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LABORATORIO MATERIALI POLIMERICI  
ECOCOMPATIBILI

Segromigno in Monte (Lucca) - Italy

**Chairman**

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# CURRICULUM VITAE & SCIENTIFIC ACTIVITY

**EMO CHIELLINI**  
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## CURRICULUM VITAE

**NAME:** Emo **CHIELLINI**  
**BIRTH PLACE:** Rosignano Marittimo - Livorno - Italy  
**BIRTH DATE:** 20 February 1937  
**NATIONALITY:** Italian



**EDUCATION:** 1957 - Scientific High School Diploma, Liceo Scientifico E. Fermi - Cecina. (Livorno)-Italy  
1963 - Doctor Degree in Chemistry, University of Pisa, Italy  
Thesis: "*Stereospecific Polymerization of Alkyl Vinyl Ethers*" under the supervision of Prof. P. Pino, the Key Scientist in the R&D Group of Nobel Prize Prof. Giulio Natta

**TITLE:** Professor of Chemistry & Chemical Fundamentals of Technologies - Faculty of Engineering - University of Pisa, Pisa (Italy)

### FORMER ADDRESS

**&**  
**RESEARCH LABS:** Department of Chemistry & Industrial Chemistry  
University of Pisa  
Via Risorgimento 35 - 56126 Pisa (Italy)

Laboratory of Bioactive Polymeric Materials for Biomedical and Environmental Applications (BIOLab) – University of Pisa  
Via Vecchia Livornese 1291 – 56010 San Piero a Grado – Pisa (Italy)

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**PRESENT ADDRESS:** Via Renato Fucini, 16 - 56127 Pisa (Italy).  
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## TEACHING EXPERIENCE AND PROFESSIONAL ACTIVITY

- 1963 – 1972 - Lecturer of "Laboratory of Analytical and Synthetic Organic Chemistry", Institute of Industrial Organic Chemistry, University of Pisa, Pisa - Italy
- 1972 – 1980 - Assistant Professor and Senior Lecturer of "Macromolecular Chemistry" and "Chemistry of Natural Hydrocarbons & Derivatives", Institute of Industrial Organic Chemistry, University of Pisa, Pisa - Italy
- 1973 - NATO Senior Fellowship Inorganic, Physical and Industrial Chemistry Department, The University of Liverpool, Liverpool - England. (Guest of Prof. A. Ledwith)
- 1976 - Visiting Scientist in the framework of the Cultural Exchanges Program between Italian CNR and Soviet Academy of Sciences. University of Moscow and Institutes of the Academy of Sciences of Moscow, Leningrad, Novosibirsk. (Guest of Prof. V.A. Kabanov)
- 1978 – 1979 - Visiting Scientist, Chemical Engineering Department, University of Massachusetts, Amherst - USA. (Guest of Prof. R.W. Lenz)  
Fullbright Fellowship Awardee
- 1980 – 2010 - Full Professor of Fundamentals of Chemical of Technologies, Faculty of Engineering, University of Pisa, Pisa - Italy
- 1986 - Professor of Organic Synthesis, National University of Somalia at Mogadishu, Somalia - Africa
- 1987 - Visiting Professor, Department of Industrial Chemistry, Faculty of Engineering, University of Nagasaki, Nagasaki, Japan. (Guest of Prof. J. Sunamoto)
- 1989 - Visiting Professor, Institute of Physics, University of Sao Paulo, Brasil. (Guest of Prof. L. Amaral)
- 2010 – 2014 - Director of Biolab Research Group at the Department of Chemistry and Industrial Chemistry – University of Pisa UdR/INSTM
- 2010 – 2015 - Chairman of the SME – Ecopol SpA – Lucca (Italy)
- 2013 – date - Member of the Scientific Advisory Committee of the Interuniversity National Consortium of Material Science & Technology (INSTM) – Florence – Italy
- 2016 – date - Chairman of the SME – LMPE Srl at the Technological Pole of the Capannori Town Hall – Segromigno in Monte, Lucca (Italy)

## RESPONSIBILITY IN INDUSTRIAL FUNDED R&D PROJECTS

1977-1979	Bulciago Co. – Milano, Italy	2001-2015	EPI-Environmental products inc. , Vancouver, Canada
1980-1984	ENEL-Co. – Milano, Italy	2002-2004	MacroChem Co., Lexington, MA (USA)
1982-1985	Ausind-Montedison – Milano, Italy	2002-2003	LaPlast srl, Piano di Mommio (LU), Italy
1984-1990	Macrochem Co. – Woburn, Ma – USA	2002-2004	SISMA SpA – (MV), Italy
1985-1987	Dow Chemical – Milano, Italy	2002-2004	Q.I. Composites srl, Strambino (TO)
1987-1990	Istituto Donegani-Montedison – Novara, Italy	2003:2004	INTEKO, Dossobuono (VR), Italy
1989-1995	Istituto Sierovaccinogeno Italiano, Lucca, Italy	2003-2004	Provincia di Pisa, (PI), Italy
1989-1992	ENI – Milano, Italy	2003-2004	MOEL srl, Montespertoli (FI), Italy
1991-1992	Lamberti SpA – Albizzate, Italy	2003-2005	Solvay Chimica Italia SpA, Rosignano (LI), Italy
1991-1992	Biodegradable International – Bari, Italy	2003-2004	Azienda Unità Sanitaria Locale BR/1, Brindisi – Italy
1991-1992	Salchi – Burago Molgora – Varese, Italy	2003-2004	PHB Industrial S/A – Fazenda da Pedra, Brazil
1992-1993	MG Recherche – Pozzilli (Isernia) , Italy	2003-2005	Print & Packaging Srl – Marano Ticino (NO), Italy
1993-1998	MacroChem Co. – Lexington, MA – USA	2004-2010	Acqua e Terme di Uliveto SpA, Uliveto (PI), Italy
1994-1996	EniChem Ricerche – Milan, Italy	2005-2010	Stabilimento Rocchetta SpA, Gualdo Tadino (PG), Italy
1996-1998	C.G.S. SAS – Pisa, Italy	2006-2010	SOMACIS SpA, Castelfidardo (AN), Italy
1996-2000	Biofil srl – Villafranca di Medolla (MO) , Italy	2006-2007	Nuova Seristudio, Cicagna (GE), Italy
1996-2009	Idroplax Srl – Altopascio (LU) , Italy	2007-2010	Ciba Specialty Chemicals, Sasso Marconi (BO), Italy
1997-2000	AgroQualità (AQ) srl – Milano, Italy	2007-2008	Termopaif SpA, Battipaglia (SA), Italy
1997-2000	Sadepan Chimica srl – Viadana (Mantova) , Italy	2008-2010	KME Italia SpA (Fi), Italy
1997-2005	Jotun A/S – Sandefjord, Norway	2008-2009	Dr. Resin & Chemicals srl, Sarzana (Sp), Italy
1998-2000	Idrotherm 2000 srl – Castelnuovo Garfagnana (LU) , Italy	2008-2010	University of Gothenburg, Göteborg Sweden
1999-2000	Società Chimica Larderello S.p.A., Larderello (PI) , Italy	2009-2010	Polimeri Europa Spa – San Donato Milanese (MI), Italy
1999-2001	Sorgente Tesorino – Montopoli Val D'Arno (PI), Italy	2009-2010	AZAD PHARMA AG, Toffen, Switzerland
2000-2008	Wally Yachts – Monte Carlo (Monaco)	2010-2011	Barilla G. & R. Fratelli, Parma, Italy
2000-2001	Medidom Laboratoire – Ginevra (CH)	2010-2011	Symphony Ltd, Borehamwood (UK)
2001-2002	FRESENIUS HemoCare Deutschland GmbH, Bad Homburg, (D)	2010-2012	ECOPOL Spa, Capannori (LU), Italy
2001-2003	EUROSAK SpA, Porcari (LU), Italy	2010-2014	Eli Lilly, Sesto Fiorentino (FI), Italy

## INVOLVEMENT IN EC-FUNDED PROJECTS (FP4 - FP7)

- 1993-1995 EC - Human Capital Mobility on "Electronic Liquid Crystals for Displays and Optical Devices" (Local Coordinator)
- 1993-1997 EC-DGXII CRAFT Projects (Project Technical Advisor - PTA)
- 1994-1997 Brite Euram Project on "Biorodible/Biodegradable Polymeric Matrices for Targeted Protein Drug Release" [Central Scientist Co-ordinator]
- 1997-2000 EC-RTM Project on "Optical Application Research of Chiral Self Organizing Systems - ORCHIS" (Local Co-ordinator)
- 1997-2001 EC-Concerted Action "International Centre of Biopolymers Technology (ICBT)" [Section Responsible]
- 1996-date ICS-UNIDO Expert in the Programme on Environmentally Degradable Polymeric Materials and Plastics
- 1998-2002 EU/FP4 FAIR Program on "Biodegradable Nanocomposites for Food Packaging (BIONANOPACK)" [Local Co-ordinator]
- 1998-2001 EU/FP4 Leonardo da Vinci Program on "Managers of Innovation in Environmentally Degradable Plastics – (MEDP)" (Scientific Consultant)
- 2001-2005 EU/FP5– Competitive & Sustainable Growth Program on "A New Biocompatible Nanoparticle Delivery System for Targeted Release of Fibrinolytic Drugs - TATLYS" [Central Scientific Co-ordinator]
- 2001-2003 EU/FP5 Cooperative Research (CRAFT) on "Thermal Processing of Biodegradable Starch-Based Nanocomposites - STARCHMOULD" (Local Co-ordinator)
- 2001-2004 EU/FP5–Growth Program on "Dairy Industry Waste as Source for Sustainable Polymeric Material Production - WHEYPOL" (Local Co-ordinator)
- 2001-2004 EU/FP5–Growth Program on "Assimilation and Standardisation of Environmentally Friendly Packaging Technologies within the Food Industry - PACKTECH" (Local Co-ordinator)
- 2001-2004 EU/FP5 – LIFE Program on "Recyclable and Biodegradable Eco-Efficient Packaging Solutions for the Food Industry – ECOPAC" (Local Co-ordinator)
- 2002-2005 EU/FP5 – Competitive & Sustainable Growth on "Low Shrinkage Materials for Dental and Ophthalmic Applications – DENTALOPT" (Local Co-ordinator)
- 2002-2005 EU/FP5 – Growth Programme on "Innovative Environmentally Friendly Flame-Retarded Polypropylene Nanocomposites – NANOPROP" (Local Co-ordinator)
- 2002-2005 EU/FP5 – RTN on "Synclinic and Anticlinic Mesophases for Photonic Applications – SAMPA" (Local Co-ordinator)
- 2002-2005 EU/FP5– CRAFT on "Production of Easily recyclable Co-Extruded Sheets Based on the Use of Renewable Biodegradable Polymers as Inner Layer – STARCHLAYER" (Local Co-ordinator)
- 2003-2006 EU/FP5-Growth Program on "Algae as raw material for production of bioplastics and biocomposites contributing to sustainable development of European coastal regions – BIOPAL" (Local Co-ordinator)
- 2004-2009 EU/FP6 NoE EXPERTISSUES NMP3-CT-2004-500283 "Novel Therapeutic Strategies for Tissue Engineering of Bone and Cartilage Using Second Generation Biomimetic Scaffolds" (Core Partner)
- 2004-2009 EU/FP6 NoE NANOFUN-POLY "Nanostructured and Functional Polymer-Based Materials and Nanocomposites" (Core Partner)
- 2005-2010 EU/FP6 IP AMBIO NMP4-CT-2005-011827 "Advanced nanostructured Surfaces for the Control of Biofouling" (Core Partner)
- 2006-2008 EU/FP6 Craft POLYVER COOP-CT-2006-032967 "Production of Poly(hydroxyalkanoate)s from Olive Oil Mills Wastewater" (Core Partner)
- 2008-2012 EU/FP7 Theme NMP-2007 Large scale integrating collaborative project "Integration of novel NANOparticle based technology for THERapeutics and diagnosis of different types of cancer" – NANOTHER (Core Partner)
- 2008-2012 EU/FP7 Theme NMP-2007-3.1-2 Collaborative projects targeted to SMEs on "Novel Approaches for the Development of Customized Skin Treatments and Services" – SKINTREAT (CP-TP 213202-2) (Local Co-ordinator)
- 2010-2012 EU/FP7-KBBE-2009-3-5-02 Collaborative Medium-scale focused research project on "Biotechnological Conversion of Carbon Containing Wastes for Eco-Efficient Production of High Added Value Products" – ANIMPOL (245084)

- 2010-2013 EU/FP7 Marie Curie IRSES (International Research Staff Exchange Scheme) on "Hyaluronan-Based Injectable Material for Tissue Engineering" – HYANJI SCAFFOLD
- 2010-2013 FP7-PEOPLE-ITN-2008/SP3 "People": Support for training and career development of researchers (Marie Curie). Networks for Initial Training on "Surface Engineering for Antifouling – Coordinated Advanced Training" – SEACOAT (PITN-GA-2009-237997)

#### **INVOLVEMENT IN PROJECT CO-FUNDED BY THE ITALIAN MINISTRY OF UNIVERSITY & RESEARCH**

- 1998-2000 MURST National Program on "Sintesi Di Materiali Polimerici Per Applicazioni Non Convenzionali" (*National Co-ordinator*)
- 2000-2002 MURST National Program on "Bioactive Polymeric Materials for Biomedical Application" (*National Co-ordinator*)
- 2001-2003 MURST National Program on "Integrated Interdisciplinary Design of Biologically Active Systems for Biomedical and Pharmaceutical Applications" (*National Co-ordinator*)
- 2001-2003 MURST National Program on "Novel Fluorinated Self-Assembling Polymers for Advanced Applications" (*National Co-ordinator*)
- 2002-2004 MURST National Program on "Novel Nanosized Polymeric Systems for the Administration of Macromolecular Drugs in Advanced Pharmacological and Tissue Engineering Technologies" (*National Co-ordinator*)
- 2003-2005 FIRS on "Hybrid Nanocomposites Based on Organic Polymeric Matrices and Inorganic Nanostructuring Fillers" (*National Co-ordinator*)
- 2004-2006 PRIN 2004 "Formulazione di Nuovi Materiali Polimerici Bioattivi per Applicazioni nel Settore dell'Ingegneria Tissutale" (*National Co-ordinator*).
- 2005-2009 FIRB 2003 – prot. RBLA02S4SP "Metodologie Nanolitografiche ad Altissima Risoluzione, Disegno e Fabbricazione di Micro e Nanodispositivi Ottici ed Elettronici" – Denominazione Lab.: *Nanosized Cancer Polymarker Biochip*
- 2006-2010 FIRB 2005 – prot. RBINO43BCP, Accordo Internazionale Italia-Israele "Nanoscience & Nanotechnology Approach to Tissue Engineering Applications Aimed at Vascular Graft Production" (*International Co-ordinator*)
- 2007-2009 PRIN 2006 – prot. 2006038548 "Bioactive Polymeric Materials for Applications in Tissue Engineering & Regenerative Medicine" (*National Co-ordinator*)

#### **INVOLVEMENT IN PROJECTS FUNDED BY TUSCANY REGION**

- 2005-2006 "NANO-RSS: Rete per lo sviluppo sostenibile delle Nanotecnologie"- DOCUP OB. 2 - Misura 1.7 – "Trasferimento delle innovazioni alle PMI" - Azione 1.7.1 "Reti per il trasferimento tecnologico". (*Local Coordinator*)
- 2008-2010 Fondi CIPE – Impiego Materiali Riciclati per Nuovi Prodotti su "Studio di nuove soluzioni e nuovi processi industriali per lo sviluppo di metodi di riciclaggio e riuso dei residui plastici delle automobili e ricerca e trasferimento tecnologico di nuovi impianti, strutture e macchinari finalizzati alla corretta gestione del fine vita dell'auto (ELV) nella realtà Toscana – Re.Au.To (*Local Coordinator*)
- 2009-2015 "Materiali Nanostrutturati a Base di Fibrina e Fattori Piastrinici in Grado di Promuovere l'Angiogenesi" – BIOSURGERY (*Local Coordinator*)
- 2011-2015 "Nuovo compound a base di polivinilalcol a struttura modificata per la compatibilizzazione con film a base poliolefinica per imballaggio alimentare con elevata efficienza conservativa". Project funded by Ministry of Economic Development n° B01/0742/x16.
- 2012-2015 "Nuovi supporti bioattivi a matrice polimerica per la rigenerazione ossea in applicazioni odontoiatriche". POR CReO 2007-2013. Bando Unico R&D – Progetto ReOss.
- 2014-2016 "Biophotonic technologies for Tissue repair". Progetto BI-TRE Biophotonicsplus Full Proposal/ European Competition for Collaborative R&D Funding.

## INVOLVEMENT IN PROJECTS FUNDED BY THE MINISTRY OF ECONOMIC DEVELOPMENT

- 2009-2014 "Packaging Sostenibile di Nuova Generazione: Sviluppo di Materiali a Matrice Polimerica da Fonti Rinnovabili non in Concorrenza con la Filiera Alimentare, Possibilmente Disgiunti da quella Energetica e Preferibilmente Biodegradabili e/o Compostabili" – BIOPACK/Coordinated by FERRERO SpA (Alba, Italy) (Local Coordinator)
- 2009-2014 Grandi Superfici Ceramiche Leggere Riccamente Decorate – Coordinated by Marazzi Group SpA (Modena, Italy) (Local Coordinator)

## EDITORIAL ACTIVITY

### Books

1. **E. Chiellini**, P. Giusti, "Polymers in Medicine: Biomedical & Pharmaceutical Applications", Vol. 1, Plenum Press, New York (1983)
2. **E. Chiellini**, P. Giusti, C. Migliaresi, L. Nicolais, "Polymers in Medicine: Biomedical & Pharmaceutical Applications", Vol. 2, Plenum Press, New York (1987)
3. C. Migliaresi, L. Nicolais, P. Giusti, **E. Chiellini**, "Polymers in Medicine", Vol. 3, Elsevier Amsterdam, (1988)
4. S. Cabani, **E. Chiellini**, G. Della Gatta, "ThermoChimica Acta – Special Issue", Vol. 160, n. 1, Elsevier, Amsterdam (1990)
5. **E. Chiellini**, P. Giusti, C. Migliaresi, L. Nicolais, "Polymers in Medicine", Vol. 4, Elsevier, London (1991)
6. C. Migliaresi, **E. Chiellini**, P. Giusti, L. Nicolais, "Polymers in Medicine", Vol. 5, Elsevier, Cambridge (1991)
8. M. Vert, J. Feijen, A. Albertsson, G. Scott and **E. Chiellini**, "Biodegradable Polymers and Plastics", Royal Society of Chemistry - London (1992)
9. R. Ottenbrite, **E. Chiellini**, "Polymers in Medicine: Biomedical and Pharmaceutical Applications", Technomic, Lancaster - USA (1992)
10. G. W. Gray, E.T. Samulski, **E. Chiellini**, C.A. Veracini, "Liquid Crystals – Proceedings of the 14<sup>th</sup> International Liquid Crystal Conference, Pisa June 21-16, 1992", Vol. 14, n. 1, 2, 3, 4, 5 and 6, Taylor & Francis, London (1993)
11. **E. Chiellini**, M. Giordano, D. Leporini, "Structure and Transport Properties in Organized Polymeric Materials", World Scientific, Singapore (1997)
12. R. M. Ottenbrite, **E. Chiellini**, D. Cohn, C. Migliaresi, J. Sunamoto, "Frontiers in Biomedical Polymer Applications"- Volume 1, Technomic, Lancaster - USA (1998)
13. R. Ottenbrite, **E. Chiellini**, D. Cohn, C. Migliaresi, J. Sunamoto, "Frontiers in Biomedical Polymer Applications" - Volume 2 Technomic, Lancaster - USA (1999)
14. A.-C. Albertsson, **E. Chiellini**, J. Feijen, G. Scott, M. Vert, "Degradability, Renewability and Recycling - Key Functions for Future Materials", Macromolecular Symposia Series, Wiley-VCH, Weinheim, Germany (1999)
15. **E. Chiellini**, J. Sunamoto, C. Migliaresi, R. M. Ottenbrite and D. Cohn, "Biomedical Polymers and Polymer Therapeutics" Kluwer Academic/Plenum Publishers, New York - USA (2001)
16. **E. Chiellini**, H. Gil, G. Braunegg, J. Buchert, P. Gatenholm, M. van der Zee, "Biorelated Polymers - Sustainable Polymer Science and Technology", Kluwer Academic/Plenum Publishers, New York - USA (2001)
17. **E. Chiellini**, R. Solaro, "Recent Advances in Biodegradable Polymers and Plastics – Macromolecular Symposia 197", Wiley-VCH Verlag GmbH & Co., Weinheim (Germany) [2003]
18. **E. Chiellini**, R. Solaro "Biodegradable Polymers and Plastics", Kluwer Academic/Plenum Press, New York (USA) [2003]
19. **E. Chiellini**, "Environmentally Compatible Food Packaging", CRC Press, Cambridge (UK), [2008]
20. M.A Abdelwahab, **E. Chiellini**, E. Grillo Fernandes "Ecocompatible Blends & Composites Based on Biodegradable Materials", Lambert Acad. Publ. (Ge) [2015]



## SCIENTIFIC JOURNALS

- Member of the Editorial Advisory Board of "Reactive Polymers" – Elsevier, Amsterdam, NL
- Member of the Editorial Advisory Board of "Journal of Material Chemistry", Royal Society – U.K.
- Member of the Editorial Advisory Board of the "Journal of Polymers & Environment", Plenum Press – USA
- Regional Editor of the "Journal of Bioactive and Compatible Polymers" Technomic, USA.
- Member of the Editorial Advisory Board of *Macromolecules*, ACS, USA
- Member of the Editorial Advisory Board of the *Korean Polymer Journal* – The Polymer Society of Korea
- Member of the Editorial Board of the *Journal of Polymer Degradation and Stability*, Elsevier Science Ltd, U.K.
- Member of the Editorial Board of the *Biomacromolecules* Journal, ACS, USA
- Member of the Editorial Board of the *Journal of Polymer Research*, Kluwer Academic Publ., UK
- Member of the Editorial Board of the *Journal of Applied Biomaterials & Biomechanics* Witching Editor, UK
- Member of the Editorial Board JTERM – *Journal of Tissue Engineering and Regenerative Medicine*
- Member of the Editorial Board of the *International Journal of Polymer Science* (Hindawi)

## SCIENTIFIC ACTIVITY: POLYMER SCIENCE AND TECHNOLOGY

- Synthetic polymer organic chemistry.
- Stereospecific polymerization of chiral vinyl monomers by Ziegler-Natta and cationic catalysts.
- Study of the conformational properties in solution of optically active synthetic polymers.
- Chemical reactions on optically active polymers and their use in phase transfer reactions.
- Synthesis of segmented polycondensates.
- Liquid crystalline polymers: synthesis and characterization.
- Polymers for biomedical & pharmaceutical applications.
- Biodegradable polymers of natural & synthetic origin: preparation and degradability evaluation.
- Polymeric materials for environmental and agricultural applications.

