal Grade" Polymers
LaMantia F.P., Valenza A., Magagnini P.L.*; Univ. Palermo Italy, *Univ. Pisa Italy
- 5-06 Formation of Oriented (Fiber-like) Domains In Simple Shear Flow. Transient Behavior of Immiscible Polymer Blends
Lyngaae-Jorgensen J., Utracki L.A.*; Valenza A.*; Sondergaard K.; DTH Denmark, *NRCC Canada, *Univ. Palermo Italy
- 5-07 Crystallization and Structure Formation Under Flow
McHugh A.J., Tree D.A., Guy R.K.; Univ. Illinois USA
- 5-08 FT-IR Study to the Elucidation of Specific Interactions in Functionalized Polyolephins / PVC Blends
Bertani R., D'Alessio A., Buggeri G., Pracella M., Aglietto M., Benedetti E.; Univ. Pisa Italy
- 5-09 Entanglements In Miscible Blends and In Random Copolymers
Lomellini P., Rossi A.G.; Montedipe Cen. Ric. Enimont Italy
- 5-10 Predicting Polymer Blend Miscibility: Dispersive Versus Specific Interactions
Wakker A.; Koninklyke/Shell Lab. The Netherlands
- 5-11 The effect of Shear Flow on Miscibility of Polymer Blends
Hindawi I.A., Higgins J.S., Fernandez M.L.; Imperial College England
- 5-12 Novel Crystalline Syndiotactic Polystyrene-poly(Phenlenoxide) Blends
Guerra G., DeRosa C., Petraccone V., Corradini P.; Univ. Naples Italy
- 5-13 Elongational properties of polymer blends
Marin G., Andriatsarafara A.; LPMI Univ. PAU France

- 5 - 1 4** **The Competition between Crystallization and Demixing in Polymer Blends with Miscibility Gap**
LI Y., Schneider L., Stein M., Jungnickel B.J.; Deut. Kunst. Inst. Darmstadt Germany
- 5 - 1 5** **Some Factors affecting the Properties of Elastomer Blends**
Fouche P.M., McGill W.L.; Univ. Port Elisabeth South Africa
- 5 - 1 6** **Effect of EPR Structure and Elastic Properties on the Physico-Mechanical Impact Strength and Processability of PP/EPR Blends**
Milani E.; Montedipe Cen. Ric. Enimont Italy
- 5 - 1 7** **Rheological Studies on Polycarbonate/ Acrylonitrile Butadiene Styrene Blends**
Babbar I., Mathur G.N.; H.B. Techn. Inst. Kanpur India
- 5 - 1 8** **Modification of Liquid Rubbers to Tough Unsaturated Polyester Resins**
Bertotti E., Martuscelli E., Musto P., Ragosta G., Scarinzi G.; ITPR-CNR Arco Felice Italy, *Alusuisse Italy
- 5 - 1 9** **Morphology and Degradation of PE Blends with Styrene-Isoprene-Styrene Triblock Copolymers**
David C., Trojan M., Getlichermann M., Daro A.; Univ. Libre de Bruxelles Belgium
- 5 - 2 0** **Effects of Polymer-Filler Interaction on the Properties of Polyurethane Elastomers Filled with Kraft Lignins**
Lacasse M., Feldman D.; Concordia Univ. Montreal Canada
- 5 - 2 1** **Synthesis and Structure-Properties of a New Class of Rubber Toughened PMMA**
Laurienzo P., Malinconico M., Martuscelli E., Ragosta G., Volpe M.G.; ITPR-CNR Arco Felice Italy
- 5 - 2 2** **Fracture Resistance of a Nylon-6 / Polypropylene Blend**
Levita G., Butta E., Marchetti A., Lazzeri A.; Phys. Techn. Prop. Macrom. Syst. CNR Pisa Italy

Symposium No. 6

NOVEL ASPECTS IN TRADITIONAL PROCESSES

Organizers: J. F. Agassant, C.V. Folonari

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- 6 - 0 1 Comparison of a New Extrusion Theory with Data from a new Laboratory Extruder
Campbell G.A., Sweeney P.A., Felton J.N.; Clarkson Univ. USA
 - 6 - 0 2 A Model Describing Melt Congestion In Counter-Rotating Twin Screw Extruders
Erdler L., Poltersdorf B.; Techn. Hochs. "Carl Schorl." Leuna-Merseburg Germany
 - 6 - 0 3 The CEMEXTRUD Software Package; a Useful Tool to Optimize Single Screw Extrusion
Vergnes B., Wey E., Agassant J.E.; CEMEF France
 - 6 - 0 4 Analysis and Complex Design of the Extrusion Head for Multilayer Polymer Films
Friedman M.L., Skachkov V.V.; Sci.-Techn. Dept "Plastics" Moscow USSR
 - 6 - 0 5 Microstructure Orientation in Polymer Products by Extrusion through Convergent-Divergent Dies
Mascia L., Zhao J.; Univ. of Technology Loughborough England
 - 6 - 0 6 kn Single and Twin Screw Extrusion - Solved and Unsolved Problems
Potente H.; Univ.-GH Paderborn Germany
 - 6 - 0 7 Finite and Boundary Element Methods for 3D Extrusion Problems
Tanner R.I., Beverly C.R.; Univ. of Sydney Australia
 - 6 - 0 8 Low Molecular Weight Polypropylene Fibres
Pinoca L., Branchesi M., Clementini L., Spagnoli L.; HIMONT Terni Italy
 - 6 - 0 9 kn Polymer Devolatilization
Astarita G., Denson C.D.*; Univ. Napoli Italy, *Univ. Delaware U.S.A.
 - 6 - 1 0 The Influence of Deformation History on the Nucleation Behavior of Polymer Melts
Eder G., Janeschitz-Kriegl H., Liedauer S.; Univ. Linz Austria
 - 6 - 1 1 Two Stage Draw of High Molecular Weight Polyethylene Reactor Powders
Ottani S.*, Wang L.H., Porter R.S.; C.S.F.M.-CNR Italy, Univ. Massachusetts U.S.A.