## SCIENTIFIC PUBLICATIONS

- Over 500 publications (422 in Peer Reviewed Journals and 89 Chapters in Books) in the field of Polymer Science & Technology
- 34 Patents & 20 Books
- Over 300 Contributions by Invitation: 200 in National & International Conferences and 113 in Companies & Scientific Academic Institutions

## INVITED CONTRIBUTIONS TO INTERNATIONAL & NATIONAL CONFERENCES & SYMPOSIA

- 1975 - IUPAC International Symposium on Macromolecules (Jerusalem - Israel)
- 1977 - IUPAC International Symposium on Macromolecules (Dublin - Ireland)  
- Gordon Research Conference on Polymers (New London, N.H. - USA)
- 1979 - Gordon Research Conference on Polymers (New London, N.H. - USA)  
- Gordon Research Conference on Micellar and Macromolecular Catalysis (Wolfeboro, N.H. - USA)
- 1980 - IUPAC International Symposium on Macromolecules (Florence - Italy)
- 1981 - ACS Meeting, Witco Award Conference (Atlanta, Ga.-USA)  
- 2<sup>nd</sup> Joint Polish-Italian Seminar on Multicomponent Polymeric Systems (Lodz, Poland)
- 1982 - IUPAC International Symposium on Macromolecules (Amherst, Ma. - USA)  
- AIM - *Convegno Scuola dell'Associazione Italiana delle Macromolecole* (Gargnano Italy)  
- *VII Scuola Estiva di Sintesi Organica A. Corbella* (Gargnano, Italy)
- 1983 - ACS Meeting (Washington, D.C. - USA)  
- ESF Conference on Liquid Crystalline Polymers (Copenhagen - DK)  
- International Symposium on Controlled Release Pharmaceuticals (Pavia - Italy)  
- ESF Workshop on Polymeric Supports with Chemical Functions (Braunschweig - FRG)
- 1984 - Gordon Research Conference on Liquid Crystal Polymers (New London, N.H. - USA)  
- Winter Conference on Liquid Crystals (Bovec - Yu)  
- *Convegno Gruppo Nazionale di Bioingegneria*, (Bressanone – Italy)
- 1985 - Gordon Research Conference on Polymers for Biomedical & Agricultural Applications (Santa Barbara, Ca - USA)  
- Faraday Discussion on Liquid Crystal Polymers (Cambridge - UK)  
- IUPAC International Symposium on Macromolecules (The Hague - NL)
- 1986 - Gordon Research Conference on Liquid Crystal Polymers (New London, N.H. - USA)  
- Bob Lenz's Sixtieth Birthday: the Next Sixty Years of Polymer Science (New London, N.H. - USA)  
- ESF-Workshop on Reactive Polymers as Supports and Catalysts (Tirrenia, Pisa - Italy)  
- International Symposium on Ophthalmic Drug Delivery: Biopharmaceutical, Technological and Chemical Aspects (Pisa - Italy)  
- Euchem Conference on the "Synthesis of Polymers and Liquid Crystal Polymers" (Lathi - Finland)
- 1987 - NATO ASI on Frontiers in Polymerization Catalysis and Polymer Synthesis (Bendor - France)  
- 30<sup>th</sup> IUPAC Microsymposium on Macromolecules "Polymer Supported Organic Reagents and Catalysts" (Prague - Czechoslovakia)  
- Annual Meeting of Japan Chemical Society (Fukuoka - Japan)  
- 36<sup>th</sup> Symposium on Macromolecules (Tokyo - Japan)  
- International Symposium on Polymer Drugs and Polymeric Drug Carriers (Nagasaki - Japan)  
- Italian Chemical Society Meeting on Liquid Crystals (Acireale – Italy)
- 1988 - One Day Meetings on Optically Active Polymers (Lancaster - U.K.)  
- Gordon Research Conference on Liquid Crystal Polymers (New London, N.H. - USA)  
- 32<sup>nd</sup> IUPAC International Symposium on Macromolecules (Kyoto - Japan)  
- 2<sup>nd</sup> Soviet-Italian Joint Seminar on Liquid Crystals (Moscow - USSR)
- 1989 - Gordon Research Conference on Biodegradable Polymers for Biomedical and Agricultural Applications (Ventura, CA - USA)  
- VI European Liquid Crystal Winter Conference (Schladming - Austria)  
- VI International Conference on Polymers in Medicine and Surgery (Amsterdam - Holland)  
- IBM Polymer Symposium (Florence - Italy)  
- IX Meeting of the Italian Association of Macromolecular Chemistry (Bologna -Italy)
- 1990 - Gordon Research Conference on Polymers in Biosystems (Oxnard, CA - USA)  
- 3<sup>rd</sup> Soviet-Italian Joint Seminar on Liquid Crystals (Catania - Italy)  
- NATO Workshop on New Biosynthetic Biodegradable Polymers of Industrial Interest from Micro-Organisms (Sitges - Spain)  
- 10<sup>th</sup> Advanced School of Pharmaceutical Chemistry (Bressanone - Italy)  
- 2<sup>nd</sup> AIM Conference on Advanced Topics in Polymer Science (Gargnano - Italy)  
- Gordon Research Conference on Liquid Crystalline Polymers (New London, NH -USA)

- 33<sup>rd</sup> Int. Macro IUPAC Symposium on Macromolecules (Montreal - Canada)
- 13th International Liquid Crystal Conference (Vancouver - Canada)
- International Symposium on Biodegradable Polymers (Tokyo - Japan)
- 1991 - ACS-Award Symposium Honouring E.J.Vandenberg (Atlanta, GA - U.S.A.)
- ACS Symposium on New Polymerization Reactions and Reaction Mechanism (Atlanta, GA - U.S.A.)
- 17th International Conference in Organic Coating Science and Technology (Luzern - Switzerland)
- Congresso su Qualità, Certificazione delle Merci e Mercato Unico: Ruoli e Obiettivi dei Laboratori Chimici Europei delle Dogane (Sorrento - Italy)
- Co-Organizer of the 2nd International Consensus Workshop on Degradable Polymers & Plastics (Montpellier - France)
- ACS Workshop on Plastic Waste Management (New Orleans - USA)
- 1992 - Giornate di Studio su Rifiuti Urbani e Industriali (Milan - Italy)
- Seminario su Materiali Biodegradabili per Chirurgia Ortopedica e Maxillofacciale (Milan - Italy)
- ACS - Award Symposium Honouring Prof. R.W.Lenz (S. Francisco, CA - USA)
- ACS - Polymer Ecology - Recycle Symposium (Washington, DC - USA)
- Eurobiomat Workshop on Biodegradation and Biodegradable Polymeric Biomaterials (Antalya, Turkey)
- Gordon Research Conference on Liquid Crystal Polymers (New London, NH - USA)
- 4th European Polymer Federation Symposium on Polymeric Materials (Baden-Baden, Germany)
- 1993 - Pisa Workshop on "Materiali avanzati: Scienza e Prospettive Tecnologiche" (Pisa, Italy)
- GRC on Biodegradable Polymers (S. Miniato-Pisa, Italy)
- 205th ACS National Meeting (Denver, CO - USA)
- International Workshop on Liquid Crystalline Polymers (WLCP „93) (Capri - Italy)
- 34th IUPAC Congress (Beijing - China)
- International Workshop on Liquid Crystalline Polymers (Seoul, Korea)
- International One-Day Workshop on Supermolecule Chemistry in Biotechnology & Materials (Kyoto, Japan)
- 2nd Kyoto-Siena Symposium (Kyoto, Japan)
- 1° Convegno Nazionale GIB (Trento, Italy)
- 3rd International Workshop on Biodegradable Plastics and Polymers (Osaka, Japan)
- 1994 - International Workshop on Controlled Life-Cycle of Polymeric Materials (Stockholm, Sweden)
- Smaltimento Rifiuti Industriali e Gestione Materie Prime Secondarie (Milan, Italy)
- 1° Congresso SICL (Amalfi, Italy)
- 15th International Liquid Crystal Conference (Budapest, Hungary)
- Workshop on Products of Sugarbet and Sugarcane (Helsinki, Finland)
- European Society of Biomaterials (Pisa, Italy)
- IUPAC International Symposium on "Functional and High Performance Polymers" (Taipei, Taiwan)
- ACS 17th Biennial Polymer Symposium on Polymers in Critical Technologies (San Juan, Puerto Rico)
- 5th EC Conference RTD on "Industrial Technologies" (Brussels - Belgium)
- 2<sup>nd</sup> International Symposium on Biomaterials and Drug Delivery Systems (Seoul - Korea)
- 1995 - 2° Convegno Scientifico INCM (Firenze, Italy)
- Gordon Research Conference on Biodegradable Polymers (Oxnard, CA - USA)
- AIM on Biodegradable Polymers (Milan, Italy)
- 5th IKETANI Conference- International Symposium on "Biomedical Polymers" (Kagoshima, Japan)
- 2nd International Workshop on *Supermolecule Chemistry in Biotechnology & Medicine* (Kyoto, Japan)
- Corso-Scuola Biomateriali, Tecnologie, Trasferimento Industriale (Marina di Campo, Isola d'Elba - Italy)
- 1st Symposium on *Frontiers in Biomedical Polymers, Biomaterials & Drug Delivery Systems* (Santa Margherita Ligure, Portofino - Italy)
- 3rd International Symposium on *Polymers for Advanced Technologies (PAT „95)* (Pisa, Italy)
- 12th European Conference on Biomaterials (Port - Portugal)

- Conference on Effective Delivery of Proteins and Peptides (Coronado, CA - USA)
- 4th International Workshop on Biodegradable Plastics & Polymers with 4th Annual Meeting of the Bio/Environmentally Degradable Polymer Society (Durham - USA)
- 1996 - 37th Microsymposium on (Bio)degradable Polymers: Chemical Biological and Environmental Aspects (Praga, Czech Republic)
- ICS-UNIDO EGM on Environmentally Degradable Plastics, (Trieste, Italy)
- 1997 - 2nd Symposium on Frontiers in Biomedical Polymers (Eilat, Israel)
- XIX Convegno-Scuola AIM (Gargnano, Brescia - Italy)
- ICS-UNIDO Training Course on Environmentally Degradable Plastics (Cairo & Alexandria, Egypt)
- XIII Convegno Italiano di Scienza e Tecnologia delle Macromolecole (AIM) (Genova, Italy)
- ICS-UNIDO International Workshop on Environmentally Degradable Polymers (Pune, India)
- 1998 - ICS-UNIDO Expert Group Meeting (EGM) on Environmentally Degradable Polymers (Trieste, Italy)
- III Congresso Nazionale Società Italiana dei Cristalli Liquidi (SICL'98) (Mondello - Palermo, Italy)
- 5th International Scientific Workshop on Biodegradable Polymers & Plastics (Stockholm, Sweden)
- 3rd Workshop on Multifunctional & Smart Polymer Systems (Tirrenia - Pisa, Italy)
- BEDPS + ACS Symposium on Biomedical Hydrogels & Water Soluble Polymers (Boston, MA- USA)
- ICS-UNIDO Workshop on Environmentally Degradable Polymers: Environmental and Biomedical Aspects" (Antalya - Turkey)
- ICS-UNIDO International Workshop on Environmentally Degradable and Recyclable Polymers in Latin America – WEDPLA (Campinas - Brasil)
- 1999 - ICS-UNIDO International Workshop on Environmentally Degradable Polymers - Plastic Materials and the Environment (Doha - Qatar)
- Biodegradable Plastics (99 Conference) - Discover the Opportunities (Frankfurt - Germany)
- 3rd International Symposium on Frontiers in Biomedical Polymers - FBPS'99 (Shiga - Japan)
- 26th International Symposium on Controlled Release of Bioactive Materials & the 2nd Conference on Consumer & Diversified Products (Boston - USA)
- ICS-UNIDO International Workshop on Environmentally Degradable Plastics: Materials Based on Natural Resources (Shanghai - China)
- International Conference on Biopolymer Technology - CBT (Coimbra - Portugal)
- ICS-UNIDO International Workshop on Environmentally Degradable Plastics (Smolenice - Slovak Republic)
- 2000 - ICS-UNIDO International Workshop on "Polymeric Materials and the Environment" Sharjah (UAE)
- 5a Scuola di Chimica Inorganica per Dottorandi "Chimica dei Materiali Avanzati" Castiglione della Pescaia (Italy)
- ICS-UNIDO International Workshop on "EDPs: Industrial Development and Applications" Seoul (Korea)
- ICS-UNIDO Follow up Meeting on "Promotion of New Technologies in Plastic Industry in the Framework of the East-West Cooperation" Smolenice (Slovakia)
- ICS-UNIDO Expert Group Meeting on Environmentally Degradable Plastics – EDPs Trieste (Italy)
- 6<sup>th</sup> International Scientific Workshop on Biodegradable Polymers and Plastics & 9<sup>th</sup> Annual Meeting of the Bio/Environmentally Degradable Polymer Society, Honolulu (Hawaii)
- 2001 - ICS-UNIDO International Workshop on Environmentally Degradable Plastics. Position of EDPs in Plastic Waste Management - Lodz, Pabienice (Poland)
- III Convegno Nazionale INSTM – Trento (Italy)
- Gordon Research Conference on Polysaccharides – Amherst, MA (USA)
- ICS-UNIDO International Meeting on Recycling and Environmentally Degradable Plastics from Renewable Resources and International Exhibition on Plastic Industries & Technologies – Jakarta (Indonesia)
- ICS-UNIDO International Meeting on Sustainable Polymers. Promotion of EDP Concept in Middle East and Gulf Countries. (Bahrain)
- 2002 - Workshop on Materials Science in Italy in the 6<sup>th</sup> European Framework, Firenze (Italy)
- Lenz Symposium on Polymer Chemistry: Past, present and Future, Amherst, MA - USA
- ICS-UNIDO Expert Group Meeting on Environmentally Degradable Plastics & Sustainable Development, Trieste (Italy)
- CERC3 (Chairman of European Research Councils' Chemistry Committees) - Workshop on Functionalised Synthetic Polymers & Biopolymers – Vaalbeek (Belgium)
- ICS-UNIDO International Workshop on "Plastics Recycling and Development of Environmentally Degradable Plastics", Bangkok (Thailand)
- ICS-UNIDO Forum on "Sustainable Development and Environmentally Degradable Plastics in China", Beijing (China)

- Sixth Framework Programme - European Commission Community Research, Brussels (Belgium)
- ICS-UNIDO Workshop on Environmentally Degradable Plastics, Plastic Recycling in Polymer Waste Management, Concepcion (Chile)
- 2003 - AIM Workshop 2003 – Gargnano (BS), Italy
- Congresso AFI - Incontro CRS - Gruppo Italiano di Biomateriali, Perugia (Italy)
- Expert Group Meeting on "Environmentally Degradable Plastics and Promotion of Related Projects", Trieste (Italy)
- 10 Corso-Scuola Biomateriali. Ingegneria dei Tessuti, Cellule Staminali e Terapia Genica - CIRMIB 2003, Ischia (NA), Italy
- Convegno INSTM'03, Ischia (NA), Italy
- AIM XVI Convegno Italiano di Scienza e Tecnologia delle Macromolecole, Pisa (Italy)
- Polymer Degradation Discussion Group - PDDG 2003, Bath (UK)
- BIOWEST 2003 - Aurora, Colorado (USA)
- EU-China Workshop on Multifunctional Materials by Design, Bologna (Italy)
- 1st IUPAC International Conference on Bio-based Polymers (ICBP 2003), Saitama (Japan)
- Kyoto International Symposium on Biodegradable Polymers - KISBP 2003 (Kyoto – Japan)
- EuroNanoForum 2003, Trieste (Italy)
- 2004 - ICS-UNIDO *Seminar Series, Trieste (Italy)*
- ICS-UNIDO 1st Regional Technical Training on Environmentally Degradable Plastics, Teheran (Iran)
- Giornata di Studio su "Cellule Staminali e Progenitori in Applicazioni Cliniche di Ingegneria Tissutale", Brescia (Italy)
- ICS-UNIDO International Conference on Renewable Resources and Renewable Energy: A Global Challenge, Trieste (Italy)
- 2005 - North-South Dialogue on Nanotechnology: Challenger and Opportunities, Trieste (Italy)
- Packaging Meeting su "Ricerca e Innovazione nell'Imballaggio Polimerico", Milano (Italy)
- Recycling-Unlocking the Benefits – The key to a sustainable future, Cambridge (UK)
- Pack-Tech Seminar on Eco-Compatible Packaging, Pisa (Italy)
- EPF Workshop on Bioplastics: Crossing the Border Between Synthetic and Natural Polymers, Paris (France)
- FBPS 2005, Granada (Spain)
- 12<sup>th</sup> CIRMIB Biomaterials School and 1<sup>st</sup> Expertissues School, Ischia (NA), Italy
- ICS-UNIDO Workshop "Promotion of Sustainable Plastics", San Jose (Costa Rica)
- EGM 2005 "Promotion of Sustainable Plastics and Evaluation of Forefront Technologies on EDPs", Trieste (Italy)
- 2006 - EGM "Promotion of Environmentally Degradable Plastics in China with GreenOlympics Initiative, Trieste (Italy)
- Convegno Scientifico in Occasione del 400 della Città di Livorno. Medicina Biomolecolare e Biotecnologie, Livorno (Italy)
- 3rd Alea Jacta Est Tutorial Course on "Drug Delivery, Targeting and Controlled Release of Growth Factors in Tissue Engineering", Menorca
- ICS-UNIDO Workshop on "Sustainable Plastics, EDPs and the Use of Renewable Feedstocks", Belgrade (Serbia & Montenegro)
- 1 Forum Nazionale per Giovani Ricercatori in Materiali Polimerici e Biomateriali, Modena (Italy)
- 2nd Marie Curie Cutting Edge InVENTS Conference on "Recent Advances on Polymeric Based Systems for Controlled Delivery of Bioactive Agents: Applications in Tissue Engineering", Algarve (Portugal)
- 2007 - I Simposio Internacional Plasticos Degradaveis e Biodegradaveis (Rio de Janeiro – Brazil)
- 14<sup>th</sup> CIRMIB Biomaterials School on "Nanomedicine: Imaging, Drug Release, Regenerative Medicine (Ischia (NA) - Italy)
- 2007 International Conference on Green Materials & Green Olympics, Beijing (China)
- International Conference on (Bio)Degradable Polymers from Renewable Resources, Vienna (Austria)
- International Congress on Biohydrogels, Viareggio (LU), (Italy)
- Trento Innovation Conferences in Materials Engineering. 1<sup>st</sup> Meeting on "Advances in Polymers, Composites and Biomaterials", Trento, (Italy)
- 2008 - NANOTEC2008, Venezia, (Italy)
- ICS-UNIDO Workshop on "Sustainable Plastics from Renewable Resources and from Agro-Food Waste", Cairo (Egypt)
- 2° Forum Nazionale dei Giovani Ricercatori su Materiali Polimerici e Biomateriali, Genova (Italy)
- Congresso Nazionale Biomateriali 2008, Follonica (GR), (Italy)
- ICS-UNIDO Workshop on Biofuels and Bio-based Chemicals, Trieste (Italy)
- XIV Scuola Nazionale di Scienza dei Materiali su "Tecnologie Convergenti per i Materiali: Problematiche nella Scienza, Energia e Ambiente", Bressanone (BZ), (Italy)

- International Conference on Ecological Materials and Technologies (ECOMAT 2008), Bucharest (Romania)
- AICAT 2008 - XX National Congress on Calorimetry Thermal Analysis and Chemical Thermodynamics, Pisa (Italy)
- ICS-UNIDO Workshop on Green Olympics, Green Materials and Biofuels Beijing (China), 14-15 December 2008
- 2009 - EPF 4th Summer School on "Bioplastics and Related Materials" Gargnano (BS), 24-29 May 2009
- VII Convegno Nazionale INSTM sulla Scienza e Tecnologia dei Materiali Green Park Resort (Calambrone - Pisa), 9-12 June 2009
- 36th Annual Meeting & Exposition of the Controlled Release Society (CRS) Copenhagen (Denmark), July 2009
- 28th Polymer Degradation Discussion Group Meeting (PDDG) Sestri Levante, 6-10 September 2009
- Technologies et Innovation dans la Filiere Fruits et Legumes Frais et Transformes, Avignon (France), 7-8 December 2009
- 2010 - Giornata Tecnologica AIM su "Materiali Polimerici per la Produzione di Manufatti Ecocompatibili", S. Piero a Grado (PI), 7 Maggio 2010
- Industrial Technologies 2010 integrating nano, materials and production, Brussels (Belgium), 7-9 September 2010
- Giornata Tecnologica AIM su "Innovazione nei Materiali Polimerici. Dalla Sintesi ai Prodotti", Milano, 19 November 2010
- 2011 - FBPS, 9th International Symposium on Frontiers in Biomedical Polymers, Madeira (Spagna), 9-12 April 2011
- EUPOC 2011 – In Celebration of Prof.Emo Chiellini & Francesco Ciardelli in their Retirement. The Long Way to Biobased Polymers & Related Biomaterials – A Case Study in Polymer Science & Technology – Gargnano, Italy May 29- June 3.
- "Bio-Breakfast : Nuevas Aplicaciones de los Plasticos Hydrosolubles" , Valencia (Spagna), 08-07 June, 2011
- Convegno IIR "Il Packaging dei Prodotti Alimentari ", Milano 15-16 June 2011
- 19th Annual Bioenvironmental Polymer Society (BEPS) Meeting, Vienna 28-29 September 2011
- CIBUSTEC 2011- Food Packaging Focus "Sicurezza e Sostenibilità dei Processi E dei Materiali di Confezionamento", Parma, 19 October 2011
- 3rd SYMPOSIUM OF THE ASSOCIATION OF HELLENIC PLASTIC INDUSTRIES "PLASTICS AND THE ENVIRONMENT" National Research Foundation Athens, 4 November 2011
- 2012 - FORUM "PACKAGING E IMBALLAGGI ALIMENTARI" Tavola Rotonda "Biodegradabilità e Compostabilità dei Materiali Usati per il Packaging e per gli Shopper" Milano, Italy, 19-20/06/2012
- Training Course "Advances in Biomaterials" Scientific Station of Polish Academy of Sciences, Vienna, March 12-16, 2012
- 2015 - "Oxo-biodegradable Polymeric Materials & Plastics: What They Are & To What They Serve", Packaging Materials Task Force – International Life Science Institute (ILSI). Bruxelles – Belgium, April 29
- "The Long Way to Polymeric Materials For Biomedical & Pharmaceutical Applications – A Case Study". The 11<sup>th</sup> FBPS – Frontiers in Biomedical Polymers Symposium. Riva del Garda - Italy, July 8.
- "Latest Advancements in Bioactive Polymeric Materials for Biomedical & Pharmaceutical Applications". Laserlab Europe User Community Training Workshop on Light-Based Technology, Trnava – Slovakia, September 3
- 2017 - Notte di Ricercatori Bright – 2017, "Energie Rinnovabili e Riciclo dei Materiali: una Sfida per la Sostenibilità", Cappella GUINIGI-Complesso San Francesco, Lucca – Italy, September, 29.
- Incontro LMPE Srl/Comune di Capannori/Baky Ltd, "Gestione dei Manufatti Plastici a Fine Vita. Una Via di Sviluppo Innovativa Finalizzata alla Loro Biodegradazione Mediante un Approccio Biotecnologico", Polo Tecnologico di Capannori, via Nuova Segromigno in Monte (Lucca) – Italy, September, 30

## CONTRIBUTIONS IN UNIVERSITY INSTITUTIONS AND IN COMPANIES

1976

- "Synthesis and characterization of optically active polymers containing functional groups embedded in a conformationally homogeneous environment". Invited by Prof. V.A. Kabanov, *Institute of Macromolecular Chemistry, University of Moscow, Moscow, URSS*
- "Synthesis and optical rotatory properties of stereoregular poly(alkylvinylethers)". Invited by Prof. B.A. Krentsel, *Institute of Petrochemistry of the Academy of Science, Moscow, URSS*
- "Chemical transformations of stereoregular optically active polymers and their applications in preparative organic chemistry". Invited by Prof. M.M. Koton, *Institute of Macromolecular Chemistry of the Academy of Science, Leningrad, URSS*
- "Polymerization of functional vinyl monomers by Ziegler Natta catalysts". Invited by Prof. Yu.I.Yermakov, *Institute of Catalysis of the Siberian Branch of the Academy of Science, Novosibirsk, URSS*

1977

- "Chemical transformations of stereoregular optically active polymers". Invited by Prof. P. Sigwalt, *Laboratory of Macromolecular Chemistry of the University of Paris, Paris, France*
- "Polymers as Reagents In Preparative Organic Chemistry. Activity of Macromolecular Quaternary Ammonium Salts in Heterophase Alkylation And Carbenation Reactions". Invited by Prof. M. Vert, *Laboratory of Macromolecular Chemistry of the University of Rouen, Mont Saint-Aignan, France*
- "Trasformazioni chimiche di polimeri stereoregulari e loro impiego nella chimica organica preparativa", Invited by Prof. C. Botteghi, *Institute of Applied Chemistry of the University of Sassari, Sassari, Italy*

1979

- "Coisotactic copolymers of functional vinylaromatic monomers with chiral  $\alpha$ -olefins", Invited by Prof. E. Thomas, *Department of Macromolecular Chemistry and Engineering, University of Massachusetts, Amherst, Mass., USA*
- "Induced optical activity in vinyl polymers containing aromatic chromophores". Invited by Dr. Scola, *Research Centre of the United Technologies, Hartford, Conn., USA*
- "Optically active polymers containing fluorescent groups: synthesis and luminescence properties". Invited by Dr. J.Pearson, *Research Center of the Xerox Co., Rochester, New York, USA*
- "Induced optical activity in vinyl polymers containing aromatic chromophores". Invited by Prof. I.Smid, *Department of Chemistry, College of Environmental Science and Forestry, New York State University, Syracuse, N.Y., USA*
- "Stereochemistry of the polymerization of chiral alkyl vinyl ethers by cationic coordinate catalytic systems". Invited by Prof. J.Chien, *Department of Macromolecular Chemistry and Engineering, University of Massachusetts, Amherst, Mass., USA*
- "Synthesis of optically active polymers from unsaturated monomers by stereospecific catalysts". Invited by Dr. H.S.Makowski, *Research Center of Exxon Research and Engineering Company, Linden, New Jersey, USA*
- "Induced optical activity in vinyl polymers containing aromatic chromophores and perspectives for their utilization in preparative organic chemistry". Invited by Prof. M. Goodman, *Department of Chemistry of the University of California, S. Diego, California, USA*
- "Optically active alternating copolymers of maleic anhydride and alkyl vinyl ethers: synthesis and properties". Invited by Dr. T.L.Smith, *Research Center of the IBM Corporation, San Jose, California, USA*
- "Optically active polymers containing aromatic chromophores: synthesis and applications". Invited by Prof. M.O'Donnell, *Department of Chemistry of the Purdue University, Indianapolis, Indiana, USA*
- "Stereochemical aspects of the stereospecific polymerization of vinyl monomers". Invited by Dr. G.L.Loomis, *Center of Elastomer Chemistry, E.I. Du Pont de Nemours, Wilmington, Delaware, USA*
- "Optically active polymers containing fluorescent groups: synthesis and characterization". Invited by Prof. H.Hall, *Department of Chemistry, University of Arizona, Tucson, Arizona, USA*
- "Stereochemical aspects of the polymerization of chiral alkyl vinyl ethers by cationic coordinate catalysts". Invited by Dr. E.J.Vandenberg, *Research Center of the Hercules Company, Wilmington, Delaware, USA*

1980

- "Synthesis and applications of polymeric ammonium salts". Invited by Prof. P.Pino, *ETH, Politechnic of Zurich, Switzerland*

1981

- "Recent research on alkyl vinyl ether polymerization and polymeric onium compounds as catalysts". Invited by Dr. P.C.Juliano, General Electric, Research and Development Center, Schenectady, New York, USA
- "Discussion on the recent developments in the field of liquid crystal-line polycondensation polymers". Invited by Dr. J.M.Pearson, Eastman Kodak, Corporate Research Center, Rochester, New York, USA
- "Polimeri sintetici di interesse biomedico", AIM, Foundation C. Erba, Milan, Italy 1982
- "Segmental polyesters displaying liquid crystalline properties. Synthesis and characterization". Invited by Dr. A. Zachariades, IBM Research Center, San Jose, California, USA
- "Structurally ordered synthetic polymers for the fabrication of semi-permeable membranes". Invited by Dr. A.E. Allegrezza, Abcor Inc., Wilmington, Massachusetts, USA
- "Segmented polyesters displaying liquid crystalline properties". Invited by Prof. M.Winnich, Department of Chemistry of the University of Toronto, Toronto, Canada
- "Segmented polyesters displaying liquid crystalline properties". Invited by Prof. G. Gray, Mc.Gill University, Montreal, Canada
- "Coordinate cationic polymerization of chiral alkyl vinyl ethers". Invited by Prof. J.H. Harwood, Institute of Polymer Chemistry, University of Akron, Akron, Ohio, USA
- "Optically active vinyl polymers containing fluorescent groups. Synthesis and properties". Invited by Prof. V. Percec, Department of Macromolecular Science, Case Western Reserve University, Cleveland, Ohio, Usa
- "Chiral polymeric onium salts in phase transfer reactions". Invited by Prof. J.M.Frechet, Institute of Chemistry, Ottawa University, Ottawa, Canada

1983

- "Effetti strutturali in poliesteri con proprietà liquido cristalline". Invited by Dr. G. Giannotti, Istituto Donegani-Montedison, Novara, Italy

1985

- "Synthesis and characterization of liquid-crystalline polyesters". Invited by Dr. J. Jackson, Eastman Kodak Co., Kingsport, Tenn., USA
- "Synthesis and characterization of liquid crystalline polyesters". Invited by Dr. K.Wissbrun, Celanese Co., Summit, N.J., USA
- "Effetti strutturali in poliesteri liquido cristallini". Invited by Prof. G. Zerbi, Department of Chemical Engineering and Industrial Chemistry, Milano, Italy

1987

- "Liquid Crystalline Polymers". Invited by Prof. S.Tokura, Department of Polymer Science, Hokkaido University, Sapporo - Japan
- "Biodegradable Polymers for Biomedical & Pharmaceutical Applications". Invited by Prof. T. Sogai, 2nd Hokkaido University Summer Seminar
- "Stereochemical Aspects of the Polymerization of Chiral Alkyl Vinyl Ethers". Invited by Prof. S.Nozakura, Department of Macromolecular Science, Osaka University, Osaka - Japan
- "Bioactive Polymers for Medical and Pharmaceutical Applications". Invited by Dr. W.Kawai, Government Industrial Research Institute, Osaka - Japan
- "Bioerodible Polymers for Drug Delivery Systems". Invited by Prof. T. Ouchi, Department of Applied Chemistry, Faculty of Engineering, Kansai University, Osaka - Japan
- "Bioactive Polymers for Medical and Pharmaceutical Applications". Invited by Prof. Y.Ikada, Department of Polymer Science, Faculty of Engineering and Medical Center, University of Kyoto, Kyoto - Japan
- "Stereochemical Aspects of the Polymerization of Chiral Vinyl Type Monomers". Invited by Prof. J. Sunamoto, Department of Chemistry and Industrial Chemistry, Faculty of Engineering, University of Nagasaki, Nagasaki - Japan
- "Chiral Liquid Crystalline Polymers". Invited by Prof. J. Sunamoto, Department of Chemistry and Industrial Chemistry, Faculty of Engineering, University of Nagasaki, Nagasaki - Japan
- "Synthesis and Catalytic Applications of Ion-Exchange Type Resins". Invited by Prof. J. Sunamoto, Department of Chemistry and Industrial Chemistry, Faculty of Engineering, University of Nagasaki, Nagasaki - Japan
- "Ion-Exchange Type Resins as Catalysts in Preparative Organic Chemistry". Invited by Prof. H.Egawa, Department of Applied Chemistry, Faculty of Engineering, Kumamoto University, Kumamoto - Japan
- "Stereochemical Aspects of the Cationic Polymerization of Alkyl Vinyl Ethers". Invited by Prof. R. Ueocha, Department of Industrial Chemistry, Kumamoto Institute of Technology, Kumamoto - Japan
- "Bioactive Polymers for Medical and Pharmaceutical Applications: a Critical Overview". Invited by Prof. K.Ueno, Dojin Co., Kumamoto - Japan



- "Bioactive Polymers for Medical and Pharmaceutical Applications: a Critical Overview". Invited by Prof. M.Akashi. *Department of Applied Chemistry, Faculty of Engineering, Kagoshima University, Kagoshima - Japan*
  - "Bioactive Polymers for Medical and Pharmaceutical Applications". Invited by Dr. K.Tsujii. *Kao Corporation, Basic Research Center of Surface Science, Wakayama - Japan*
  - "Chiral Liquid Crystal Polyesters". Invited by Dr. K.Tsujii, *Kao Corporation, Basic Research Center of Surface Science, Wakayama - Japan*
  
  - "Polymers Containing Carbazole and Related Aromatic Moieties". Invited by Dr. H. Okamura, *Petroleum Energy Center, Tokyo - Japan*
  - "Chiral Liquid Crystal Polymers". Structure-Properties Relationship". Invited by Dr. S.Nozaawa, *Mitsubishi Chemical Industries, Ltd – Yokohama City - Japan*
  - "Bioactive and Compatible Polymers". Invited by Dr. Y.Murata, *Nippon Oil and Fats Corporation, Ltd., Tsukuba - Japan*
  - "Chiral Liquid Crystal Polymers". Invited by Dr. Y.Murata, *Nippon Oil and Fats Corporation, Ltd., Tsukuba - Japan*
  - "Synthetic Polymers for Ophthalmic Drug Release". Invited by Dr. M.Hara. *Basic Research Laboratories, Toray Industries, Inc., Kamakura - Japan*
  - "Polymer Drug Delivery Systems: Ophthalmic Applications". Invited by Prof. N.Ogata, *Sophia University, Department of Chemistry, Tokyo - Japan*
  - "Liquid Crystal Research at the University of Pisa". Invited by Prof. L.L. Chapoy, *Istituto G. Donegani, Novara - Italy*
- 1989
- "Stereospecific Polymerization of Alkyl Vinyl Ethers and Olefins by Catalysts Based on Organoaluminum Sulfates". Invited by Prof. E. Mano. *Federal University of Rio de Janeiro - Rio de Janeiro, Brasil*
  - "An Overview of Structure-Property Relationship in Thermotropic Liquid Crystalline Polymers". Invited by Dr. R. Haag. *Petrobras Research Center - Rio de Janeiro, Brasil*
  - "Chiral Main Chain Liquid Crystalline Polyesters: Synthesis and Properties". Invited by Prof. F. Galembek, *University of Sao Paulo at Campinas - Campinas Brasil*
  - "Ion-Exchange Type Resins as Catalysts in Reactions of Industrial Interest". Invited by Prof. F. Galembek, *University of Sao Paulo at Campinas - Campinas Brasil*
  - "Biodegradable Polymers for Biomedical Applications". Invited by Prof. L. Amaral, *University of Sao Paulo - Sao Paulo, Brasil*
  - "Thermal Optical and X-Ray Analysis of Semiflexible Liquid Crystalline Polymers". Invited by Prof. L. Amaral, *University of Sao Paulo - Sao Paulo, Brasil*
- 1990
- "Recent Developments in Chiral Liquid Crystalline Polymers". Invited by Dr. M. Ishidoia, *Nippon Oil & Fats, Co., Yokohama, Japan*
  - "Chiral Liquid Crystalline Polymers in Optical and Electrooptical Applications". Invited by Dr. K.Yoshinaga, *Canon Research Labs, Kamakura, Japan*
  - "Trasformazioni Chimiche di Polimeri di Sintesi e Naturali". Invited by Dr. G.Garbassi. *Istituto G. Donegani, Novara, Italy*
- 1991
- "Degradation of Starch Filled Polyethylene Films under Different Environmental Conditions". Invited by Prof. R.W.Lenz. *University of Massachusetts, Amherst, Ma - USA*
  - "Liquid Crystalline Polymers: Issues in the Design and Perspectives in Applications". Invited by Dr. G.P.Coffey. *BP-Research Laboratories, Cleveland, OH - USA*
  - "Chiral Liquid Crystalline Polymers: Synthesis in Applications". Invited by Prof. V.Percec. *Case Western Reserve University, Cleveland, OH - USA*
- 1992
- "Materiali Polimerici Biodegradabili: Problematiche e Prospettive". Invited by Prof F. Naso. *Università di Bari, Bari - Italy*
  - "Biomaterials & Intelligent Materials. Technological Aspects & Medical Applications". Invited by Prof. P. Cavaliere, *Villanova di Ostuni, Brindisi-Italy*
- 1993
- "Thermotropic Liquid Crystalline Polymers: Synthesis, Properties and Applications". Invited by Prof. M. Jiang, *Dept. of Materials Science, Fudan University, Shanghai - China*
  - "Biocompatible Polymers for Medical Utilization". Invited by Prof. J. Sunamoto, *Department of Chemistry, University of Kyoto, Kyoto (Japan)*
- 1994
- "Out-line of research activity in the field of LCP and biodegradable polymers". Invited by Prof. H.R. Penton, *ETHYL S.A., Louvain-La Neuve, Belgium*

- 1995
- "Bioerodible-Biodegradable Polymers from Renewable Resources". Invited by Dr. J. Noonan. *Eastman Kodak - Rochester, NY - USA*
- 1996
- "Il Rischio Chimico". Invited by Dr. Giuliano Trebbi. *Sicurezza e Salute dei Lavoratori - Valutazione su alcuni aspetti della nuova normativa (D.Lgs N. 626 del 19.9.94 e N. 242 del 19.3.96)*, - ENEL - Centro Ricerca Termica, Pisa
  - "Biodegradable Synthetic and Semisynthetic Polymers". Invited by Prof. F. Rypacek. *37th Microsymposium on (Bio)degradable Polymers: Chemical Biological and Environmental Aspects*. Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Prague, Czech Republic
- 1997
- "Biodegradable-Bioerodible Synthetic And Semisynthetic Polymers For Biomedical Applications". Invited by Prof. F. Sironi. *Incontri Tecnici di Ricerca Federchimica - Federazione Nazionale dell'Industria Chimica, Milano*
  - "Design of Polymeric Systems for the Targeted Administration of Proteic Drugs". Invited by Prof. B. Wesslen, *Lund University - Centre for Chemistry & Chemical Engineering, Lund - Sweden*
- 1998
- "Design of Polymeric Systems for the targeted Administration of Proteic Drugs". Invited by Prof. L. Innocentini Mei, *Department of Chemical Engineering, University of Campinas, Campinas, Brasil*
  - "Modification of Stable and Degradable Polymers by Heterogeneous Grafting". Invited by Prof. A.-C. Albertsson. *PdD Thesis - M. Ohrlander*. Royal Institute of Technology, Department of Polymer Technology, Stockholm, Sweden
- 2000
- "Environmentally Degradable Polymeric Materials. State Of Art & Perspectives". Invited by Dr. Syed Imam. *2000 Lecture Series - United States of Agriculture, USDA, Peoria, IL -USA (2000)*
  - "Materiali Macromolecolari nello Sviluppo Industriale. Stato Attuale e Prospettive". Invited by Prof. Norberto Roveri. *Inaugurazione dell'Anno Accademico 2000-2001 - Corso di Laurea in Chimica*. Istituto Ciamician, Bologna, Italy
- 2001
- "Impiego di Nanoparticelle nel Settore Farmaceutico". Invited by Dr. S. Sironi. *Incontro Tecnico di Ricerca su Nanotecnologie: la Prossima Rivoluzione Industriale*, FAST, Milano, Italy
  - "Hydrosoluble Biodegradable Polymeric Materials". Invited by Dr. E. Fleury. *Rhodia Workshop on Biodegradable Polymers*. Lyon, France
  - "Consumption and Loss of Commercial Stabilisers in Polyethylene Exposed to Different Natural Environments". Invited by Dr. S. Karlsson. *Nadejzda Haider PhD Thesis Defense*. KTH, Stockholm, Sweden
- 2002
- A New Biocompatible Nanoparticle Delivery for Targeted Release of Fibrinolytic Drugs. *Annual Network Meeting LGC, Alicante (Spain)*
- 2003
- "Plastic Waste Management in Europe Including Environmentally Degradable Polymeric Materials & Plastics. Directives & Standards", Invited by Dr. S. Ortega, *BIOCYCLE Co., Ribeirao Preto (Brasil)*
  - "Environmentally Degradable Plastics. An Overview on Present Status & Perspectives", Invited by Dr. S. Ortega, *BIOCYCLE Co., Ribeirao Preto (Brasil)*
- 2004
- "Hydrosoluble Polymeric Materials In Packaging: Hydrolene - A Case Study" Invited by Dr. Donal Brennan, *ECOLAB + BIOLAB Meetings, Minneapolis & Atlanta (USA)*
  - "Development and Future Trends for Environmentally Degradable Plastics" Invited by Dr. Radu Baciu, *ISAB Meeting, Vancouver (Canada)*
  - "Pros & Cons - Development of Commercial Formulation Based on Starch/TDPA Blends" Invited by Dr. Radu Baciu *ISAB Meeting, Vancouver (Canada)*
  - EPI-TDPA - Workprogram May-July 2004, Invited by Dr. Radu Baciu, *ISAB Meeting, Vancouver (Canada)*
- 2005
- "Materiali Macromolecolari: □Uomo e □Ambiente" Accademia Nazionale dei Lincei - Fondazione "Guido Donegani" 6a Edizione delle "Giornate Lincee della Chimica", Roma
  - "Materiali Macromolecolari: □Uomo e □Ambiente" Accademia Nazionale dei Lincei - Fondazione "Guido Donegani" 6a Edizione delle "Giornate Lincee della Chimica", Firenze
- 2006
- "Biobased Polymeric Materials vs & with Petrobased Counterparts Trends, Main Applications, Future Market Perspective, R&D Activities" Invited by Dr. Marta Macias, *International Trends in*

- Eco-Friendly Packaging Technologies Industrialization Program / Marine Resources Area / Fundacionchile Technology Mission ftz-Bremerhaven, Bremerhaven (Germany)
- 2007
- "Biomaterials for Medical & Pharmaceutical Applications" BIOS Doctorate School Conference Faculty of Medicine, University of Pisa
- 2008
- "Sistemi Macromolecolari Nanostrutturati per il Rilascio Mirato di Farmaci Non Convenzionali" 7PQ: Misure a Supporto delle PMI: Un'Occasione di Dialogo tra le Imprese e il Mondo della Ricerca, Firenze
  - "Hydro- & Oxo-Biodegradable Polymers from Fossil Feedstock vs. Their Counterparts from Renewable Resources Global Survey" Plastics and Chemicals Industries Associations (PACIA) Round Table, Malbourn (Australia)
  - "Hydro- & Oxo-Biodegradable Polymers from Fossil Feedstock vs. Their Counterparts from Renewable Resources Global Survey" Invited by O. Waleffe, Duferco, Belgium, La Louvière (Belgium)
- 2009
- "New Trends In Environmentally Degradable Plastic Productions". Invited by Dejan Brnovic, Garmin Meeting on "Environmentally Degradable Polymers & Plastics, Podgorica (Montenegro).
  - "Polymeric Nanoconstructs in Nanomedicine and Bioenvironmental Applications". Invited by M.R. Tinè, BIOS Conferences, University of Pisa, Faculty of Mathematics, Physics & Natural Sciences, Pisa,
  - "Imballaggi Plastici Idrobiodegradabili, Ecocompatibili da Scarti Agro-industriali e Oxobiodegradabili da Fonte Petrochimica", Incontri TINNOVA "Aperitivi con la Ricerca", Firenze
  - "Biodegradability & Compostability of Polymeric Materials & Plastics - Technical Definitions & State of Art", Seminario Materiali Biodegradabili GiFlex, Milano.
  - "Environmentally Compatible Food Packaging", Technologies et Innovation dans la Filière Fruits et Legumes Frais et Transformés, Avignon (France)
- 2010
- "Environmentally Degradable Plastics – State of the Art & Perspectives". Algeri (Algeria).
  - "Hydro- & Oxo-Biodegradable Plastics. Is Partnership or Marriage Possible?", Green Plastics Conference, Skenkar College of Engineering & Design, Ramat Gan (Israel)
  - "Scarti Agroindustriali come Fonte di Materiali Polimerici Ecocompatibili", Incontri TINNOVA "Aperitivi con la Ricerca" – Tecnologie e Innovazioni per le Filiere del Vino e dell'Olivo, S. Pietro in Palazzi, Cecina (LI).
- 2011
- Fiorini Guarda Oltre, Senigallia (AN), 17-19 giugno
- 2012
- Bonduelle, S. Paolo d'Argon (BG), 24/02/2012
  - Training Course "Advances in Biomaterials", Marzo 12-16, 2012, Scientific Station of Polish Academy of Sciences, Vienna, Austria
  - ISOPSC 2012 "New and Old Polymers for Sustainable Chemistry" Università di Salerno Dipartimento di Chimica e Biologia - Settembre 2-7, 2012
  - PPC 2012- Plastpack Conference, Sustainable Plastic Packaging: State and Trends 11<sup>th</sup> PACKTECH EXPO BALKAN 2012 FAIR September 27<sup>th</sup>, 2012, Belgrade Fair, Belgrade, Serbia
- 2014
- Plastiche da Fonti Rinnovabili e da Fonti Fossili: Pros & Cons – Conferenza Assefi "Il futuro delle bioplastiche" – Incontro con la ricerca, Camera di Commercio, Pisa
  - "Opportunità applicative del PLA: Problematiche ed aspettative – Tavola Rotonda – Università Piemonte Orientale – Alessandria (Italy).
- 2015
- "The Long Way to Biobased Polymers & Related Biomaterials – A case Study" Istituto Tecnico Agrario Statale "Dionisio Anzillotti", Pescia (Pistoia) – Italy, March 14
  - "Biomaterials for Biomedical & Pharmaceutical Applications", Istituto Tecnico Agrario Statale "Dionisio Anzillotti", Pescia (Pistoia) – Italy, March 14
  - "The Long Way to Polymeric Materials for Biomedical & Pharmaceutical Applications – a Case Study"
  - The 11<sup>th</sup> FBPS, Riva del Garda - Italy, 8<sup>th</sup> - 11<sup>th</sup> July 2015

## RESPONSIBILITY IN ORGANIZATION OF THE SCIENTIFIC INTERNATIONAL CONFERENCES & SYMPOSIA

- 1982 - Vice-Chairman of the 1st International Conference on Polymers in Medicine (Porto Cervo - Italy)
- 1985 - Co-chairman of the 2nd International Conference on Polymers in Medicine (Capri - Italy)
- 1987 - Co-chairman of the 3rd International Conference on Polymers in Medicine (Porto Cervo - Italy)
- 1990 - Co-chairman of the 4th International Conference on Polymers in Medicine (Riva del Garda - Italy)
- 1991 - Co-Organizer of the 2nd International Consensus Workshop on Degradable Polymers & Plastics (Montpellier - France)
- 1992 - Chairman of the 14th International Liquid Crystal Conference (Pisa - Italy)
- 1995 - Vice-Chairman of the Gordon Research Conference on "Biodegradable Polymers" (Oxnard - CA, USA)
  - Scientific Co-Chairman of the 1st Int. Symposium on Frontiers in Biomedical Polymers (S. Margherita Ligure, Italy)
  - Co-Chairman Scientific Committee of the 3rd International Symposium on Polymers for Advanced Technology (PAT „95) (Pisa, Italy)
- 1996 - Co-responsible in Actions promoted by UNIDO-Aide-Memoire, Scientific Planning & Co-ordination Meeting On Polymeric Materials. Environmentally Degradable Polymers, (Trieste, Italy)
- 1997 - Scientific Co-Chairman of 2nd International Symposium on Frontiers in Biomedical Polymers (Eilat, Israel)
  - Elected Chairman of the 3rd Gordon Research Conference on "Biodegradable Polymers", (Barga - Lucca, Italy)
  - Chairman of One Day Ares Serono Foundation Workshop on "Polymeric Materials in Biomedical & Pharmaceutical Applications" (Pisa, Italy)
  - Co-responsible of the ICS-UNIDO Training Course on Environmentally Degradable Plastics, (Alexandria, Egypt)
  - Co-responsible of ICS-UNIDO Workshop on Environmentally Degradable Polymers (Pune, India)
- 1998 - Co-responsible of ICS-UNIDO Workshop on Environmentally Degradable Polymers: Environmental and Biomedical Aspects", (Antalya - Turkey), (Campinas - Brasil)
- 1999 - Co-responsible of ICS-UNIDO International Workshop on Environmentally Degradable Polymers - Plastic Materials and the Environment", (Doha - Qatar), (Shanghai - China), (Smolenice - Slovak Republic)
  - Scientific Co-Chairman of the 3<sup>rd</sup> International Symposium on Frontiers in Biomedical Polymers (Shiga - Japan)
- 2000 - Co-responsible of ICS-UNIDO International Workshop on "Plastic and the Environment. Biorecycling & Recycling", (Sharjah - UAE), (Seoul - Korea).
  - Co-Chairman of the ACS Symposium on Biorelated Polymers (Honolulu - Hawaii)
- 2001 - Co-responsible of ICS-UNIDO International Workshop on Environmentally Degradable Plastics. Position of EDPs in Plastic Waste Management. Lodz, Pabienice (Poland)
  - Scientific Co-Chairman of the "Frontiers in Biomedical Polymers Conference", Williamsburg, VA (USA)
  - Co-responsible of ICS-UNIDO International Workshop on Recycling and Environmentally Degradable Plastics from Renewable Resources and International Exhibition on Plastic Industries and Technologies, (Jakarta - Indonesia)
  - Co-responsible of ICS-UNIDO International Workshop on Sustainable Polymer: Promotion of EDP Concept in Middle East and Gulf Countries, (Bahrain)
  - Co-responsible of the Expert Group Meeting (EGM) on Environmentally Degradable Plastics (EDPs) and Sustainable Development, (Trieste - Italy)
- 2002 - Chairman of the 7<sup>th</sup> World Conference on Biodegradable Polymers & Plastics, (Tirrenia - Italy)
  - Co-responsible of the Expert Group Meeting (EGM) on Environmentally Degradable Plastics (EDPs) and Sustainable Development, (Trieste - Italy)
  - Co-responsible of ICS-UNIDO International Workshop on Plastic Recycling and Development of Environmentally Degradable Plastics, (Bangkok - Thailand)
  - Co-responsible of ICS-UNIDO Forum on Sustainable Development and Environmentally Degradable Plastics in China, (Beijing - China)
  - Co-responsible of ICS-UNIDO International Workshop on Environmentally Degradable Plastics, Recycling in Polymer Waste Management, (Concepción - Chile)