Symposium No. 7

RECYCLING OF POLYMERS

Organizers: O. Laguna, F. P. La Mantia

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- 7-01kn Post-Consumer Plastic Recycling
Wippler C.; EAHP France
 - 7-02 Reclamation of Polymers to Materials and/or Energy from Discarded Motor Cars and Commercial Vehicles
Wolpert V. M.; Hunters, Holly Hill, East Sussex, England
 - 7-03 Ecobalances: a Key to better Environmental Material Choices
Fussler C.R., Carrubba E.; Dow Plastics Switzerland
 - 7-04 Post Consumer Plastics Recycling, A Systematic Approach towards Solving a Major Problem
Fox R.; Plas/Tech Ltd. England
 - 7-05 Some Results of Plastics Recycling in Poland
Zenkiewicz M.; OBR "Metalchem" Poland
 - 7-06 Recycling: Technical and Economic Aspects
Preylero A.; Sorema Italy
 - 7-07 Quality Assurance in Producing Secondary PP Material
Potzschke M., Pfaff R., Heil K.; Metallgesellschaft AG Germany
 - 7-08 Importance and Practability of Co-injected, Recycled PET/Virgin PET Containers on the EEC Market
Neumann E.H.; Nissei ASB Germany
 - 7-09 Technologies for the Processing of Mixed Plastic Waste
Vezzoli A., Lamperti M., Beretta C.A.; CSI Montedison Italy
 - 7-10 The Use of Recyclable Plastics in Motor Vehicles
Henstock M.E.; Univ. of Nottingham England
 - 7-11 Studies on a New Technology For Urban Plastic Waste Recycling
Cremonini F., Castelnovo L.; CRPP MONT. ECO Italy
 - 7-12 Blends of PE and Polymers Waste: Processing and Characterization
LaMantia F.P., Perrone C.*; Univ. Palermo Italy, * IPI Italy
 - 7-13 Collection, Sorting and Reclaiming of Plastic Bottles In Italy
Pieroni M.; IVR Rozzano Italy
 - 7-14 Refuse Derived Plastics (RDP) for Paving Applications
Tribastone S.; Montedipe Italy

POSTERS

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- P - 01 Consideration of Thermorheokinetics of Coating Solutions in the Production of Photographic Films
Reher E.O., Schnabel R., Schulze V.; Techn. Hochs. "Carl Schorl." Leuna-Merseburg Germany
- P - 02 Modeling and Simulation of the Tubular and Die Flow of Curing Fluids
Kohlman J., Schulze V., Schnabel R., Heinicke A.; Techn. Hochs. "Carl Schorl." Leuna-Merseburg Germany
- P - 03 Reactive Blending of Poly(ethylene tereftalate)/Poly(Bisphenol-A carbonate): a Possible Novel Route to Polyarylates
Bertl C., Bonora V., Florini M., Pilati F.; Univ. Bologna Italy
- P - 04 A Novel High Temperature RRIM Machine
Armitage P.D., Cerrotti J.P., Coates P.D., Johnson A.E., Patrick P., Ryan J.; Univ. of Bradford England
- P - 05 Study of the Intercrosslinking Reaction between Inks and UV-Cured Polymeric Based Varnishes
Avella M., Martuscelli E., Milosa S.*; ITPR-CNR Arco Felice Italy, *BASF Italy
- P - 06 Simulation of Reactive Processing in a Laboratory Mixer
Meissner K., Vogel J., Poltersdorf B.; Techn. Univ. Merseburg Germany
- P - 07 Effect of PA6 Molecular Weight on the Reactive Blending with Bisphenol-A Polycarbonate
Gatigliola E., Turturro A., LaMantia F.P.*; Valenza A.*; CNR-CEMAG Italy, *Univ. Palermo Italy
- P - 08 Rheological and Mechanical Behavior of Tetraglycidyl of 4-4'-Diamine Diphenyl Methane (TGDDM)/Anhydride Epoxy Systems
Corcuera M.A., Andrés M.A., Lozano C., Mondragon I.; Univ. del País Vasco San Sebastian Spain
- P - 09 Physico-Mechanical Investigations on Tetraglycidyl of 4-4'-Diamine Diphenyl Methane (TGDDM)/m-Phenylene Diamine Epoxy Systems
Imaz J.J., Corcuera M.A., Andrés M.A., Mondragon I.; Univ. del País Vasco San Sebastian Spain
- P - 10 Morphological Studies of Fibre Reinforced Thermoplastic Polymers
Moginger B., Muller U.; IKP Univ. Stuttgart Germany
- P - 11 Characteristics of Processing Carbon-Fiber Composites Using the Extrusion Equipment
Petrenko S.D., Anufriev V.A., Pimonenko N.Y.*; Nikolaev V.G.*; R&D Inst."UkrNIplastmash", *Ukrainian Acad of Sci. USSR
- P - 12 Influence of the Extrusion Parameters on the Properties of 110mm - PE Pipes
Gueugnaut D., Rousselot D., Relet P.; CERSTA/STD Gaz de France
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