- 2003 - Co-responsible of the Expert Group Meeting (EGM) on Environmentally Degradable Plastics and Promotion of Related Projects, (Trieste - Italy)
- Co-Chairman of the Fifth International Symposium on Frontiers in Biomedical Polymers (Ischia - Italy)
- 2004 - Co-responsible of the ICS-UNIDO 1st Regional Technical Training on Environmentally Degradable Plastics (Teheran – Iran)
- Co-responsible of the ICS-UNIDO International Conference on "Renewable Resources and Renewable Energy: A Global Challenge" (Trieste – Italy)
  - Co-responsible of the ICS-UNIDO Seminar on "Use of Ecooplastics in China, Development and Promotion of the Joint GREENOLYMP Project" (Beijing – China)
  - Co-responsible of the ICS-UNIDO International Workshop on "Plastic Waste Management and Environmentally Degradable Plastics" (Kampala – Uganda)
  - Co-responsible of the Expert Group Meeting (EGM) on Environmentally Degradable Plastics and Promotion of Related Projects, (Trieste - Italy)
  - Co-chairman with A. Gandini (Grenoble) and N. Bikales (Washington) of the V4 Symposium "Polymers and environment – Polymers from Renewable Sources" – World Polymer Congress IUPAC Macro 2004 (Paris – France)
- 2005 - Chairman of the PACK-TECH Seminar on "Eco-compatible Packaging", Pisa (Italy)
- Co-chairman of the 6th International Symposium on Frontiers in Biomedical Polymers (FBPS 2005), (Granada – Spain)
  - Co-responsible of the ICS-UNIDO Workshop "Promotion of Sustainable Plastics", San Jose (Costarica)
  - Co-responsible of the Expert Group Meeting (EGM) on "Promotion of Sustainable Plastics and Evaluation of Forefront Technologies on EDPs" (Trieste – Italy)
- 2006 - Co-responsible of the EGM on Promotion of Environmentally Degradable Plastics in China with GreenOlympics Initiative (Trieste, Italy)
- Co-responsible of the ICS-UNIDO Workshop on Sustainable Plastics, EDPs and the Use of Renewable Feedstocks", Belgrade (Serbia & Montenegro)
  - Co-Responsible of the ICS-UNIDO Workshop on "Sustainable Plastics in India and Asian Countries" (Pune – India)
- 2007 - Co-Chairman of Payen Symposium Award – 233<sup>rd</sup> ACS National Meeting (Chicago- IL, USA).
- Co-Chairman of the 7<sup>th</sup> FBPS 2007 Conference (Gent, Belgium)
  - Co-Advisor of the 2007 International Conference Green Materials & Green Olympics, Beijing (China)
- 2008 - ICS-UNIDO Workshop on "Sustainable Plastics from Renewable Resources and from Agro-Food Waste", Cairo (Egypt)
- 2009 - Chairman of the VII Convegno Nazionale INSTM sulla Scienza e Tecnologia dei Materiali, Green Park Resort [Calambrone – Tirrenia (PI), Italy], June 2009
- Co-Chairman of the 8<sup>th</sup> FBPS 2009- Mishima- Japan
- 2010 - Chairman of the AIM Technical Workshop on "Polymeric Materials for the Production of Ecocompatible Manufacts", S. Piero a Grado (PI),

## LIST OF SCIENTIFIC PUBLICATIONS IN PEER REVIEWED JOURNALS

1. G.P. Lorenzi, E. Benedetti, **E. Chiellini**, "Polimeri vinilici otticamente attivi -Polimerizzazione del (1-metil-propil) viniletere e del (2-metilbutil) viniletere otticamente attivi e racemi, con sistemi catalitici diversi", *Chim. Ind. (Milan)*, **46**, 1474 (1964)
2. P. Pino, G.P. Lorenzi, **E. Chiellini**, "Polimeri vinilici otticamente attivi - Sul poli(S)-1-metilpropil vinil etere", *Ricerca Scientifica*, **7**, 193 (1964)
3. P. Pino, G.P. Lorenzi, **E. Chiellini**, P.Salvadori, "Polimeri vinilici otticamente attivi - Dispersione ottica rotatoria di alcuni poli(vinileteri) e dei loro complessi con Al(i-C<sub>4</sub>H<sub>9</sub>)<sub>3</sub>", *Rend. Accad. Naz. Lincei*, **39**, 196 (1965)
4. P. Pino, C. Carlini, **E. Chiellini**, F. Ciardelli, P. Salvadori, "Dissymmetrically perturbed aromatic chromophores in stereoregular copolymers of (R)-3, 7-dimethyl-1-octene with styrene", *J. Am. Chem. Soc.* **90**, 5025 (1968)
5. P. Pino, G.P. Lorenzi, **E. Chiellini**, "Optically active vinyl polymers - The optical activity in hydrocarbon solution of poly(S)-1-methylpropyl vinyl ether and poly(S)-2-methylbutyl vinyl ether", *J. Polym. Sci.*, **C16**, 3279 (1968)
6. P.L. Luisi, **E. Chiellini**, P.F. Franchini, M. Orienti, "Stereoregularity and dipole moments of optically active poly(alkyl vinyl ethers)", *Makromol. Chem.*, **112**, 197 (1968)
7. P. Pino, P. Salvadori, **E. Chiellini**, P.L.Luisi, "Optical activity and optical rotatory dispersion in synthetic polymers", *Pure Appl. Chem.* **16**, 469 (1968)
8. **E. Chiellini**, G. Montagnoli, P. Pino, "Stereoselectivity in vinyl ethers polymerization", *J. Polym. Sci.*, **B7**, 121 (1969)
9. G. Natta, G. Allegra, I.W. Bassi, C. Carlini, **E. Chiellini**, G.Montagnoli, "Isomorphism phenomena in isotactic poly(4-methylsubstituted  $\alpha$ -olefin)s and isotactic poly(alkyl-vinylethers)", *Macromolecules*, **2**, 311 (1969)
10. **E. Chiellini**, P. Salvadori, M. Osgan, P. Pino, "On the optical activity of poly(R)-propylene oxide samples having different stereoregularity", *J. Polym. Sci.*, **A-1**, 1589 (1970)
11. **E. Chiellini**, "Stereoselectivity and stereoelectivity in the copolymerization of asymmetric vinyl ethers", *Macromolecules*, **3**, 527 (1970)
12. G. Ceccarelli, **E. Chiellini**, "Nuclear magnetic resonance spectra and structure of some alkyl vinyl sulfides", *Org. Magn. Res.*, **2**, 409 (1970)
13. **E. Chiellini**, M. Marchetti, G. Ceccarelli, "A convenient mode to synthesize and to determine the optical purity of (S) (-)-phenylethyl vinyl sulfide", *Int. J. Sulfur Chem.*, **A1**, 73 (1971)
14. **E. Chiellini**, "Stereospecificity in the synthesis and cleavage of some alkyl vinyl ethers derived from optically actives econdary alcohols", *Gazz. Chim. Ital.*, **102**, 830 (1972)
15. F. Ciardelli, P. Salvadori, C. Carlini, **E. Chiellini**, "Circular dichroism between 230 and 185 nm of the aromatic chromophore in high molecular weight hydrocarbons", *J. Am. Chem. Soc.*, **94**, 6536 (1972)
16. C. Carlini, H. Bano, **E. Chiellini**, "Stereoelective polymerization of racemic  $\alpha$ -olefins: influence of conversion and nature of catalyst component", *J. Polym. Sci.*, **A-1**, 10, 2803 (1972)
17. P. Pino, P. Salvadori, G.P. Lorenzi, **E. Chiellini**, L. Lardicci, G.B. Consiglio, O. Bonsignori, "Interaction between triisobutylaluminium and ethereal oxygen as a tool for the investigation of chiroptical and conformational properties of poly(vinylether)s and low molecular weight models", *Chim. Ind. (Milan)*, **55**, 82 (1973)
18. **E. Chiellini**, M. Marchetti, P. Salvadori, L. Lardicci, "Optically active vinyl sulfides: synthesis, properties and relationship between optical rotatory power and optical purity", *Int. J. Sulfur Chem.*, **8**, 19 (1973)
19. **E. Chiellini**, R. Nocci, "Polymerization of mixtures of alkyl methacrylates and alkyl acrylates with 4-methyl-1-pentene by Ziegler-Natta catalysts", *J. Polym. Sci.*, **A-1**, 11, 493 (1973)
20. **E. Chiellini**, M. Marchetti, "On the absence of stereoselectivity in the stereospecific polymerization of racemic 5-methyl-1-heptene and (2-methylbutyl) vinyl ether", *Makromol. Chem.*, **169**, 59 (1973)
21. C. Carlini, **E. Chiellini**, "Optically active hydrocarbon polymers with aromatic side chain. Synthesis and properties of copolymers of vinyl aromatic monomers with chiral  $\alpha$ -olefins", *Makromol. Chem.*, **176**, 519 (1975)
22. R. Solaro, **E. Chiellini**, "Synthesis and optical rotatory properties of copolymers of vinyl alcohol and optically active vinyl ethers", *Gazz. Chim. Ital.*, **106**, 1037 (1976)
23. **E. Chiellini**, R. Solaro, M. Palmieri, A. Ledwith, "Optically active vinyl polymers containing fluorescent groups. 1. Synthesis and properties of copolymers of N-vinylcarbazole with optically active monomers", *Polymer*, **17**, 641 (1976)
24. F. Conti, L. Acquaviva, **E. Chiellini**, F. Ciardelli, M. Delfini, A.L. Segre, "<sup>13</sup>C n.m.r. study of optically active polymers:poly(4-methyl-1-hexene)", *Polymer*, **17**, 901 (1976)

25. R. Nocci, **E. Chiellini**, C. Carlini, "Synthesis and characterization of stereoregular copolymers from p-alkoxystyrenes and chiral vinyl monomers", *Chim. Ind. (Milan)*, **59**, 329 (1977)
26. **E. Chiellini**, R. Solaro, "Stereoordered macromolecular matrices bearing ammonium groups as catalysts in alkylation and carbenation reactions", *J. Chem. Soc. Chem. Commun.*, **231** (1977)
27. E. Benedetti, **E. Chiellini**, "Conformational study of isotactic poly (S)-5-methyl-1-heptene and poly (S)-2-methylbutyl vinyl ether by IR spectroscopy", *J. Polym. Sci., Polym. Phys. Ed.*, **16**, 1251 (1977)
28. **E. Chiellini**, C. Carlini, "Synthesis and properties of coisotactic copolymers of functional vinyl aromatic monomers with chiral  $\alpha$ -olefins", *Makromol. Chem.*, **178**, 2545 (1977)
29. **E. Chiellini**, R. Solaro, S. D'Antone, "Polymers as reagents. Ethylation of phenylacetonitrile in the presence of poly(vinylpyridine)s, low molecular weight analogs and derived quaternary ammonium salts", *Makromol. Chem.*, **178**, 3165 (1977)
30. **E. Chiellini**, R. Solaro, A. Ledwith, "Optically active vinyl polymers containing fluorescent groups. 2. Synthesis of optically active vinylcarbazole derivatives", *Makromol. Chem.*, **178**, 701 (1977)
31. **E. Chiellini**, R. Solaro, "Reagenti polimerici in chimica organica. Attività catalitica di matrici macromolecolari a struttura primaria e secondaria definita in reazioni polifase", *Chim. Ind. (Milan)*, **60**, 1006 (1978)
32. C. Villiers, C. Braud, M. Vert, **E. Chiellini**, M. Marchetti, "Optically active alternating copolymers of maleic acid and alkyl vinyl ethers", *Eur. Polym. J.*, **14**, 211 (1978)
33. **E. Chiellini**, R. Solaro, O. Colella, A. Ledwith, "Optically active vinyl polymers containing fluorescent groups. 4. Synthesis and properties of copolymers of 9-vinylcarbazole with (-)-menthyl vinyl ether", *Eur. Polym. J.*, **14**, 489 (1978)
34. **E. Chiellini**, G. Galli, F. Ciardelli, R. Palla, F. Carmassi, "Structurally ordered block copolymers as membranes for hemodialysis", *Inf. Chem.*, **176**, 221 (1978)
35. **E. Chiellini**, R. Solaro, "One step dialkylation of phenylacetonitrile in the presence of tertiary amines", *J. Org. Chem.*, **43**, 2550 (1978)
36. F. Ciardelli, **E. Chiellini**, C. Carlini, O. Pieroni, P. Salvadori, R. Menicagli, "Synthetic chiral polymers with aromatic side chains", *J. Polym. Sci., Polym. Symp.*, **62**, 143 (1978)
37. **E. Chiellini**, R. Solaro, A. Ledwith, "Optically active vinyl polymers containing fluorescent groups. 3. Synthesis and characterization of optically active polymers containing carbazolyl groups", *Makromol. Chem.*, **179**, 1929 (1978)
38. J.L. Houben, B. Natucci, R. Solaro, O. Colella, **E. Chiellini**, A. Ledwith, "Optically active vinyl polymers containing fluorescent groups. 5. Fluorescence properties of optically active polymers containing carbazole units", *Polymer*, **19**, 811 (1978)
39. R. Bianchi, A. Bionda, F. Carmassi, R. Palla, C. Donadio, G. Galli, **E. Chiellini**, N. Molea, G. Mariani, "Evaluation of new membranes for hemodialysis: preliminary studies with a polycarbonate membrane", *J. Dialysis*, **3**, 383 (1979)
40. C. Villiers, C. Braud, M. Vert, **E. Chiellini**, "Optically active polyelectrolytes with variable hydrophobicity. Chiroptical properties of alternating copolymers of chiral (1-methyl alkyl)vinylethers and maleic acid at different degree of neutralization of carboxyl moiety", *Macromolecules*, **12**, 103 (1979)
41. A. Ledwith, **E. Chiellini**, R. Solaro, "Stereoregulation in the free ion propagation of optically active alkyl vinyl ethers", *Macromolecules*, **12**, 240 (1979)
42. M. Marchetti, **E. Chiellini**, M. Sepulchre, N. Spassky, "Stereoselection in the polymerization of racemic propylene sulfide", *Makromol. Chem.*, **180**, 1305 (1979)
43. A. Ledwith, G. Galli, **E. Chiellini**, R. Solaro, "Solvent effect in radical polymerization of N-vinylcarbazole and methyl methacrylate", *Polym. Bull.*, **1**, 491 (1979)
44. **E. Chiellini**, R. Solaro, A. Ledwith, G. Galli, "Optically active vinyl polymers containing fluorescent groups. 7. The distribution of monomeric units in cationically prepared copolymers of N-vinylcarbazole and (-)-menthyl vinyl ether", *Eur. Polym. J.*, **16**, 875 (1980)
45. M. Aglietto, C. Carlini, **E. Chiellini**, F. Ciardelli, "Synthesis and stereochemistry of alternating copolymers of maleic anhydride with chiral olefins", *Gazz. Chim. Ital.*, **100**, 449 (1980)
46. R. Solaro, **E. Chiellini**, A. Ledwith, "Identification of multiple charge transfer transitions by circular dichroism studies", *J. Chem. Soc. Chem. Commun.*, **580** (1980)
47. R. Solaro, **E. Chiellini**, A. Ledwith, "Relative intensities and temperature effects on charge transfer transitions of carbazoles with p-chloranil", *J. Chem. Soc. Chem. Commun.*, **583** (1980)
48. R. Solaro, S. D'Antone, **E. Chiellini**, "Heterogeneous ethylation of phenylacetonitrile", *J. Org. Chem.*, **45**, 4179 (1980)
49. C. Carlini, **E. Chiellini**, R. Solaro, "Model reactions for stereochemistry of Ziegler Natta polymerization: asymmetric hydroisomerization of  $\alpha$ -olefins by chiral titanium tetraalkoxides/triisobutylaluminum catalytic systems", *J. Polym. Sci., Polym. Chem. Ed.*, **18**, 2129 (1980)
50. **E. Chiellini**, R. Solaro, G. Galli, A. Ledwith, "Optically active vinyl polymers containing fluorescent groups. 8. Synthesis and properties of copolymers of N-vinylcarbazole and (-)-menthyl acrylate and (-)-menthyl methacrylate", *Macromolecules*, **13**, 1654 (1980)

51. **E. Chiellini**, R. Solaro, F. Ciardelli, G. Galli, A. Ledwith, "Optically active vinyl polymers containing fluorescent groups. 6. Synthesis and properties of copolymers of (-)-menthyl acrylate and (-)-menthyl methacrylate with spaced-carbazole containing monomers", *Polym. Bull.*, **2**, 577 (1980)
52. F. Ciardelli, **E. Chiellini**, C. Carlini, M. Aglietto, "Some aspects of catalytic activity and stereochemistry in macromolecular systems", *Pure Appl. Chem.*, **52**, 1857 (1980)
53. **E. Chiellini**, R. Solaro, S. D'Antone, "Optically active poly(4-vinylpyridine)/bromine adducts", *Chim. Ind. (Milan)*, **63**, 12 (1981)
54. **E. Chiellini**, G. Galli, "Synthetic polymers for membrane of biomedical interest", *Int. J. Artif. Organs*, **4**, 305 (1981)
55. **E. Chiellini**, R. Solaro, S. D'Antone, "Polymeric onium salts as catalysts in preparative organic chemistry", *Makromol. Chem., Suppl.*, **5**, 82 (1981)
56. G. Galli, E. Benedetti, **E. Chiellini**, C.K. Ober, R.W. Lenz, "Phase transitions in alkylene glycol terephthalate copolyesters containing mesogenic p-oxybenzoate units", *Polym. Bull.*, **5**, 497 (1981)
57. G. Galli, R. Solaro, **E. Chiellini**, A. Ledwith, "Synthesis, fluorescence emission spectra and chiroptical properties of copolymers of N-vinylcarbazole and optically active fumarates", *Polymer*, **22**, 1088 (1981)
58. D.C. Sherrington, R. Solaro, **E. Chiellini**, "Induced circular dichroism in 2-benzoylbenzoate anion paired with polymer-supported optically active quaternary ammonium ions", *J. Chem. Soc. Chem. Commun.*, **1103** (1982)
59. **E. Chiellini**, R. Solaro, F. Ciardelli, "Optically active hydrocarbon polymers with aromatic side chains. Synthesis and properties of homopolymers and copolymers of 6-vinylchrysene", *Makromol. Chem.*, **183**, 103 (1982)
60. G. Galli, **E. Chiellini**, C.K. Ober, R.W. Lenz, "Structurally ordered thermotropic polyesters of glycolethers", *Makromol. Chem.*, **183**, 2693 (1982)
61. G. Galli, P. Nieri, C.K. Ober, **E. Chiellini**, "Preparation and properties of mesomorphic oligo(oxalate)s", *Makromol. Chem., Rapid Commun.*, **3**, 543 (1982)
62. **E. Chiellini**, R. Solaro, S. D'Antone, "Homogeneous polymerization of chiral alkyl vinyl ethers by organoaluminum sulphates", *Makromol. Chem., Rapid Commun.*, **3**, 787 (1982)
63. G. Schleier, G. Galli, **E. Chiellini**, "Chiral liquid crystal polymers. I. Synthesis and properties of optically active glycidyl ethers", *Polym. Bull.*, **6**, 529 (1982)
64. F. Ciardelli, M. Aglietto, C. Carlini, **E. Chiellini**, R. Solaro, "Structural analysis of optically active polymers by CD", *Pure Appl. Chem.*, **54**, 521 (1982)
65. C. Malanga, N. Spassky, R. Menicagli, **E. Chiellini**, "Regioselective pyranilation of (S)-1, 2-propanediol", *Synth. Commun.*, **12**, 67 (1982)
66. R. Solaro, G. Galli, F. Masi, A. Ledwith, **E. Chiellini**, "Synthesis, stereochemistry and fluorescence properties of polystyrenes having carbazole substituents", *Eur. Polym. J.*, **19**, 433 (1983)
67. R. Solaro, S. D'Antone, M. Orsini, F. Andruzzi, **E. Chiellini**, "Hybrid copolymerization of alkyl vinyl ethers with glycidyl ethers", *J. Applied Polym. Sci.*, **28**, 3651 (1983)
68. C.K. Ober, R.W. Lenz, G. Galli, **E. Chiellini**, "Liquid crystalline polymers. Polyesters with either alternating or random orientation of mesogenic units", *Macromolecules*, **16**, 1034 (1983)
69. M. Delfini, F. Conti, M. Paci, A.L. Segre, R. Solaro, **E. Chiellini**, "<sup>13</sup>C-NMR study of poly(menthyl vinyl ether) obtained by different catalytic systems", *Macromolecules*, **16**, 1212 (1983)
70. G. Galli, R. Solaro, **E. Chiellini**, A. Ledwith, "Synthesis and characterization of optically active copolymers of acenaphthylene. I. Preparation and characterization", *Macromolecules*, **16**, 497 (1983)
71. G. Galli, R. Solaro, **E. Chiellini**, A. Fernyhough, A. Ledwith, "Synthesis and characterization of optically active copolymers of acenaphthylene. II. Chiroptical and fluorescence properties", *Macromolecules*, **16**, 502 (1983)
72. C. Bertucci, **E. Chiellini**, P. Salvadori, W.C. Johnson, "Far-UV circular dichroism of isotactic optically active poly alkyl vinyl ethers and of their low molecular weight models", *Macromolecules*, **16**, 507 (1983)
73. **E. Chiellini**, G. Galli, "Chiral liquid crystal polymers. 4. Chiroptical properties of thermotropic polyesters in dilute solution", *Makromol. Chem., Rapid Commun.*, **4**, 285 (1983)
74. G. Galli, M. Laus, A.S. Angeloni, P. Ferruti, **E. Chiellini**, "Thermotropic poly(b-aminoester)s containing azoxy groups", *Makromol. Chem., Rapid Commun.*, **4**, 681 (1983)
75. V. Frosini, S.de Petris, **E. Chiellini**, G. Galli, R.W. Lenz, "Transitions and relaxations in mesophase polymers. Thermotropic liquid crystalline polyesters with mesogenic groups in the main chain", *Mol. Cryst. Liq. Cryst.*, **98**, 223 (1983)
76. C. Malanga, N. Spassky, R. Menicagli, **E. Chiellini**, "Chiral liquid crystal polymers. 2. Synthesis of optically active oligoethers of (S)-1, 2-propanediol", *Polym. Bull.*, **9**, 328 (1983)
77. **E. Chiellini**, G. Galli, C. Malanga, N. Spassky, "Chiral liquid crystal polymers. 3. Structurally ordered thermotropic polyesters of optically active propyleneglycol ether", *Polym. Bull.*, **9**, 336 (1983)



78. A.S. Angeloni, P. Ferruti, M. Laus, M. Tramontini, **E. Chiellini**, G. Galli, "The Mannich bases in polymer synthesis. Further studies on synthesis and characterization of some poly(b-aminoketone)s containing potentially mesogenic groups", *Polymer Commun.*, **24**, 87 (1983)
79. E. Benedetti, P. Santini, P. Vergamini, **E. Chiellini**, "IR investigation on the conformational properties of symmetrically substituted dialkyl sulfides", *Spectrochem. Acta*, **39A**, 57 (1983)
80. **E. Chiellini**, R. Solaro, G. Galli, A. Ledwith, "Optically active synthetic polymers containing pendant carbazolyl groups", *Adv. Polym. Sci.*, **62**, 143 (1984)
81. M.F. Saettoni, B. Giannaccini, P. Chetoni, G. Galli, **E. Chiellini**, "Vehicle effects in ophthalmic bioavailability: an evaluation of polymeric inserts containing pilocarpine", *J. Pharm. Pharmacol.*, **36**, 229 (1984)
82. M. Laus, A.S. Angeloni, P. Ferruti, G. Galli, **E. Chiellini**, "Thermotropic liquid crystalline poly(b-thioesters)", *J. Polym. Sci., Polym. Lett. Ed.*, **22**, 587 (1984)
83. **E. Chiellini**, A.M. Raspolti-Galletti, R. Solaro, "Optically active hydrocarbon polymers with aromatic side chains. Synthesis and characterization of coisotactic copolymers of (S)-4-methyl-1-hexene with styrene", *Macromolecules*, **17**, 2212 (1984)
84. M. Pracella, V. Frosini, G. Galli, **E. Chiellini**, "Thermal characterization of liquid crystal polyesters based on mesogenic aromatic triads", *Mol. Cryst. Liq. Cryst.*, **113**, 201 (1984)
85. **E. Chiellini**, P. Nieri, G. Galli, "Chiral liquid crystal polymers. 5. Thermotropic polyesters based on 3-O-alkylated glycerol ethers", *Mol. Cryst. Liq. Cryst.*, **113**, 213 (1984)
86. M. Delfini, M.E.Di Cocco, M. Paci, R. Solaro, **E. Chiellini**, "Optically active vinyl polymers containing fluorescent groups. 9. <sup>13</sup>C NMR spectra of (-)-menthyl vinyl ether/N-vinylcarbazole copolymers", *Eur. Polym. J.*, **21**, 723 (1985)
87. G. Galli, M. Laus, A.S. Angeloni, P. Ferruti, **E. Chiellini**, "Thermotropic liquid crystalline poly(b-thioester)s containing azoxybenzene mesogenic units", *Eur. Polym. J.*, **21**, 727 (1985)
88. **E. Chiellini**, G. Galli, "Chiral liquid crystalline polyesters. Structural effects on mesomorphic behaviour", *Faraday Discuss. Chem. Soc.*, **79**, 241 (1985)
89. P. Ghetti, U.De Robertis, S. D'Antone, M. Villani, **E. Chiellini**, "Coal Combustion. Correlation between surface area and thermo-gravimetric analysis data", *Fuel*, **64**, 959 (1985)
90. **E. Chiellini**, G. Galli, "Chiral liquid crystal polymers. 6. Preparation and properties in solution and in bulk of optically active thermotropic copolyesters", *Macromolecules*, **18**, 1652 (1985)
91. A.S. Angeloni, M. Laus, C. Castellari, G. Galli, P. Ferruti, **E. Chiellini**, "Liquid crystalline poly(b-aminoester)s containing different mesogenic groups", *Makromol. Chem.*, **186**, 977 (1985)
92. R. Caciuffo, **E. Chiellini**, G. Galli, F. Rustichelli, G. Torquati, "X-ray analysis of chiral thermotropic copolyesters based on linear and non linear aromatic units", *Mol. Cryst. Liq. Cryst.*, **127**, 129 (1985)
93. A.S. Angeloni, M. Laus, E. Burgin, G. Galli, **E. Chiellini**, "Monotropic liquid crystalline poly(b-thioester)s containing bis(p-oxybenzoate) mesogenic units", *Polym. Bull.*, **13**, 131 (1985)
94. S. D'Antone, M. Penzo, R. Solaro, **E. Chiellini**, "Chiral functional polymers as catalysts in phase transfer reactions", *Reactive Polymers*, **3**, 107 (1985)
95. **E. Chiellini**, A. Callaioli, R. Solaro, "Chiral polymeric halogen adducts. Synthesis and reactivity", *Reactive Polymers*, **3**, 357 (1985)
96. G. Giro, P.G.Di Marco, **E. Chiellini**, R. Solaro, "Photogeneration and transport studies on differently polymerized N-vinylcarbazole polymers", *Eur. Polym. J.*, **22**, 801 (1986)
97. T.St. Pierre, **E. Chiellini**, "Biodegradability of synthetic polymers used for medical and pharmaceutical applications. Part 1 - Principles of hydrolysis mechanism", *J. Bioact. Compat. Polym.*, **1**, 467 (1986)
98. M. Giuffrida, P. Maravigna, G. Montaudo, **E. Chiellini**, "Thermal decomposition mechanisms of sequential bipolyesters based on propenoglycol and hydroxybenzoic acid/phthalic diacid derivatives", *J.Polym.Sci., Polym.Phys.Ed.*, **24**, 1643 (1986)
99. M. Pracella, D. Dainelli, G. Galli, **E. Chiellini**, "Polymer blends based on mesomorphic components. 1.Properties of PBT/poly[1, 10-decamethylene bis (4-oxycarbonylphenyl) terephthalate] blends", *Makromol. Chem.*, **187**, 2387 (1986)
100. T.St. Pierre, **E. Chiellini**, "Biodegradability of synthetic polymers used for medical and pharmaceutical applications. Part 2 - Backbone hydrolysis", *J. Bioact. Compat. Polym.*, **2**, 4 (1987)
101. T.St. Pierre, **E. Chiellini**, "Biodegradability of synthetic polymers used for medical and pharmaceutical applications. Part 3 - Pendent group hydrolysis", *J. Bioact. Compat. Polym.*, **2**, 238 (1987)
102. **E. Chiellini**, G. Galli, A.S. Angeloni, M. Laus, R. Pellegrini, "Chiral liquid crystal polymers 8. Thermotropic poly(ester-beta-disulfide)s based on variously spaced twin p-oxybenzoate diads", *Liquid Crystals*, **2**, 529 (1987)
103. B. Gallot, G. Galli, **E. Chiellini**, "The liquid crystal polymorphism of chiral thermotropic polyesters based on 4, 4'-(terephthaloyldioxy)dibenzoic acid and dipropylene glycols", *Makromol. Chem., Rapid Commun.*, **8**, 417 (1987)

104. **E. Chiellini**, G. Galli, S. Carrozzino, S. Melone, G. Torquati, "Chiral liquid crystal polymers - 7. Structural characterization of thermotropic polyesters based on 4, 4'-(terephthaloyldioxy)dibenzoic acid and 1, 3-butandiol", *Mol. Cryst. Liq. Cryst.*, **146**, 385 (1987)
105. M. Pracella, **E. Chiellini**, G. Galli, D. Dainelli, "Blends of poly(butylene terephthalate) with thermotropic liquid crystalline polyesters. Morphology and thermal behaviour", *Mol. Cryst. Liq. Cryst.*, **153**, 525 (1987)
106. M. Laus, V. Milanese, A.S. Angeloni, G. Galli, **E. Chiellini**, "Liquid crystalline poly(b-thioester)s containing p-oxybenzoate triads", *Polymer Commun.*, **28**, 82 (1987)
107. **E. Chiellini**, F. Masi, L. Senatori, R. Solaro, "Polymerization of alkyl vinyl ethers in the presence of organo-aluminum sulfates", *Chim. Ind. (Milan)*, **70**, 38 (1988)
108. **E. Chiellini**, M.F. Saettone, "Polymer drug delivery systems in ophthalmic applications", *J. Bioact. Compat. Polym.*, **3**, 86 (1988)
109. M. Laus, A.S. Angeloni, G. Galli, **E. Chiellini**, "Liquid crystal poly(b-aminoester)s. Thermotropic liquid mesomorphism and degradability in solution", *Makromol. Chem.*, **189**, 743 (1988)
110. A.S. Angeloni, **E. Chiellini**, G. Galli, M. Laus, F. Rustichelli, G. Torquati, "An X-ray study of thermotropic liquid crystalline poly(ester-b-sulfides)", *Mol. Cryst. Liq. Cryst.*, **155**, 151 (1988)
111. G. Torquati, R. Caciuffo, S. Melone, **E. Chiellini**, G. Galli, "X-ray analysis of chiral thermotropic liquid crystal copolyesters based on linear and nonlinear aromatic ester triads", *Mol. Cryst. Liq. Cryst.*, **158B**, 255 (1988)
112. **E. Chiellini**, L. Senatori, R. Solaro, "A new chiral poly(alkyl vinyl ether): synthesis and chiroptical properties", *Polym. Bull.*, **20**, 215 (1988)
113. A.S. Angeloni, D. Caretti, M. Laus, **E. Chiellini**, G. Galli, "Structural effects on mesomorphic properties in isomeric liquid crystalline polyesters", *Polymer J.*, **20**, 1157 (1988)
114. M. Aglietto, **E. Chiellini**, S. D'Antone, G. Ruggeri, R. Solaro, "Chiral polymer catalysts in preparative organic chemistry: a critical overview", *Pure Appl. Chem.*, **60**, 415 (1988)
115. R. Solaro, S. D'Antone, **E. Chiellini**, "Anion exchange type resins in preparative organic chemistry: structure-activity relationships", *Reactive Polymers*, **9**, 155 (1988)
116. V. Ragaini, G. Colombo, P. Barzaghi, **E. Chiellini**, S. D'Antone, "Phenylacetonitrile alkylation with different phase transfer catalysts in continuous flow and batch reactors", *Ind. Eng. Chem. Res.*, **27**, 1382 (1989)
117. **E. Chiellini**, R. Solaro, E. Casini, S. Casella, C. Leporini, G. Picci, "Biosynthetic degradable polymers. Study of the activity of *Rhizobium 'hedysari'* strains in the production of poly(b-hydroxybutyrate)", *J. Bioact. Compat. Polym.*, **4**, 296 (1989)
118. E. Benedetti, F. Galleschi, **E. Chiellini**, G. Galli, R.W. Lenz, "Infrared study of phase transition in thermotropic liquid crystal polyester", *J. Polym. Sci., Polym. Phys. Ed.*, **27**, 25 (1989)
119. A.S. Angeloni, D. Caretti, C. Carlini, **E. Chiellini**, G. Galli, A. Altomare, R. Solaro, M. Laus, "Photochromic liquid-crystalline polymers. Main chain and side chain polymers containing azobenzene mesogens", *Liquid Crystals*, **4**, 515 (1989)
120. **E. Chiellini**, G. Galli, A.S. Angeloni, D. Caretti, M. Laus, "Liquid crystalline polyesters containing alternating alkylene and oxyalkylene spacers", *Liquid Crystals*, **5**, 1593 (1989)
121. G. Galli, **E. Chiellini**, M. Laus, A.S. Angeloni, "Thermotropic liquid crystal poly(ester-beta-sulfide)s based on twin hexamethylene-spaced (p-oxybenzoyl)dyads", *Macromolecules*, **22**, 1120 (1989)
122. D. Caretti, A.S. Angeloni, M. Laus, **E. Chiellini**, G. Galli, "Mesomorphism-structure relationships in polyesters based on twin p-oxybenzoate mesogens", *Makromol. Chem.*, **190**, 1655 (1989)
123. M. Pracella, **E. Chiellini**, D. Dainelli, "Blends of poly(tetramethyleneterephthalate) with a liquid crystalline polyester, poly(decamethylene-4, 4'-terephthaloyldioxy dibenzoate), 2 - Crystallization kinetics and melting behaviour", *Makromol. Chem.*, **190**, 175 (1989)
124. A.S. Angeloni, **E. Chiellini**, G. Galli, M. Laus, G. Torquati, "Functional liquid crystalline polyesters based on twin nona-methylene spaced p-oxybenzoate dyads and dithiols", *Makromol. Chem., Macromol. Symp.*, **24**, 311 (1989)
125. G. Galli, P. Berti, **E. Chiellini**, B. Gallot, "The mesomorphic behaviour of bis alkyl 4, 4'-(terephthaloyldioxy) dibenzoate as models of thermotropic polyesters", *Mol. Cryst. Liq. Cryst.*, **174**, 89 (1989)
126. L. Andreozzi, M. Giordano, D. Leporini, M. Martinelli, L. Pardi, **E. Chiellini**, "Non linear spectroscopies in very viscous materials", *Phys. Med.*, **2-4**, 187 (1989)
127. G. Galli, **E. Chiellini**, M. Laus, A.S. Angeloni, "Thermotropic poly(ester-b-sulfide)s. A new polymer series containing the p-phenylene di(p-oxybenzoate) unit", *Polym. Bull.*, **21**, 563 (1989)
128. G. Galli, **E. Chiellini**, G. Torquati, R. Caciuffo, S. Melone, B. Gallot, "Semiflexible thermotropic liquid crystalline polymers: the characterization of a polyester-polyether", *Polymer J.*, **21**, 155 (1989)
129. **E. Chiellini**, S. D'Antone, R. Solaro, A. Callaioli, M. Penco, L. Galeazzi, E. Petrocchi, "Synthesis and characterization of modified sulfonic resins", *Chim. Ind. (Milan)*, **72**, 899 (1990)
130. **E. Chiellini**, S. D'Antone, R. Solaro, A. Callaioli, M. Penco, L. Galeazzi, E. Petrocchi, "Modified ion-exchange sulfonic resins: thermostability and catalytic activity in bisphenol-A synthesis", *Chim. Ind. (Milan)*, **72**, 991 (1990)

131. A.S. Angeloni, I. Campagnari, D. Caretti, C. Carlini, M. Laus, A. Altomare, **E. Chiellini**, G. Galli, R. Solaro, "Synthesis and properties of side chain liquid-crystalline polymers containing azobenzene mesogens", *Gazz. Chim. Ital.*, **120**, 171 (1990)
132. V. Ragaini, G. Colombo, P. Barzagli, **E. Chiellini**, S. D'Antone, "Phase transfer alkylation of phenylacetonitrile in prototype reactors under magnetic or ultrasound mixing conditions - II: kinetic modelling", *Ind. Eng. Chem. Res.*, **29**, 920 (1990)
133. **E. Chiellini**, S. Faggioni, R. Solaro, "Polyesters based on glyceric acid derivatives as potential biodegradable materials", *J. Bioact. Compat. Polym.*, **5**, 16 (1990)
134. R. Issa, A. Akelah, A. Rehab, R. Solaro, **E. Chiellini**, "Controlled release of herbicides bound to poly[oligo(oxyethylene) methacrylate] hydrogels", *J. Controlled Release*, **13**, 1 (1990)
135. **E. Chiellini**, G. Galli, A.S. Angeloni, M. Laus, "Chiral liquid crystalline polymers. XI. Thermotropic behavior and chiroptical properties in solution of a series of optically active poly(ester-b-sulfide)s", *J. Polym. Sci. Polym. Chem. Ed.*, **28**, 1354 (1990)
136. **E. Chiellini**, G. Galli, S. Carrozzino, B. Gallot, "Chiral liquid crystal polymers. X. Thermotropic mesomorphism in chiral isomeric polyesters", *Macromolecules*, **23**, 2107 (1990)
137. M. Laus, A.S. Angeloni, G. Galli, **E. Chiellini**, "The molecular weight effect on the mesomorphic behavior of liquid crystalline poly(ester-b-sulfide)s", *Makromol. Chem.*, **191**, 147 (1990)
138. A.S. Angeloni, M. Laus, D. Caretti, **E. Chiellini**, G. Galli, "Chiral liquid crystalline poly(ester-b-sulfoxides) by asymmetric oxidation of prochiral nematic poly(ester-b-sulfide)s", *Makromol. Chem.*, **191**, 2787 (1990)
139. **E. Chiellini**, R. Po, S. Carrozzino, G. Galli, B. Gallot, "Chiral liquid crystalline polymers. IX. The effect of chiral spacer structure in thermotropic polyesters", *Mol. Cryst. Liq. Cryst.*, **179**, 405 (1990)
140. G. Torquati, O. Francescangeli, M. Laus, A.S. Angeloni, C. Carlini, D. Caretti, G. Galli, **E. Chiellini**, "An X-ray investigation of thermotropic poly(malonate)s containing the azobenzene mesogen", *Mol. Cryst. Liq. Cryst.*, **193**, 185 (1990)
141. **E. Chiellini**, "Structural and stereochemical isomerism effects in thermotropic liquid crystalline polymers", *Nuovo Cimento*, **12D**, 1179 (1990)
142. **E. Chiellini**, G. Galli, R. Po, "Chiral liquid crystalline polymers. XII. New chiral polyesters by chemical modification of nonmesophasic polymers", *Polym. Bull.*, **23**, 397 (1990)
143. M. Laus, P. Ferruti, D. Caretti, A.S. Angeloni, G. Galli, **E. Chiellini**, "Isothermal crystallization kinetics of liquid crystal semiflexible polymers", *Thermochimica Acta*, **162**, 179 (1990)
144. **E. Chiellini**, R. Solaro, A. Corti, G. Picci, C. Leporini, A. Pera, G. Vallini, P. Donaggio, "Degradation of starch filled polyethylene films in a composting environment", *Chim. Ind. (Milan)*, **73**, 656 (1991)
145. A.S. Angeloni, M. Laus, D. Caretti, **E. Chiellini**, G. Galli, "Chiral liquid crystalline side-chain polymers by enantioselective modification of prochiral parent polymers", *Chirality*, **3**, 307-314 (1991)
146. G. Galli, **E. Chiellini**, M. Laus, A.S. Angeloni, "Structural effects on the mesomorphic behaviour of thermotropic liquid crystal poly(ester-b-sulfide)s", *Europ. Polym. J.*, **27**, 237 (1991)
147. **E. Chiellini**, G. Galli, F. Cioni, "Chiral liquid crystal polymers with potential ferroelectric properties: synthesis and characterization", *Ferroelectrics*, **114**, 223 (1991)
148. A. Rehab, A. Akelah, R. Issa, S. D'Antone, R. Solaro, **E. Chiellini**, "Controlled release of herbicides supported on polysaccharide based hydrogels", *J. Bioact. Compat. Polym.*, **6**, 52 (1991)
149. A. Rehab, A. Akelah, R. Issa, R. Solaro, **E. Chiellini**, "Herbicide containing methacrylates: synthesis, polymerization and release investigation", *J. Controlled Release*, **17**, 113 (1991)
150. M. Laus, D. Caretti, A.S. Angeloni, G. Galli, **E. Chiellini**, "Thermal investigation of the nematic-isotropic biphasic in a thermotropic main chain polyester", *Macromolecules*, **24**, 1459 (1991)
151. G. Galli, **E. Chiellini**, M. Laus, D. Caretti, A.S. Angeloni, "The observation of a novel biphasic behaviour in thermotropic side chain polymers", *Makromol. Chem., Rapid Commun.*, **12**, 43 (1991)
152. L. Coppola, G.A. Ranieri, **E. Chiellini**, G. Galli, C.A. Veracini, A.S. Angeloni, M. Laus, "1H-NMR measurements of T1 in liquid crystalline poly(ester-b-sulfides)", *Polymer Commun.*, **32**, 5 (1991)
153. R. Solaro, **E. Chiellini**, A. Rehab, A. Akelah, R. Issa, "Ionogenic polymer pro-herbicides based on quaternized poly[oligo(oxyethylene) methacrylate]s. Synthesis and herbicide release", *Reactive Polym.*, **14**, 21 (1991)
154. **E. Chiellini**, G. Leonardi, D. Giannasi, R. Solaro, "Partial esters of alternating copolymers of maleic anhydride and alkyl vinyl ethers for pharmaceutical applications", *J. Bioact. Compat. Polym.*, **7**, 161 (1992)
155. **E. Chiellini**, R. Solaro, G. Leonardi, D. Giannasi, R. Lisciani, G. Mazzanti, "New polymeric hydrogel formulations for the controlled release of  $\alpha$ -interferon", *J. Controlled Release*, **22**, 273 (1992)
156. **E. Chiellini**, G. Galli, M. Laus, A.S. Angeloni, O. Francescangeli, Bin Yang, "Semiflexible liquid-crystalline polyesters based on twin di (p-oxybenzoyl) units: synthesis and characterization", *J. Mater. Chem.*, **2**, 449 (1992)
157. S. De Petris, M. Laus, A.S. Angeloni, E. Grillo Fernandes, G. Galli, **E. Chiellini**, "Thermal and dynamic-mechanical properties of semiflexible thermotropic liquid crystalline polyesters", *Chim. Ind. (Milan)* **74**, 774 (1992)

158. M. Laus, A.S. Angeloni, G. Galli, **E. Chiellini**, "Molecular weight and molecular weight distribution effects on the liquid crystalline and biphasic behavior of a thermotropic polyester", *Macromolecules*, **25**, 5901 (1992)
159. **E. Chiellini**, R. Solaro, "New synthetic functional polyesters", *Makromol.Chem., Macromol.Symp.*, **54/44**, 483 (1992)
160. **E. Chiellini**, G. Galli, M. Laus, A.S. Angeloni, D. Caretti, "The nematic-isotropic phase segregation in a thermotropic semiflexible liquid crystalline polyester", *Mol.Cryst.Liq.Cryst.*, **215**, 101 (1992)
161. **E. Chiellini**, G. Galli, A. Altomare, R. Solaro, A.S. Angeloni, M. Laus, C. Carlini, D. Caretti, "Thermotropic and solution photoisomerization properties of side-chains liquid crystalline polymers containing methyl-substituted azobenzene mesogens", *Mol. Cryst. Liq. Cryst.*, **221**, 61 (1992)
162. S. D'Antone, R. Solaro, **E. Chiellini**, A. Rehab, A. Akelah, R. Issa, "Controlled release of herbicides loaded on oligoethoxylated styrene/divinylbenzene resins", *New Polym. Mat.*, **3**, 223 (1992)
163. **E. Chiellini** et.al, "Structure-properties relations in polymeric materials, *Innovative Materials*, Ed. P.Vincenzini, Techna Faenza 1993, *Advances in Science and Technology*, **2**, 73 (1993)
164. D. Giannasi, R. Solaro, G. Mazzanti, **E. Chiellini**, "Nuovi sistemi polimerici per il rilascio controllato di farmaci proteici", *Biomateriali*, **3/4**, 103 (1993)
165. E. Dossi, D. Giannasi, G. Mazzanti, R. Solaro, **E. Chiellini**, "Polimeri sintetici e semisintetici per la formulazione di idrogeli pH sensibili", *Biomateriali*, **3/4**, 111, 1993
166. **E. Chiellini**, R. Solaro, "New bioerodible-biodegradable hydrophilic polymers", *Chemtech*, **July**, **29**, (1993)
167. **E. Chiellini**, G. Galli, E.I. Serhatli, Y. Yagci, M. Laus, A.S. Angeloni, "Chiral liquid-crystalline block copolymers based on polyether and mesogenic polyacrylate blocks", *Ferroelectrics*, **148**, 311 (1993)
168. R. Solaro, S. D'Antone, L. Bemporad, **E. Chiellini**, "New polyfunctional derivatives of  $\beta$ -cyclodextrin suited for the formulation of drug release systems", *J. Bioact. Compat. Polym.*, **8**, 236 (1993)
169. **E. Chiellini**, F. Cioni, R. Solaro, G. Vallini, A. Corti, A. Pera, "Starch-filled polyethylene in a composting environment: evidence for polyethylene matrix oxidation", *J. Environ. Polym. Degrad.*, **1**, 167 (1993)
170. **E. Chiellini**, G. Galli, F. Cioni, E. Dossi, B. Gallot, "Chiral smectic liquid-crystalline polyacrylates with variously spaced and substituted biphenylene units", *J.Mater.Chem.*, **3**, 1065 (1993)
171. R. Solaro, S. D'Antone, **E. Chiellini**, A. Rehab, A. Akelah, R. Issa, "Herbicide Containing Polymers: Synthesis and Release Properties", *La Chimica & L'Industria*, **75**, 535 (1993)
172. O. Francescangeli, G. Albertini, B. Yang, A.S. Angeloni, M. Laus, **E. Chiellini**, G. Galli, "Semiflexible liquid crystalline polyesters based on twin di (p-oxybenzoyl) units: X-ray study on smectic mesophase structures", *Liquid Crystals*, **13**, 353 (1993)
173. L. Andreozzi, **E. Chiellini**, M. Giordano, D. Leporini, "ESR studies of the orientational and reorientational properties of mesophasic polymers", *Liquid Crystals*, **14**, 1529 (1993)
174. O. Francescangeli, B. Yang, **E. Chiellini**, G. Galli, A.S. Angeloni, M. Laus, "X-ray diffraction study of the smectic mesophase of some azobenzene - containing polyacrylates", *Liquid Crystals*, **14**, 981 (1993)
175. M. Laus, M.C. Bignozzi, A.S. Angeloni, G. Galli, **E. Chiellini**, "Side Chain liquid crystalline alternatin copolymers of mesogenic monomers: synthesis and properties", *Macromolecules*, **26**, 3999 (1993)
176. **E. Chiellini**, G. Galli, E. Dossi, F. Cioni, "New chiral smectic polysiloxanes from mesogenic olefins or vinyl ether monomers", *Macromolecules*, **26**, 849 (1993)
177. **E. Chiellini**, G. Galli, F. Cioni, E. Dossi, "Chiral liquid crystalline polymers: recent issues and perspectives", *Makromol Chem.Makromol. Symp.*, **69**, 51 (1993)
178. G. Galli, **E. Chiellini**, Y. Yagci, E.I. Serhatli, M. Laus, M.C. Bignozzi, A.S. Angeloni, "Block copolymers with crystalline and side-chain liquid crystalline blocks", *Makromol. Chem. Rapid Commun.*, **14**, 185 (1993)
179. A.S. Angeloni, M.C. Bignozzi, M. Laus, **E. Chiellini**, G. Galli, "Hybrid liquid-crystalline block copolymers based on polystyrene and polyester blocks", *Polymer Bulletin*, **31**, 387 (1993)
180. M. Laus, A.S. Angeloni, G. Galli, **E. Chiellini**, "Thermal and biphasic behaviour of a side-chain smectic polyacrylate", *Thermochemica Acta*, **227**, 49 (1993)
181. A.Ali Farah, G. Galli, **E. Chiellini**, B. Gallot, "Synthesis and liquid-crystalline properties of new chiral polyesters with aromatic triad mesogen and spacer of different optical purity", *Gazz. Chim..Ital.*, **124**, 279 (1994)
182. **E. Chiellini**, L. Bemporad, R. Solaro, "Novel hydroxyl containing polyesters and polycarbonates by copolymerization of the glycidyl ethers of protected alditols and carbon dioxide", *J. Bioact. Compat. Polym.*, **9**, 152 (1994)
183. G. Vallini, A. Corti, A. Pera, R. Solaro, F. Cioni, **E. Chiellini**, "Effects of intensive microbial metabolism on starch-filled polyethylene films in controlled composting windrows", *J.Gen.Appl.Microbiol.*, **40**, 445-461 (1994)
184. G. Galli, **E. Chiellini**, M. Laus, A.S. Angeloni, A.C. Bignozzi, "Semiflexible liquid-crystalline polyesters based on twin di(p-oxybenzoyl) units I. effect of spacer length on mesomorphic behavior", *J. Mater.Chem.*, **4**, 429 (1994)

185. M. Laus, A.S. Angeloni, A. Spagna, G. Galli, **E. Chiellini**, "Semiflexible liquid-crystalline polyesters based on twin di(p-oxybenzoyl) units II. effect of molar mass on mesomorphic behavior", *J. Mater.Chem.*, **4**, 437 (1994)
186. G. Galli, **E. Chiellini**, M. Laus, A.S. Angeloni, D. Caretti, E. Fanelli, G. Poeti, B. Gallot, "Synthesis and thermotropic properties of new polyacrylates containing alkanoyl-substituted azobenzene mesogens", *Liq.Cryst.*, **16**, 115 (1994)
187. **E. Chiellini**, G. Galli, A.S. Angeloni, M. Laus, M.C. Bignozzi, Y. Yagci, E.I. Serhatli, "Hybrid thermotropic liquid crystalline block copolymers", *Macromol. Symp.*, **77**, 349 (1994)
188. G. Galli, **E. Chiellini**, M. Laus, A.S. Angeloni, O. Francescangeli, B. Yang, , "Thermal and X-ray investigation on the coexisting smectic mesophases of a liquid-crystalline side-chain polymer", *Macromolecules*, **27**, 303 (1994)
189. G. Galli, **E. Chiellini**, M. Laus, M.C. Bignozzi, A.S. Angeloni, "Synthesis and thermal behavior of liquid-crystalline block copolymers containing both main-chain and side-chain mesomorphic blocks", *Makromol.Chem. Phys.*, **195**, 2247 (1994)
190. **E. Chiellini**, G. Galli, S. Trusendi, A.S. Angeloni, M. Laus, O. Francescangeli, "Synthesis and liquid crystalline properties of new thermotropic polyurethanes", *Mol. Cryst. Liq. Cryst.*, **243**, 135 (1994)
191. **E. Chiellini**, G. Galli, "Chiral liquid crystalline polymers: recent trends and perspectives in synthesis and electrooptical applications", *Mol. Cryst.Liq.Cryst.*, **254**, 17 (1994)
192. M. Laus, A.S. Angeloni, G. Galli, **E. Chiellini**, "On the isotropic-anisotropic biphasic behavior of two side chain liquid-crystalline polyacrylates", *Mol.Cryst.Liq.Cryst.*, **254**, 241 (1994)
193. O. Francescangeli, S. Melone, M. Laus, A.S. Angeloni, G. Galli, **E. Chiellini**, "X-ray diffraction study of the smectic C mesophase of a side chain polyacrylate containing a sulfide substituted mesogen", *Mol.Cryst.Liq.Cryst.*, **254**, 321 (1994)
194. G. Galli, **E. Chiellini**, M. Laus, A.S. Angeloni, M.C. Bignozzi, O. Francescangeli, "Hybrid Liquid-Crystalline Block Copolymers with Polystyrene and Polyester Blocks", *Mol.Cryst.Liq.Cryst.*, **254**, 429 (1994)
195. L. Lestel, G. Galli, M. Laus, **E. Chiellini**, "Thermal and dynamic-mechanical properties of new chiral smectic networks", *Polym. Bull.*, **32**, 669 (1994)
196. A.Ali Farah, G. Galli, **E. Chiellini**, B. Gallot, "Synthesis and characterization of a new series of semiflexible liquid-crystalline polyesters with aromatic triad mesogens", *Polymer J.*, **26**, 728 (1994)
197. E.Grillo Fernandes, I. Giolito, **E. Chiellini**, "Blends of polyolefins and semiflexible liquid crystalline polyesters. I. Thermogravimetric analysis", *Thermochemica Acta.*, **235**, 67 (1994)
198. **E. Chiellini**, G. Galli, A.S. Angeloni, M. Laus, "Liquid crystalline block copolymers", *Trends in Polymer Sciences*, **2** (7), 244 (1994)
199. A. Corti, S. Frassinetti, G. Vallini, **E. Chiellini**, S. D'Antone, C. Fichi, R. Solaro, "Biodegradation of nonionic surfactants. I. Biotransformation of 4-(1-nonyl)phenol by a *Candida Maltosa* isolate", *Environmental Pollution*, **90**, 83 (1995)
200. A.S. Angeloni, M. Laus, **E. Chiellini**, G. Galli, O. Francescangeli, "Synthesis and liquid-crystalline properties of thermotropic poly(ester-urethane)s", *Eur.Polym.J.*, **31**, 253 (1995)
201. **E. Chiellini**, R. Solaro, L. Bemporad, S. D'Antone, D. Giannasi, G. Leonardi, "New hydrophilic polyesters and related polymers as biodegradable bioerodible polymeric matrices", *J. Biomater.Sci.*, **7**, 307 (1995)
202. M. Carotenuto, L. Guadagno, P. Iannelli, **E. Chiellini**, A.A. Farah, G. Galli, "Molecular structure refinement of a segmented thermotropic polyester containing an aromatic triad mesogen", *J. Polym. Sci.*, **33**, 1097 (1995)
203. O. Francescangeli, B. Yang, M. Laus, A.S. Angeloni, G. Galli, **E. Chiellini**, "An x-ray diffraction study of the different nematic mesophases of liquid-crystalline poly(urethane-ester)s", *J. Polym. Sci., Physics*, **33**, 699 (1995)
204. B. Gallot, G. Galli, E. Dossi, **E. Chiellini**, "Structural characterization of the smectic polymorphism of chiral liquid crystalline polysiloxanes containing biphenyl mesogens", *Liq. Cryst.*, **18**, 463 (1995)
205. **E. Chiellini**, G. Galli, M.C. Bignozzi, S.A. Angeloni, M. Fagnani, M. Laus, "Synthesis and liquid crystalline properties of azobenzene-containing poly(vinyl ether)s with narrow molar mass distribution", *Macromol.Chem. Phys.*, **196**, 3187 (1995)
206. **E. Chiellini**, E. Dossi, G. Galli, R. Solaro, B. Gallot, "Synthesis and structural characterization of chiral smectic C and smectic A poly(vinyl ether)s", *Macromol.Chem.Phys.*, **196**, 3859 (1995)
207. **E. Chiellini**, G. Galli, S.T. Lagerwall, L. Komitov, "Electroclinic properties of chiral smectic A liquid crystalline polymers and block copolymers", *Macromol. Symp.*, **96**, 79 (1995)
208. **E. Chiellini**, R. Solaro, "Multifunctional bioerodible/biodegradable polymeric materials", *Macromol.Symp.*, **98**, 803 (1995)
209. F.de Candia, L. Guadagno, **E. Chiellini**, A.A. Farah, G. Galli, "Thermal behaviour and transport properties of Liquid crystalline polymers. Phase organization in a thermotropic polyester", *Mat. Sci & Eng.*, **C3**, 57 (1995)

210. M. Laus, **E. Chiellini**, L. Andreozzi, D. Ferri, D. Leporini, "On the peculiar dynamic-mechanical behavior of an azobenzene-containing mesomorphic polyacrylate", *Mol.Cryst.Liq.Cryst.*, **226**, 179 (1995)
211. **E. Chiellini**, G. Galli, A.S. Angeloni, M. Laus, S. Melone, O. Francescangeli, "Liquid-crystalline side-chain polyacrylates containing chiral sulfoxide substituents", *Mol.Cryst.Liq.Cryst.*, **226**, 189 (1995)
212. M. Laus, M.C. Bignozzi, A.S. Angeloni, O. Francescangeli, G. Galli, **E. Chiellini**, "LC block copolymers containing side-chain and main-chain blocks", *Mol.Cryst.Liq.Cryst.*, **261**, 393 (1995)
213. L. Andreozzi, **E. Chiellini**, M. Giordano, D. Leporini, "Microscopic and collective dynamics in supercooled polymeric liquid crystals: dependence on the thermal history", *Mol.Cryst.Liq.Cryst.*, **266**, 73 (1995)
214. S.H. Wang, F.M.B. Coutinho, G. Galli, **E. Chiellini**, "Synthesis and characterization of polystyrene-polyester liquid crystalline block copolymers", *Polym. Bull.*, **34**, 531 (1995)
215. M.Laus, A.S. Angeloni, G. Galli, **E. Chiellini**, O. Francescangeli, B. Yang, "Synthesis and Liquid-crystalline Properties of Polyacrylates Containing Prochiral Sulphide Substituents", *Polymer*, **36**, 1261 (1995)
216. I.E. Serhatli, G. Galli, Y. Yagci, **E. Chiellini**, "Synthesis of hybrid liquid crystalline block copolymers by combination of cationic or promoted cationic and free-radical polymerizations", *Polymer Bulletin*, **34**, 539 (1995)
217. **E. Chiellini**, R. Solaro, "Biodegradable polymeric materials, *Advanced Materials*", **3**, 305 (1996)
218. **E. Chiellini**, G. Cantoni, R. Solaro, "Investigation of polymerizability of w-alkenyldioxolanes with  $\alpha$ -olefins and alkyl vinyl ethers by modified Ziegler-Natta catalysts", *J.Appl.Polym.Sci.*, **61**, 285 (1996)
219. **E. Chiellini**, A. Corti, P. Narducci, A.M. Paparella, R. Solaro, "Evaluation of biodegradability of PET/PCL blends", *J.Enviro.Polym.Degrad.*, **4** (1) , 37-50 (1996)
220. M. Carotenuto, L. Guadagno, V. Vittoria, G. Galli, **E. Chiellini**, "Solvent induced structural transitions in liquid crystalline polyester", *Macromol. Rapid Commun.*, **17**, 447 (1996)
221. G. Galli, **E. Chiellini**, Y. Yagci, E.I. Serhatli, M. Laus, A.S. Angeloni, "Liquid crystalline block copolymers by sequential cationic or promoted cationic and free-radical polymerizations", *Macromol.Symp.*, **107**, 85 (1996)
222. M. Laus, M.C. Bignozzi, M. Fagnani, A.S. Angeloni, G. Galli, E. Chiellini, O. Frascangeli, "Liquid crystalline poly(vinyl ether)s and block copoly(vinyl ether)s by living cationic polymerization", *Macromolecules*, **29** (15), 5111 (1996)
223. G. Galli, **E. Chiellini**, A.S. Angeloni, M.C. Bignozzi, M. Laus, O. Francescangeli, "Mesophase behavior of polyester-polymethacrylate liquid crystal block copolymers", *Mol. Cryst. Liq. Cryst.*, **289**, 235 (1996)
224. D. Wolff, D. Ferri, J. Springer, O. Francescangeli, M. Laus, A.S. Angeloni, C. Bignozzi, G. Galli, **E. Chiellini**, "Phase and thermal behavior of liquid- crystalline block copolymers", *Polym. Adv. Techn.*, **7**, 374 (1996)
225. O. Francescangeli, M. Laus, M.C. Bignozzi, A.S. Angeloni, G. Galli, **E. Chiellini**, "Hybrid liquid-crystalline block copolymers. 2. X-ray diffraction analysis of polyester-polymethacrylate block copolymers", *Polymer J.*, **28** (3), 193 (1996)
226. F. Morganti, R. Ricceri, R. Solaro, **E. Chiellini**, G. Gabrielli, "A study of Macroderm A and Macroderm L monolayers and their two-dimensional compatibility", *Colloid. Polym. Sci.*, **275**, 705 (1997)
227. R. Solaro, G. Cantoni, **E. Chiellini**, "Polymerisability of different lactones and methyl methacrylate in the presence of various organoaluminium catalysts", *Eur.Polym.J.*, **33**, 205 (1997)
228. S. Miertus, J. Tomasi, G. Mazzanti, E.E. Chiellini, R. Solaro, **E. Chiellini**, "Modelling of the 3D structure of IFN- $\alpha$ -k and characterization of its surface molecular properties", *Int. J. Biolog. Macromol.*, **20**, 85 (1997)
229. R. Solaro, E. Dossi, **E. Chiellini**, G. Mazzanti, "New multifunctional polymeric materials for the treatment of chronic uremia", *J. Bioact. Compat. Polym.*, **12**, 27 (1997)
230. V. Castelvetro, G. Galli, F. Ciardelli, **E. Chiellini**, "Liquid crystalline side chain polysiloxanes with 4-cyano and 4-alkoxystilbene mesogenic units", *J.M.S. - Pure Appl. Chem.*, **A34**, 2205 (1997)
231. G. Galli, **E. Chiellini**, O. Francescangeli, D. Ferri, D. Wolff, J. Springer, M. Laus, A.S. Angeloni, "Mesophase structure and alignment under different fields of liquid crystalline main-chain/side-group block copolymers", *Macromol. Symp.*, **121**, 235 (1997)
232. R. Solaro, E.E. Chiellini, D. Giannasi, F. Morganti, **E. Chiellini**, "Multifunctional polymeric materials for biomedical applications", *Macromol. Symp.*, **118**, 603 (1997)
233. **E. Chiellini**, S. D'Antone, R. Solaro, "Biodegradable synthetic and semisynthetic polymers", *Macromol. Symp.*, **123**, 25 (1997)
234. G. Galli, **E. Chiellini**, M. Laus, D. Ferri, D. Wolff, J. Springer, "Mutual interactions in liquid crystalline main-chain/side-group block copolymers", *Macromolecules*, **30**, 3417 (1997)
235. A. Corti, S. D'Antone, R. Solaro, **E. Chiellini**, "Degradation of poly(ethylene glycol) based nonionic surfactants by different bacterial isolates from river water", *J. Environ.Polym.Degrad.*, **6**, 121-131 (1998)

236. S. Miertus, V. Frecer, **E. Chiellini**, F. Chiellini, R. Solaro, J. Tomasi, "Molecular interactions and inclusion phenomena in substituted b-cyclodextrins. simple inclusion probes: H<sub>2</sub>O, C, CH<sub>4</sub>, C<sub>6</sub>H<sub>6</sub>, NH<sub>4</sub><sup>+</sup>, HCCO-", *J. Inclus. Phenom. Mol. Rec. Chem.*, **32**, 23 (1998)
237. D. Ferri, D. Wolff, J. Springer, O. Francescangeli, M. Laus, A.S. Angeloni, G. Galli, **E. Chiellini**, "Phase and orientational behaviors in liquid crystalline main-chain/side-group block copolymers", *J. Polym. Sci., Polym. Phys.*, **36**, 21 (1998)
238. **E. Chiellini**, G. Galli, A.S. Angeloni, M. Laus, "Design and preparation of liquid crystalline block copolymers", *Macromol. Symp.*, **128**, 231 (1998)
239. E.I. Serhatli, G. Galli, Y. Yagci, M. Laus, S.A. Angeloni, **E. Chiellini**, "Synthesis of liquid crystalline graft and block copolymers by sequential cationic and free-radical polymerizations", *Designed Monomers & Polymers*, **2** (3), 259 (1999)
240. F. Morganti, E. Bramanti, R. Solaro, E. Nannipieri, P. Narducci, S.F. Krauser, C.M. Samour, E. Benedetti, **E. Chiellini**, "Thermal and spectroscopic characterization of interactions between a penetration enhancer and stratum corneum components", *J. Bioact. Compat. Polym.*, **14**, 162 (1999)
241. R. Bizzarri, R. Solaro, **E. Chiellini**, "Synthesis and characterization of segmented hydrosoluble poly(tartaramide)s", *J. Bioact. & Compat. Polym.*, **14**, 504 (1999)
242. S. Miertus, A.C. Nair, V. Frecer, **E. Chiellini**, F. Chiellini, R. Solaro, J. Tomasi, "Modelling of b-cyclodextrin with L- $\alpha$ -aminoacids residues", *J. Incl. Phenom. & Macrocyclic Chem.*, **34**, 69 (1999)
243. **E. Chiellini**, R. Bizzarri, P. Bonaguidi, P. Talamelli and R. Solaro, "Multifunctional hydrophilic polymers", *J. Macromol. Sci., A-Pure & Appl. Chem.*, **A36**, 901 (1999)
244. S. Miertus, **E. Chiellini**, F. Chiellini, J. Kona, J. Tomasi, R. Solaro, "Modelling of molecular interactions and inclusion phenomena in substituted b-cyclodextrin: from simple probes to proteins", *Macromol. Symp.*, **138**, 41 (1999)
245. **E. Chiellini**, A. Corti, S. D'Antone, R. Solaro, "Biodegradation of PVA-based formulations", *Macromol. Symp.*, **144**, 127 (1999)
246. E.-R. Kenawy, P. Cinelli, A. Corti, S. Miertus, **E. Chiellini**, "Biodegradable composite films based on waste gelatin", *Macromol. Symp.*, **144**, 351 (1999)
247. **E. Chiellini**, M.R. Di Bona, G. Galli, L. Komitov, B. Gallot, "Synthesis and electrooptical properties of polysiloxanes containing chiral phenyl nitrobenzoate side chains", *Mol. Cryst. Liq. Cryst.*, **328**, 21 (1999)
248. G. Galli, M.R. Di Bona, K. Fodor-Csorba, B. Gallot, **E. Chiellini**, "Synthesis and mesophase structure of chiral liuid crystalline polysilozanes containing a new phenyl benzoate mesogen", *Mol. Cryst. Liq. Cryst.*, **336**, 101 (1999)
249. D. Catalano, **E. Chiellini**, L. Chiezzi, K. Fodor-Csorba, G. Galli, E. Gács-Baitz, S. Holly, C.A. Veracini, "Partially deuterated side-chain liquid crystalline monomers and polymers: characterization and order by 2H-NMR", *Mol. Cryst. Liq. Cryst.*, **336**, 111 (1999)
250. **E. Chiellini**, A. Corti, R. Solaro, "Biodegradation of poly(vinyl alcohol) based blown films under different environmental conditions", *Polym. Degrad. & Stability*, **64**, 305 (1999)
251. M.C. Bignozzi, S.A. Angeloni, M. Laus, L. Incicco, O. Francescangeli, D. Wolff, G. Galli, **E. Chiellini**, "Liquid crystal poly(glycidyl ether)s by anionic polymerization and polymer-analogous reaction", *Polym. J. Jap.*, **31**, 913 (1999)
252. B. Gallot, G. Galli, A. Ceccanti, **E. Chiellini**, "X-ray studies on the smectic polymorphism of chiral polysiloxanes with a sulfide substituent", *Polymer*, **40**, 2561 (1999)
253. V.L. Covolan, E.G. Fernandes, S. D'Antone, **E. Chiellini**, "Thermal characterisation of Boc-aminostyrene/styrene copolymers latexes", *Thermochimica Acta*, **342**, 97 (1999)
254. G. Galli, B. Saliva, A. Lotz, L. Komitov, **E. Chiellini**, G. Scherowsky, "New monomer liquid crystals containing a chiral 2,2- or 2,3-disubstituted oxirane ring", *Des. Monom. Polym.*, **3**, 463 (2000)
255. R. Bizzarri, R. Solaro, P. Talamelli, **E. Chiellini**, "Synthesis and characterization of new poly(esteramide)s containing oligo(oxyethylene) segments", *J. Bioact. & Compat. Polym.*, **15**, 43 (2000)
256. **E. Chiellini**, A. Corti, B. Politi, R. Solaro, "Adsorption/desorption of polyvinyl alcohol on solid substrates and relevant biodegradation", *J. Polym. Environ.*, **8**, 67-79 (2000)
257. V.L. Covolan, G. Ruggeri, **E. Chiellini**, "Synthesis and characterization of styrene/Boc-p-amino styrene copolymers", *J. Polym. Sci., Part A: Polym. Chem.*, **38**, 2910 (2000)
258. E.G. Fernandes, S. Krauser, C.M. Samour, **E. Chiellini**, "Symmetric block oligomers. gelation characteristics by DSC", *J. Therm. Anal. & Calorimetry*, **61**, 551 (2000)
259. **E. Chiellini**, P. Cinelli, A. Corti, E.-R. Kenawy, E. Grillo Fernandez, R. Solaro, "Environmentally sound blends and composites based on water soluble polymer matrices", *Macromol. Symp.*, **152**, 83 (2000)
260. V.L. Covolan, S. D'Antone, G. Ruggeri, **E. Chiellini**, "Preparation of aminated polystyrene latexes by dispersion polymerization", *Macromolecules*, **33**, 6685 (2000)
261. F. Gouda, A.A. Kutub, K. Fodor-Csorba, G. Galli, **E. Chiellini**, L. Komitov, J.P.F. Lagerwall, S.T. Lagerwall, "Dielectric investigations of a chiral monomer and side chain polymer", *Mol. Cryst. Liq. Cryst.*, **352**, 169 (2000)

262. **E. Chiellini**, J.L. Houben, D. Wolff, G. Galli, "Chiral liquid crystalline polyacrylates with side-chain fluorescent mesogens", *Mol. Cryst. Liq. Cryst.*, **352**, 439 (2000)
263. R. Solaro, A. Corti, **E. Chiellini**, "Biodegradation of poly(vinyl alcohol) with different molecular weights and degree of hydrolysis", *Polym. Adv. Technol.*, **11**, 873 (2000)
264. **E. Chiellini**, P. Cinelli, S.H. Imam, L. Mao, "Composite films based on biorelated agro-industrial waste and poly(vinyl alcohol). Preparation and mechanical properties characterization", *Biomacromolecules*, **2** (3), 1029-1037 (2001)
265. **E. Chiellini**, P. Cinelli, E.Grillo Fernandes, E.-R. Kenawy, A. Lazzeri, "Gelatin based blends and composites. Morphological and thermal mechanical characterization", *Biomacromolecules*, **2** (3), 806-811 (2001)
266. R. Bizzarri, **E. Chiellini**, E.E. Chiellini, F. Chiellini, C. Fiumi, F. Signori, R. Solaro, "Polymeric nanoparticles in the targeted delivery of peptide and protein drugs", *Chim.& Ind.*, **83**, 1-7 (2001)
267. **E. Chiellini**, S. Miertus, "An outline on environmentally degradable polymeric materials and plastics - State of art on future perspectives", *EPF - special issue*, **66-71** (2001)
268. E.Grillo Fernandes, A. Lombardi, R. Solaro, **E. Chiellini**, "Thermal characterization of three component blends for hot-melt adhesives", *J. Appl. Polym. Sci.*, **80**, 2889-2901 (2001)
269. **E. Chiellini**, E.E. Chiellini, F. Chiellini, R. Solaro, "Targeted administration of proteic drugs: I. Preparation of polymeric nanoparticles", *J. Bioact. Compat. Polym.*, **16** (6), 441-465 (2001)
270. Y. Hepuzer, I. E. Serhatli, Y. Yagci, G. Galli, **E. Chiellini**, "The synthesis of liquid crystalline copolymers with block copolymer grafts", *Macromol. Chem. Phys.*, **202** (11), 2247-2252 (2001)
271. F. Chiellini, R. Bizzarri, C.K. Ober, D. Schmaljohann, T. Tianye Yu, R. Solaro, **E. Chiellini**, "Patterning of polymeric hydrogels for biomedical applications", *Macromol. Rapid Comm.*, **22**, 1284-1287 (2001)
272. C. Cesarino, L. Komitov, G. Galli, **E. Chiellini**, "Sign reversal of the dielectric anisotropy in the chiral nematic phase of a copolysiloxane", *Mol. Cryst and Liq. Cryst.*, **372**, 217-227 (2001)
273. G. Galli, C. Cesarino, B. Gallot, L. Komitov, **E. Chiellini**, "The mesophase structure of chiral liquid crystalline polysiloxanes for electro-optical applications", *Mol. Cryst. Liq. Cryst.*, **360**, 147 (2001)
274. **E. Chiellini**, P. Cinelli, A. Corti, E.-R. Kenawy, "Composite films based on waste gelatin. Thermal-mechanical properties and biodegradation testing", *Polym. Degrad. Stab.*, **73**, 549-555 (2002)
275. G. Galli, M. Ragnoli, **E. Chiellini**, L. Komitov, G. Andersson. "Liquid crystalline polysiloxane with 45 molecular tilt in the SmC\* phase", *Ferroelectrics*, **276**, 37-44 (2002)
276. S. Tomasi, R. Bizzarri, R. Solaro, **E. Chiellini**, "Poly(ester-sulphide)s from oligo(oxyethylene) dithiols and bis(acrylates)", *J. Bioact. Compat. Polym.*, **17**, 3-21 (2002)
277. L. Andruzzi, **E. Chiellini**, G. Galli, X. Li, S.H. Kang, C.K. Ober, "Engineering low surface energy polymers through molecular design: synthetic routes to fluorinated polystyrene-based block copolymers", *J. Mat. Chem.*, **12**, 1684-1692 (2002)
278. L. Mao, S. Imam, S. Gordon, P. Cinelli, **E. Chiellini**, "Extruded cornstarch-glycerol-polyvinyl alcohol blends: mechanical properties, morphology and biodegradability", *J. Polym. Environ.*, **8**(4), 205-211 (2002)
279. G. Gorrasi, M. Tortora, V. Vittoria, G. Galli, **E. Chiellini**, "Transport and mechanical properties of blends of poly(e-caprolactone) and a modified montmorillonite- poly(e-caprolactone) nanocomposite", *J. Polym. Sci. Part B: Polym. Phys.*, **40** (11), 1118-1124 (2002)
280. M. Tortora, V. Vittoria, G. Galli, S. Ritrovati, **E. Chiellini**. "Transport and mechanical properties of modified montmorillonite-poly(e-caprolactone) nanocomposites". *Macromol. Mat. Eng.*, **287** (4), 243-249 (2002)
281. R. Bizzarri, F. Chiellini, R. Solaro, **E. Chiellini**, S. Cammas-Marion, P. Guerin, "Synthesis and characterization of new malolactonate polymers and copolymers for biomedical applications", *Macromolecules*, **35**, 1215 (2002)
282. X. Li, L. Andruzzi, **E. Chiellini**, G. Galli, C.K. Ober, A. Hezemer, E.J. Kramer, D.A. Fischer. "Semifluorinated aromatic side-group polystyrene-based block copolymers: bulk structure and surface orientation studies". *Macromolecules*, **35** (21), 8078-8087 (2002)
283. A. Corti, R. Solaro, **E. Chiellini**, "Biodegradation of poly(vinyl alcohol) in selected mixed microbial culture and relevant culture filtrate", *Polym. Degr. & Stab.*, **75**, 447-458 (2002)
284. E.Grillo Fernandes, E.-R. Kenawy, S. Miertus, **E. Chiellini**, "Environmentally degradable plastics: thermal behavior of polymer blends based on waste gelatin", *Polymer*, **47** (7-8), 500-508 (2002)
285. **E. Chiellini**, P. Cinelli, S. D'Antone, V.Ivanova Ilieva, "Environmentally degradable polymeric materials (EDPM) in agricultural applications - An Overview", *Polymer*, **47** (7-8), 538-544 (2002)
286. R. Bizzarri, B. Cerbai, F. Signori, R. Solaro, E. Bergamini, I. Tamburini, **E. Chiellini**, "New perspectives for (S)-dolichol and (S)-nordolichol synthesis and biological functions", *Biogerontology*, **4**, 353-363 (2003)
287. **E. Chiellini**, S. Miertus, "Il futuro delle plastiche è bio?", *Imballaggio*, **562**, 64-74 (2003)
288. R. Bizzarri, B. Cerbai, R. Solaro, **E. Chiellini**, "A Convenient Method for the Synthesis of (S)-Dolichol and (S)-norDolichol", *J. Bioact. & Compat. Polym.*, **18**, 433-452 (2003)



289. R. Solaro, F. Chiellini, F. Signori, C. Fiumi, R. Bizzarri, **E. Chiellini**, "Nanoparticle Systems for the Targeted Release of Active Principles of Proteic Nature", *J. Mat. Sci.: Mat. in Med.*, **14**, 705-711 (2003)
290. F. Signori, R. Solaro, **E. Chiellini**, P.A.M. Lips, P.J. Dijkstra, J. Feijen, "Synthesis and Characterization of Segmented Poly(Ether Ester)s Containing H-Bonding Units", *Macromol. Chem. Phys.*, **204**, 1971-1981 (2003)
291. F. Signori, R. Solaro, P.A.M. Lips, P.J. Dijkstra, J. Feijen, **E. Chiellini**, "Preparation and Characterization of Segmented Poly(Ether-Ester)s Consisting of H-Bonding Units and Poly(ethylene glycol) Segments", *Macromol. Chem. Phys.*, **204**, 1971-1981 (2003)
292. R. Solaro, P. Talamelli, L. Carbonaro, **E. Chiellini**, "Kinetic Investigation of the Condensation Reaction of Activated Ester-Amides Containing Oligo(oxyethylene) Segments", *Macromol. Chem. & Phys.*, **204**, 500-509 (2003)
293. P. Cinelli, J.W. Lawton, S.H. Gordon, S.H. Imam, **E. Chiellini**, "Injection Molded Hybrid Composites Based on Corn Fibers and Poly(vinyl alcohol)", *Macromol. Symp.*, **197**, 115-124 (2003)
294. **E. Chiellini**, P. Cinelli, V.Ivanova Ilieva, A. Ceccanti, P. Alexy, D. Bakos. "Biodegradable Hybrid Polymer Films Based on Poly(vinyl alcohol) and Collagen Hydrolyzate", *Macromol. Symp.*, **197**, 125-132 (2003)
295. **E. Chiellini**, P. Cinelli, S. D'Antone, V.Ivanova Ilieva, S. Magni, S. Miele, S. Pampana, "Liquid Mulch Based on Poly(vinyl alcohol). PVA-Soil Interaction", *Macromol. Symp.*, **197**, 133-142 (2003)
296. P. Cinelli, S.H. Gordon, S.H. Imam, **E. Chiellini**, "Characteristics and Degradation of Hybrid Composite Films Prepared from PVA, Starch and Lignocellulosics", *Macromol. Symp.*, **197**, 143-155 (2003)
297. F. Signori, R. Solaro, **E. Chiellini**, P.A.M. Lips, P.J. Dijkstra, J. Feijen, "Multifunctional Polyesters as New Candidate materials for Biomedical Applications. Synthesis and Structural Characterization", *Macromol. Symp.*, **197**, 289-301 (2003)
298. R. Bizzarri, F. Chiellini, C.K. Ober, W.M. Saltzmann, R. Solaro, **E. Chiellini**, "Malolactonate Polymers and Copolymers for Biomedical Applications", *Macromol. Symp.*, **197**, 303-314 (2003)
299. R. Solaro, R. Bizzarri, **E. Chiellini**, "An Investigation of the Condensation Kinetics in Poly(Ester-amide) and Poly(Ester-Sulphide) Preparation", *Macromol. Symp.*, **197**, 315-329 (2003)
300. **E. Chiellini**, V.L. Covolan, L.M. Orsini, R. Solaro, "Polymeric Nanoparticles Based on Polylactide and Related Copolymers", *Macromol. Symp.*, **197**, 345-354 (2003)
301. **E. Chiellini**, A. Corti, "A Simple Method Suitable to Test the Ultimate Biodegradability of Environmentally Degradable Polymers", *Macromol. Symp.*, **197**, 381-395 (2003)
302. **E. Chiellini**, E.G. Fernandes, M. Pietrini, R. Solaro, "Factorial Design in Optimization of PHAs Processing", *Macromol. Symp.*, **197**, 45-55 (2003)
303. S.S. Miyazaki, A.R. Yep, F. Kolton, E.B. Hermida, F. Povolo, E.G. Fernandes, **E. Chiellini**, "Biodegradable Polymeric Films Based on microbial Poly(3-Hydroxybutyrate) - Effect of gamma-radiation on Mechanical Properties and Biodegradability", *Macromol. Symp.*, **197**, 57-64 (2003)
304. F. Chiellini, R. Bizzarri, C.K. Ober, D. Schmaljohann, T. Yu, W.M. Saltzman, R. Solaro, **E. Chiellini**, "Surface patterning and Biological Evaluation of Semi-Interpenetrated Poly(HEMA) /Poly(Alkyl-beta-malolactonate)s", *Macromol. Symp.*, **197**, 369-379 (2003)
305. **E. Chiellini**, A. Corti, G. Swift, "Biodegradation of thermally-oxidized, fragmented low-density polyethylenes", *Polym. Degr. Stab.*, **81** (2), 341-351 (2003)
306. P. Alexy, D. Bakos, S. Hanzelová, L. Kukulíková, J. Kupec, K. Charvátová, **E. Chiellini**, P. Cinelli, "Poly(vinyl alcohol)-collagen hydrolysate thermoplastic blends: I. Experimental design optimisation and biodegradation behavior", *Polymer Testing*, **22**, 801-809 (2003)
307. P. Alexy, D. Bakos, G. Crkonová, Z. Kramárová, J. Hoffmann, M. Julinová, **E. Chiellini**, P. Cinelli, "Poly(vinyl alcohol)-collagen hydrolysate thermoplastic blends: II. Water penetration and biodegradability of melt extruded films", *Polymer Testing*, **22**, 811-818 (2003)
308. **E. Chiellini**, A. Corti, S. D'Antone, R. Solaro, "Biodegradation of Poly(vinyl alcohol) Based Materials", *Prog. Polym.Sci.*, **28(6)**, 963-1014 (2003)
309. E.Grillo Fernandes, M. Pietrini, **E. Chiellini**, "Bio-based Polymeric Composites Comprising Wood-Flour as Filler", *Biomacromolecules*, **5**, 1200-1205 (2004)
310. E. Bergamini, R. Bizzarri, G. Cavallini, B. Cerbai, **E. Chiellini**, A. Donati, Z. Gori, A. Manfrini, I. Parentini, F. Signori, "I Tamburini, Ageing and Oxidative Stress: a Role for Dolichol in the Antioxidant Machinery of Cell Membranes", *J. Alzheimer's Disease*, **6**, 129-135 (2004)
311. T. Ogoshi, T.Fujiwara, M. Bertolucci, G. Galli, **E. Chiellini**, Y.Chujo, K.J. Wynne, "Tapping Mode AFM Evidence for an Amorphous Reticular Phase in a Condensation Cured Hybrid Elastomer: a,w-Dihydroxypoly(dimethylsiloxane) / Poly (diethoxysiloxane) / Fumed Silica Nanoparticles", *J. American Chem. Soc. (JACS)*, **126**, 12284-12285 (2004)
312. **E. Chiellini**, P. Cinelli, R. Solaro, M. Laus, "Thermo-Mechanical behavior of Poly(vinyl alcohol) and Sugarcane Bagasse Composites", *J. Appl. Polym. Sci.*, **92**, 426-432 (2004)

313. A.M. Bianucci, I. Massarelli, F. Chiellini, C. Eidelman, **E. Chiellini**, "Design of Highly Specified Ligands of Fibrin for Therapeutic Applications", *J. Biomat. Sci.*, **15** (9), 1203-1222 (2004)
314. V.L. Covolan, F. Galembeck, C.A.de Paula Leite, G. Ruggeri, **E. Chiellini**, "Characterization of Surface NH<sub>3</sub>+Cl<sup>-</sup> Groups on Poly(Styrene-co-Boc-Aminostyrene) Microspheres Obtained by Controlled Acidic Treatment", *J. Colloid & Interface Sci.*, **273**, 121-130 (2004)
315. I. Bartolozzi, R. Solaro, G. Mari, P. Bonaguidi, **E. Chiellini**, "Removal of Viruscide Agents by Using Styrenic Resins", *JABB*, **2**, 105-111 (2004)
316. L. Andruzzi, A. Hexemer, S. Li, C.K. Ober, E.J. Kramer, G. Galli, **E. Chiellini**, D.A. Fischer, "Control of Surface Properties Using Fluorinated Polymer Brushes Produced by Surface-Initiated Controlled Radical Polymerization", *Langmuir*, **20**, 10498-10506 (2004)
317. **E. Chiellini**, P. Cinelli, F. Chiellini, S.H. Imam, "Environmentally Degradable biobased Polymeric Blends & Composites", *Macromol. Biosci.*, **4**, 218-231 (2004)
318. F. Signori, R. Solaro, P.A.M. Lips, P.J. Dijkstra, J. Feijen, **E. Chiellini**, "Segmented Multifunctional Poly(Ether-Ester) Polymers Containing H-Bonding Units. Preparation and Characterization", *Macromol. Chem. Phys.*, **205** (10), 1299-1308 (2004)
319. G. Galli, M. Ragnoli, M. Bertolucci, C.K. Ober, E.J. Kramer, **E. Chiellini**, "Fluorinated 2-Vinylcyclopropane Copolymers as Low Surface energy Materials", *Macromol. Symp.*, **218**, 303-312 (2004)
320. E.Grillo Fernandes, M. Pietrini, **E. Chiellini**, "Thermo-mechanical and morphological characterization of plasticized poly[(R)-3-hydroxybutyric acid]", *Macromol. Symp.*, **218** (1), 157-164 (2004)
321. E. Grillo Fernandes, P. Cinelli, **E. Chiellini**, "Thermal Behavior of Composites Based on Poly(vinyl alcohol) and Sugar Cane Bagasse", *Macromol. Symp.*, **218** (1), 231-240 (2004)
322. V.L. Covolan, R.Di Ponzio, F. Chiellini, E.Grillo Fernandes, R. Solaro, **E. Chiellini**, "Polyurethane based Materials for the Production of Biomedical Materials", *Macromol. Symp.*, **218** (1), 273-282 (2004)
323. M. Bertolucci, G. Galli, **E. Chiellini**, K.J. Wynne, "Wetting Behavior of Films of New Fluorinated Styrene-Siloxane Block Copolymers", *Macromolecules*, **37**, 3666-3672 (2004)
324. R. Toth, S. Meriani, M. Ferrone, M. Fermeglia, S. Pricl, A. Coslanich, S. Miertus, **E. Chiellini**, "Computer simulation of polypropylene/organoclay nanocomposites: characterization of atomic scale structure and prediction of the binding energy", *Polymer*, **45**, 8075-8083 (2004)
325. K.J. Wynne, T. Fujiwara, T. Ogoshi, S. Inagi, Y. Chujo, M. Bertolucci, G. Galli, **E. Chiellini**, "Tapping mode AFM evidence for an amorphous reticular phase in a condensation cured hybrid elastomer: Alpha, omega-dihydroxypoly(dimethylsiloxane) poly(diethoxysiloxane) fumed silica nanoparticles", *Abstracts of Papers of the American Chemical Society*, **229**, U975 (2005)
326. F. Signori, R. Solaro, **E. Chiellini**, "Micelles from New Biodegradable Amphiphilic Block Copolymers Containing PEG and PCL", *J. Controlled Release*, **101**, 379-381 (2005)
327. S.H. Imam, P. Cinelli, S.H. Gordon, **E. Chiellini**, "Characterization of Biodegradable Composite Films Prepared from Blends of Poly(vinyl alcohol), Cornstarch, and Lignocellulosic Fiber", *J. Polym. Environ.*, **13**, 47-55 (2005)
328. G. Galli, M. Rheinmann, A. Crudeli, **E. Chiellini**, Y. Panarin, J. Vij, C. Blanc, V. Lorman, N. Olsson, "Design of Siloxane Liquid Crystals Forming a de Vries SmA\* Phase.", *Mol. Cryst. Liq. Cryst.*, **439**, 2111 (2005)
329. G. Galli, E. Martinelli, **E. Chiellini**, C.K. Ober, A. Glisenti, "Low Surface Energy Characteristics of Mesophase-Forming ABC and ACB Triblock Copolymers with Fluorinated b-Blocks", *Mol. Cryst. Liq. Cryst.*, **441**, 211 (2005)
330. G. Galli, A. Baldini, **E. Chiellini**, B. Gallot, "New Chiral Liquid-Crystalline Poly(vinylcyclopropane)s with Cyclic and Linear Repeat Units", *Mol. Cryst. Liq. Cryst.*, **441**, 227 (2005)
331. R. Toth, M. Ferrone, S. Miertus, **E. Chiellini**, M. Fermeglia, S. Pricl, "Structure and Energetics of Biocompatible Polymer Nanocomposite Systems: A Molecular Dynamics Study", *Biomacromol.*, **7** (6), 1714-1719 (2006)
332. A.M. Piras, L. Nikkola, F. Chiellini, **E. Chiellini**, N. Ashammakhi, "Development of Diclofenac Sodium Releasing Bio-Erodible Polymeric Nanomats", *J. Nanosci. Nanotech.*, **6**, 3310-3320, (2006)
333. N. Ashammakhi, A. Ndreu, A.M. Piras, L. Nikkola, T. Sindelar, H. Ylikauppila, A. Harlin, **E. Chiellini**, V. Hasirci, H. Redl, "Biodegradable Nanomats Produced by Electrospinning: Expanding Multifunctionality and Potential for Tissue Engineering", *J. Nanosci. Nanotech.*, **6**, 2693-2711 (2006)
334. N. Bicaç, M. Gazi, G. Galli, **E. Chiellini**, "Polystyrene Microspheres Having Epoxy Functional Dangling Chains Linked with Hydrolytically Stable Bonds by ATRP", *J. Polym. Sci.: Part A - Polym. Chem.*, **44**, 6708-6716 (2006)
335. **E. Chiellini**, A. Corti, S. D'Antone, R. Baciu, "Oxo-biodegradable Full Carbon Backbone Polymers – Oxodegradation of Polyethylene Under Accelerated Test Conditions", *Polym. Degr. Stab.*, **91**, 2739-2747 (2006)
336. A. Krzan, S. Hemjinda, S. Miertus, A. Corti, **E. Chiellini**, "Standardization and Certification in the Area of Environmentally Degradable Plastics", *Polym. Degr. Stab.*, **91** (12), 2819-2833 (2006)

337. P. Cinelli, **E. Chiellini**, J.W. Lawton, S.H. Imam, "Properties of Injection Molded Composites Containing Corb Fiber and Poly(Vinyl Alcohol)", *J. Polym. Res.*, **13**, 107-113 (2006)
338. P. Cinelli, **E. Chiellini**, J.W. Lawton, S.H. Imam, "Foamed Articles Based on Potato Starch, Corn Fibers and Poly(vinyl alcohol)", *Polym. Degr. Stab.*, **91**, 1147-1155 (2006)
339. M. Pietrini, L. Roes, M.K. Patel, **E. Chiellini**, "Comparative Life Cycle Studies on PHB Based Composites as Potential Replacement for Conventional Petrochemical Plastics". *Biomacromol.* **8** (7), 2210-2218 (2007)
340. S. Inagi, T. Ogoshi, M. Bertolucci, T. Fujiwara, G. Galli, **E. Chiellini**, Y. Chujo, K.J. Wynne, "Appearing, Disappearing, and Reappearing Fumed Silica Nanoparticles: Tapping Mode AFM Evidence in a Condensation Cured Polydimethylsiloxane Hybrid Elastomer", *Chem. Mater.*, **19**, 21-41 (2007)
341. I. Bartolozzi, R. Solaro, E. Schacht, **E. Chiellini**, "Difunctionalized end-capped macromers of N-vinyl-2-pyrrolidinone as precursors of amphiphilic block copolymers", *European Polymer*, **43**, 4628-4638 (2007)
342. I. Massarelli, L. Murgia, A.M. Bianucci, F. Chiellini, **E. Chiellini**, "Understanding selectivity mechanism of human asialoglycoprotein receptor (ASGP-R) toward Gal- and Man-type ligands for predicting interactions with exogenous sugars", *Int. J. Mol. Sci.*, **8**, 13-28 (2007)
343. F. Chiellini, D. Dinucci, C. Bartoli, A.M. Piras, **E. Chiellini**, "Intracellular Fate Investigation of Bioeliminable Polymeric Nanoparticles by Confocal Laser Scanning Microscopy", *JBCP*, **22**, 667-685 (2007)
344. **E. Chiellini**, A. Corti, S. D'Antone, N.C. Billingham, "Microbial Biomass Yield and Turnover in Soil Biodegradation Tests: Carbon Substrate Effects", *J. Polym. Env.*, **15** (3), 169-178 (2007)
345. I. Bartolozzi, R. Solaro, **E. Chiellini**, G. Mari, "Polymeric Sorbents for Virucide Agents in Blood Treatments", *JBCP*, **22**, 411-427 (2007)
346. N. Ashammakhi, A. Ndreu, A.M. Piras, L. Nikkola, T. Sindelar, H. Ylikauppila, A. Harlin, M.E. Gomes, N.M. Neves, **E. Chiellini**, F. Chiellini, V. Hasirci, H. Redl, R.L. Reis, "Biodegradable Nanomats Produced by Electrospinning: Expanding Multifunctionality and Potential for Tissue Engineering", *J. Nanosci. Nanotech.*, **7** (3), 862-882 (2007)
347. **E. Chiellini**, A. Corti, S. D'Antone, "Oxo-biodegradable Full Carbon Backbone Polymers - Biodegradation Behavior of Thermally Oxidized Polyethylene in an Aqueous Medium", *Polym. Degr. Stab.*, **92**, 1378-1383 (2007)
348. **E. Chiellini**, A. Corti, S. D'Antone, N.C. Billingham, "Microbial Biomass Yield and Turnover in Standardized Soil Biodegradation Tests: Carbon Substrate Effects", *J. Polym. Env.*, **15** (3), 169-178 (2007)
349. S. Inagi, T. Ogoshi, M. Bertolucci, T. Fujiwara, G. Galli, **E. Chiellini**, Y. Chujo, K.J. Wynne, "Appearing, Disappearing, and Reappearing Fumed Silica Nanoparticles: Tapping Mode AFM Evidence in a Condensation Cured Polydimethylsiloxane Hybrid Elastomer", *Chem. Mater.*, **19** (9), 2141-2143 (2007)
350. I. Massarelli, L. Murgia, A.M. Bianucci, F. Chiellini, **E. Chiellini**, "Understanding selectivity mechanism of human asialoglycoprotein receptor (ASGP-R) toward Gal- and Man-type ligands for predicting interactions with exogenous sugars", *Int. J. Mol. Sci.*, **8**, 13-28 (2007)
351. A.M. Piras, A. Dessy, F. Chiellini, **E. Chiellini**, C. Farina, M. Ramelli, E. Della Valle, "Polymeric Nanoparticles for Hemoglobin-Based Oxygen Carriers", *BBA-Proteins & Proteomics*. **1784**, 1454-1461 (2008)
352. **E. Chiellini**, P. Cinelli, V. Ivanova Ilieva, M. Martera, "Biodegradable Thermoplastic Composites Based on Polyvinyl Alcohol and Algae", *Biomacromolecules*, **9**, 1007-1013 (2008)
353. M. Koller, R. Bona, **E. Chiellini**, E. Grillo Fernandes, P. Horvat, C. Kutschera, P. Hesse, G. Braunegg, "Polyhydroxyalkanoate Production from Whey by *Pseudomonas hydrogenovora*", *Bioresource Techn.*, **99**, 4854-4863 (2008)
354. A.M. Piras, F. Chiellini, C. Fiumi, C. Bartoli, **E. Chiellini**, B. Fiorentino, C. Farina, "A new biocompatible nanoparticle delivery system for the release of fibrinolytic drugs", *Int. J. of Pharm.*, **357**, 260-271 (2008)
355. **E. Chiellini**, P. Cinelli, S. Magni, S. Miele, C. Palla, "Fluid Biomulching Based on Polyvinyl Alcohol and Fillers from Renewable Resources", *J. Appl. Polym. Sci.*, **108**, 295-301 (2008)
356. P. Cinelli, **E. Chiellini**, S. H. Imam, "Hybrid Composite Based on Poly(Vinyl Alcohol) and Fillers from Renewable Resources", *J. Appl. Polym. Sci.*, **109**, 1684-1691 (2008)
357. E. Grillo Fernandes, C. Tramidi, G.M. Di Gregorio, G. Angeloni, **E. Chiellini**, "Effect of temperature-pressure cycles on structural properties of epoxy based composites for printed circuit boards (PCB) applications", *J. Appl. Polym. Sci.*, **110**, 1606-1612 (2008).
358. N. Detta, A.A. El-Fattah, **E. Chiellini**, P. Walkenström, P. Gatenholm, "Biodegradable Polymeric Micro-Nanofibers by Electrospinning of Polyester/polyether Block Copolymers", *J. Appl. Polym. Sci.*, **110**, 253-261 (2008).

359. A.M. Piras, L. Nikkola, F. Chiellini, N. Ashammakhi, **E. Chiellini**, "New Multicomponent Bioerodible Electrospun Nanofibers for Dual Controlled Drug Release", *J. Bioactive & Compatible*, **23**, 423-443 (2008)
360. H. Jukola, L. Nikkola, M.E. Gomes, F. Chiellini, M. Tukiainen, M. Kellomaki, **E. Chiellini**, R.L. Reis, N. Ashammakhi, "Development of a Bioactive Glass Fiber Reinforced Starch-Polycaprolactone Composite", *J. Biomed.Mat.Res. (JBMB)*, **87B**, 197-203 (2008)
361. B. Cerbai, R. Solaro, **E. Chiellini**, "Synthesis and Characterization of Functional Polyesters Tailored for Biomedical Applications", *J. Polym. Sci. Part A: Polym. Chem.*, **46**, 2459-2476 (2008)
362. F.E. Martinelli, S. Agostini, G. Galli, **E. Chiellini**, A. Glisenti, M.E. Pettitt, M.E. Callow, J.A. Callow, K. Graf, F.W. Bartels, "Nanostructured Films of Amphiphilic Fluorinated Block Copolymers for Fouling Release Application", *Langmuir*, **24**, 13138-13147 (2008)
363. F. Chiellini, A.M. Piras, M. Gazzarri, C. Bartoli, M. Ferri, L. Paolini, **E. Chiellini**, "Bioactive Polymeric Materials for Targeted Administration of active Agents - Synthesis and Evaluation", *Macromol. Biosci.*, **8**, 516-525 (2008)
364. F. Chiellini, A.M. Piras, C. Errico, **E. Chiellini**, "Micro/nanostructured polymeric systems for biomedical and pharmaceutical applications", *Nanomedicine*, **3/3**, 367-393 (2008)
365. I. Marabotti, A. Morelli, L.M. Orsini, E. Martinelli, G. Galli, **E. Chiellini**, E.M. Lien, M.E. Pettitt, M.E. Callow, J.A. Callow, S.L. Conlan, R.J. Mutton, A.S. Clare, A. Kocijan, C. Donik, M. Jenko, "Fluorinated/siloxane copolymer blends for fouling release: chemical characterization and biological evaluation with algae and barnacles", *Biofouling*, **25**, 481-493 (2009)
366. I. Massarelli, A.M. Bianucci, F. Chiellini, C. Eidelman, **E. Chiellini**, "Computational modeling and surface plasmon resonance analyses in the assessment of peptide ligands interacting with fibrin gamma (312-324) epitope", *Eur. J. Med. Chem.*, **44**, 2128-2134 (2009)
367. **E. Chiellini**, P. Cinelli, V.Ivanova Ilieva, F. Zimbardi, N. Kanellopoulos, B.de Wilde, A. Pipino, B. Anders, "Hybrid Composites Based on Fibres of Marine Origin", *Int. J. Materials and Product Technology*, **36**, 47-61 (2009)
368. S.K. Samal, E.G. Fernandes, A. Corti, **E. Chiellini**, "Hybrid Polymeric Composites Based on Polyethylene and Lignin", *Int. J. Materials and Product Technology*, **36**, 62-72 (2009)
369. B. Girginer, G. Galli, **E. Chiellini**, N. Bıcak, "Preparation of stable CdS nanoparticle in aqueous medium and their hydrogen generation efficiencies in photolysis of water", *Int.J. Hydrogen Energy*, **34**, 1176-1184 (2009)
370. D. Castiello, **E. Chiellini**, P. Cinelli, S. D'Antone, M. Puccini, M. Salvadori, M. Seggiani, "Polyethylene-Collagen Hydrolyzate Thermoplastic Blends: Thermal and Mechanical Properties", *J. Appl. Polym. Sci.*, **114**, 3827-3834 (2009)
371. C. Errico, C. Bartoli, F. Chiellini, **E. Chiellini**, "Poly(hydroxyalkanoates) Based Polymeric Nanoparticles for Drug Delivery", *J. Biomed. & Biotech.*, DOI:10.1155/2009/571702, 10 pages (2009)
372. **E. Chiellini**, P. Cinelli, V.Ivanova Ilieva, S.H. Imam, J.W. Lawton, "Environmentally Compatible Foamed Articles Containing Potato Starch, Corn Fiber and Poly(Vinyl Alcohol)", *J. Cellular Plastics*, **45**, 17-32 (2009)
373. S.M. Martelli, E.G. Fernandes, **E. Chiellini**, "Thermal Analysis of soil buried oxo-biodegradable polyethylene based blends", *J. Thermal Analysis and Calorimetry*, **97**, 853-858 (2009)
374. S.K. Samal, E.G. Fernandes, F. Chiellini, **E. Chiellini**, "Thermal Analysis of PVA/CNTs 2D Membrane", *J. Thermal Analysis and Calorimetry*, **97**, 859-864 (2009)
375. M. Domingos, F. Chiellini, S. Cometa, E. De Giglio, E.Grillo Fernandes, P. Bartolo, **E. Chiellini** "Evaluation of In Vitro Degradation of PCL Scaffolds Fabricated via BioExtrusion", *Part 1: Influence of the degradation environment*, *Virtual and Physical Prototyping*, **5** (2), 65-73 (2010)
376. I. Massarelli, F. Chiellini, **E. Chiellini**, A.M. Bianucci, "Three-dimensional models of the oligomeric human Asialoglycoprotein Receptor (ASGP-R)", *Int. J. Molecular Sciences*, **11**, 3867-3884 (2010)
377. A. Barghini, V.Ivanova Ilieva, S.H. Imam, **E. Chiellini**, "PCL and PHB blends containing seaweed fibers: Morphology and Thermal-Mechanical Properties", *J. Polymer Science Part A: Polym. Chem.*, **48** (23), 5282-5288 (2010)
378. J. Mielczarski, E. Mielczarski, G. Galli, A. Morelli, E. Martinelli, **E. Chiellini**, "The Surface-Segretated Nanostructure of Fluorinated Copolymer-Poly(dimethylsiloxane) Blend Films", *Langmuir*, **26** (4), 2871-2876 (2010)
379. K. Wynne, W. Zhang, Y. Zheng, L. Orsini, A. Morelli, G. Galli, **E. Chiellini**, E. Carpenter, "More Fluorous Surface Modifier Makes it Less Oleophobic: Fluorinated-Siloxane Copolymers/PDMS Coatings", *Langmuir*, **26** (8), 5848-5855 (2010)
380. S. Cometa, F. Chiellini, I. Bartolozzi, **E. Chiellini**, E.De Giglio, L. Sabbatini, "Surface Segregation Assessment In Poly( $\epsilon$ -Caprolactone)-Poly(Ethylene Glycol) Multiblock Copolymer Films", *Macromol. Biosci.*, **10**, 317-327 (2010)
381. D. Puppi, N. Detta, A.M. Piras, F. Chiellini, **E. Chiellini**, D. Clarke, G. Reilly, "Development of Electrospun Three-arm Star Poly( $\epsilon$ -caprolactone) Meshes for Tissue Engineering Application", *Macromol. Biosci.*, **10**, 887-897 (2010)

382. S. Cometa, F. Chiellini, I. Bartolozzi, **E. Chiellini**, E.De Giglio, L. Sabbatini, " Synthesis and characterization of amphiphilic multiblock copolymers for tissue engineering applications ", *J. Applied Biomaterials & Biomechanics*, **8** (2), 107 (2010)
383. A. Corti, S. Muniyasamy, M. Vitali, S.H. Imam, **E. Chiellini**, "Oxidation and biodegradation of PE films containing pro-oxidant additives: Synergistic effects of sunlight exposure, thermal aging and fungal biodegradation", *Polymer Degradation and Stability*, **75** (6), 1106-1114 (2010)
384. S. Cometa, I. Bartolozzi, A. Corti, F. Chiellini, E.De Giglio, **E. Chiellini**, "Hydrolytic and microbial degradation of multiblock polyurethane based on Poly( $\epsilon$ -caprolactone)/poly(ethylene glycol) segments", *Polymer Degradation and Stability*, **95**, 2013-2021 (2010)
385. N. Detta, T.D. Brown, F.K. Edin, K. Albrecht, F. Chiellini, **E. Chiellini**, P.D. Dalton, D.W. Hutmacher, "Melt electrospinning of polycaprolactone and its blends with poly(ethylene glycol)", *Polymer Int.*, **59** (11), 1558-1562 (2010)
386. D. Puppi, F. Chiellini, A.M. Piras, **E. Chiellini**, "Polymeric Materials for Bone and Cartilage Repair", *Progress in Polymer Science*, **35**, 403-440 (2010)
387. D. Puppi, A.M. Piras, F. Chiellini, **E. Chiellini**, A. Martins, I.B. Leonor, N. Neves, R. Rui, "Optimized Electro- and Wet-spinning Techniques for the Production of Polymeric Fibrous Scaffolds Loaded with Bisphosphonate and Hydroxyapatite", *J Tissue Eng Regen Med*, **5**, 253-263 (2010)
388. D. Puppi, A.M. Piras, N. Detta, F. Chiellini, **E. Chiellini**, H. Ylikauppila, L. Nikkola, N. Ashammaki, "Poly(vinyl alcohol) Based Electrospun Meshes and Potential Candidate Scaffolds in Regenerative Medicine", *J. Bioact. Compat. Polym.*, **26** (1), 20-34 (2011)
389. C. Errico, N. Detta, D. Puppi, A.M. Piras, F. Chiellini, **E. Chiellini**, "Polymeric Nanostructured Items Electrospun on Cylindrical Template. An Easy Procedure for their Removal", *Polym. Int.*, **60**, 1162-1166 (2011)
390. M. Domingos, F. Chiellini, S. Cometa, E. De Giglio, E.Grillo Fernandes, P. Bartolo, **E. Chiellini** "Evaluation of *In Vitro* Degradation of PCL Scaffolds Fabricated via BioExtrusion", *Part 2: Influence of Pore Size and Geometry*, **6** (3), 157-165 (2011)
391. M. Dash, F. Chiellini, R. Ottenbrite, **E. Chiellini**, "Chitosan-A Versatile Semi-synthetic Polymer in Biomedical Applications", *Progr. Polym. Sci.*, **36**, 981-1014 (2011)
392. A. Atlic, M. Koller, D. Scherzer, C. Kutschera, E.Grillo Fernandes, P. Horvat, **E. Chiellini**, G. Braunegg, "Continuous production of poly([R]-3-hydroxybutyrate) by *Cupriavidus necator* in a multistage bioreactor cascade", *Appl Microbiol Biotechnol*, **91**, 295-304 (2011)
393. I. Bartolozzi, S. Cometa, C. Errico, F. Chiellini, **E. Chiellini**, "Multiblock Polyurethanes Based on Biodegradable Amphiphilic Poly( $\epsilon$ -caprolactone)/poly(ethylene glycol) Segments as Candidates for Tissue Engineering Applications", *Nanobiom. Eng.*, **3**, 86-94 (2011)
394. M. Dash, F. Chiellini, E.G. Fernandez, A.M. Piras, **E. Chiellini**, "Statistical Approach of Chitin Deacetylation as a Route to Various Chitosan Grades", *Carbohydrate Polymers*, **86**, 65-71 (2011)
395. I. Massarelli, M. Imbriani, F. Chiellini, **E. Chiellini**, A.M. Bianucci, "Identification of Selective Ligands for Human Fibrin Recognition by Means of High-Throughput Docking", *J. Mol. Recogn.*, **24** (5), 824-832 (2011)
396. M. Domingos, F. Chiellini, A. Gloria, L. Ambrosio, P. Bartolo, **E. Chiellini**, "Effect of process parameters on the morphological and mechanical properties of 3DBioextruded poli ( $\epsilon$ -caprolactone) scaffolds", *Rap. Protot. J.*, **18**, 56-67 (2012)
397. **E. Chiellini**, "Oxo-biodegradabili: realtà, non fiction", *Com.Pack*, **4**, 16-20 (2012)
398. **E. Chiellini**, "Materiali Polimerici Oxo-biodegradabili. Chi sono e a cosa servono", *AIM Magazine G-A* 2012, 30-36 (2012)
399. **E. Chiellini**, A. Corti, "Plastiche Oxo-Biodegradabili. Cosa sono ed a cosa servono" *La Chimica e l'Industria*, Lug-Ago 2012, 93-97 (2012)
400. A. Corti, S. Muniyasamy, **E. Chiellini**, "Assessment of the whole environmental degradation of oxo-biodegradable linear low density polyethylene (LLDPE) films designed for mulching applications" *J. Polym. Environ.*, **20**, 1007-1018 (2012)
401. M.A. Abdelwahab, A. Flynn, B. Chiou, S. Imam, W. Orts, **E. Chiellini**, "Thermal, mechanical and morphological characterization of plasticized PLA-PHB blends", *Polym. Degr. & Stab.*, **97** (9), 1822-1828 (2012)
402. S.K. Samal, M. Dash, S.Van Vlierberghe, D. Kaplan, **E. Chiellini**, P. Dubruel, "Cationic Polymers and Their Therapeutic Potential", *Chem. Soc. Rev.*, **41**, 7147-7194 (2012)
403. L.Perez Amaro, M. Bernabo', **E. Chiellini**, "Los plásticos diseñados para durar cuanto sirven", *Conversaplast*, **12**, 40-43 (2012)
404. C. Mota, D. Puppi, F. Chiellini, **E. Chiellini**, "Additive Manufacturing Techniques for the Production of Tissue Engineering Constructs" to *J Tissue Eng Regen Med*, DOI: 10.1002/term.1635 (2012)
405. M.A. Abdelwahab, E. Martinelli, M. Alderighi, E.G. Fernandes, S. Imam, A. Morelli, **E. Chiellini**, "Poly([R]-3-hydroxybutyrate)]/poly(styrene) blends compatibilized with the relevant block copolymer" *J. Polym. Sci. Part A: Polymer Chemistry*, **50**, 5151-5160 (2012)

406. S.M. Martelli, M. Pietrini, E.Grillo Fernandes, **E. Chiellini** "Degradation Reactions of Poly(3-hydroxybutyrate) During Melt Processing. Strategy for Prevention", *J. of Polym. and Env.*, **21**, 39-45 (2013)
407. R.Ata Alla, G. Hegde, L. Komitov, A. Morelli, **E. Chiellini**, G. Galli, "Composite Materials Containing Perfluorinated and Siloxane Units for Vertical Alignment of Liquid Crystals", *Soft Nanoscience Letters*, **3**, 11-13 (2013)
408. M. Koller, R. Bona, **E. Chiellini**, G. Braunegg, "Extraction of short-chain-length Poly-[(R)-hydroxyalkanoates] (scl-PHA) by the "anti-solvent" acetone under high temperature and pressure", *Biotechnol. Lett.*, Doi. 10.1007/s10529-013-1185-7 (2013)
409. S.K. Samal, M. Dash, F. Chiellini, D.L. Kaplan, **E. Chiellini**, "Silk microgels formed by proteolytic enzyme activity", *Acta Biomaterialia*, **9** (9), 8192-8199 (2013)
410. **E. Chiellini**, "Bioactive Polymeric Materials in Biomedical & Pharmaceutical Applications. A Story Ongoing for decades", *Polimery*, **58**, 633-640 (2013)
411. **E. Chiellini**, A. Dworak, M. Kowalczyk, "A Man for Synthetic & Bioactive Polymers", *Polimery*, **58**, 707-710 (2013)
412. M. Martínez-Sanz, M.A. Abdelwahab, A. Lopez-Rubio, J.M. Lagaron, **E. Chiellini**, W.J. Orts, S.H. Imam, "Incorporation of poly(glycidylmethacrylate) grafted bacterial cellulose nanowhiskers in Poly(lactic acid) nanocomposites: improved barrier and mechanical properties", *European Polymer Journal*, **49**, 2062-2072 (2013)
413. S. Povo, M.G. Romanelli, M. Basaglia, V.Ivanova Ilieva, A. Corti, A. Morelli, **E. Chiellini**, S. Casella, "Polyhydroxyalkanoates biosynthesis by *Hydrogenophaga pseudo flava* DSM1034 from structurally unrelated carbon sources", *New Biotechnology*, **30**, 629-634 (2013)
414. A.M. Piras, S. Sandreschi, S.P. Malliappan, M. Dash, C. Bartoli, D. Dinucci, F. Guarna, E. Ammannati, M. Masa, M. Múčková, L. Schmidtová, **E. Chiellini**, F. Chiellini, "Surface decorated poly(ester-ether-urethane)s nanoparticles: A versatile approach towards clinical translation", *International journal of pharmaceuticals*, **475**, 523-535 (2014)
415. D. Puppi, X. Zhang, L. Yang, F. Chiellini, X. Sun, **E. Chiellini**, "Nano/microfibrous polymeric constructs loaded with bioactive agents and designed for tissue engineering applications: A review", *Journal of Biomedical Materials Research Part B: Applied Biomaterials*, **102**, 1562-1579 (2014)
416. M. Koller, A. Salerno, K. Strohmeier, S. Schober, M. Mittelbach, V.Ivanova Ilieva, **E. Chiellini**, G. Braunegg, "Novel precursors for production of 3-hydroxyvalerate-containing poly[(R)-hydroxyalkanoate]s", *Biocatalysis and Biotransformation*, **32**, 161-167 (2014)
417. S.K. Samal, E.G. Fernandes, A. Corti, **E. Chiellini**, "Bio-based Polyethylene-Lignin Composites Containing a Pro-oxidant/Pro-degradant Additive: Preparation and Characterization", *Journal of Polymers and the Environment*, **22**, 58-68 (2014)
418. C. Mota, S. Wang, D. Puppi, M. Gazzari, C. Migone, F. Chiellini, G.Q. Chen, **E. Chiellini**, "Additive Manufacturing of Poly[(R)-3-hydroxybutyrate-co-(R)-3-hydroxyhexanoate] Scaffolds for Engineered Bone Development" *Journal of Tissue Engineering and Regenerative Medicine*, DOI: 10.1002/term.1897 (2014)
419. S.K. Samal, M. Dash, F. Chiellini, X. Wang, **E. Chiellini**, H.A. Declercq, D.L. Kaplan, "Silk/chitosan biohybrid hydrogels and scaffolds via green technology", *RSC Advances*, **96**, 53547-53556 (2014)
420. I. Ntaikou, C.V. Peroni, C. Kourmentza, V.Ivanova Ilieva, A. Morelli, **E. Chiellini**, G. Lyberatos, "Microbial bio-based plastics from olive-mill wastewater: Generation and properties of polyhydroxyalkanoates from mixed cultures in a two-stage pilot scale system", *Journal of Biotechnology*, **188**, 138-147 (2014)
421. M. Koller, **E. Chiellini**, G. Braunegg. "Study on the production and re-use of poly(3-hydroxybutyrate-co -3-hydroxyvalerate) and extracellular polysaccharide by the archaeon *Haloferax Mediterranei* strain DSM 1411". *Chemical & Biochemical Engineering Quarterly.(CABEQ)*, **29**, 87-98 (2015)
422. L. Pérez Amaro, H. Chen. A. Barghini, A. Corti, **E. Chiellini**. "High Performance Compostable Biocomposites Based on Bacterial Polyesters Suitable For Injection Molding and Blow Extrusion", *Chem. Biochem. Eng. Q.*, **29**, 261-274 (2015)
423. L.S. Montagna, A.L. Catto, M.M.de C. Forte, **E. Chiellini**, A. Corti, A. Morelli, R.M. Campomanes Santana, "Comparative assessment of biodegradation in aqueous medium of polypropylene films doped with metal-free and metal-containing and commercial pro-oxidant/pro-degradant additives after exposure to controlled UV radiation", *Polymer Degradation and Stability*, **120**, 186-192 (2015)
424. C. Mota, D. Puppi, F. Chiellini, **E. Chiellini**. "Additive manufacturing techniques for the production of tissue engineering constructs". *J Tissue Eng. Regen. Med.* **9**, 174-190 (2015)
425. E.Grillo Fernandes, E. Tombari, G. Salvetti, G. Galli, **E. Chiellini**, "Dielectric relaxation of thermotropic liquid crystalline polyesters based on  $\alpha,\alpha$ -alkylene-di-4-hydroxybenzoates and 4,4'-alkylenedioxy-dibenzoic acid", *J.Therm. Anal. Calorim.*, **131**, 627-631 (2018).
426. M.A. Abdelwahab, A.A. El-Barbary, K.S. El-Said, M. Betha, H.M. Elkholy, **E. Chiellini**, "Functionalization of poly(3-hydroxybutyrate) with different thiol compounds inhibit MDM2-p53 interactions in MCF7 cells", *J. Appl. Pol. Sci.*, DOI: 10.1002/APP.46924 (2018).

427. B. Johnston, I. Radecka, D. Hill, **E. Chiellini**, V.Iv. Ilieva, W. Sikorska, M. Musioł, M. Zięba, A.A. Marek, D. Keddie, B. Mendrek, S. Darbari, G. Adamus, M. Kowalczyk, "The Microbial Production of Polyhydroxyalkanoates From Waste Polystyrene Fragments Attained Using Oxidative Degradation", *Polymers*, **10**, 957-976 (2018).
428. B. Johnston, I. Radecka, **E. Chiellini**, D. Barsi, V.Iv. Ilieva, W. Sikorska, M. Musioł, M. Zięba, P. Chaber, A.A. Marek, B. Mendrek, A.It. Ekere, G. Adamus, M. Kowalczyk, "Mass Spectrometry Reveals Molecular Structure of Polyhydroxyalkanoates Attained by Bioconversion of Oxidized Polypropylene Waste Fragments", *Polymers*, **11**, 1580-1599 (2019).
429. A.It. Ekere, B. Johnston, M. Zięba, P. Chaber, G. Adamus, F. Tchuenbou-Magaia, D. Barsi, L.P. Amaro, **E. Chiellini**, I. Radecka, M. Kowalczyk, "Environmental Cleaning Mission-Bioconversion of Oxidatively Fragmented Polyethylene Plastic Waste to Value-Added Copolyesters", *Chemistry Today*, **37** (6), 36-39 (2019).

## LIST OF SCIENTIFIC CONTRIBUTIONS IN BOOKS

1. P.Pino, F.Ciardelli, **E.Chiellini**, "Optical rotatory dispersion of synthetic high polymers" in "*Optical Rotatory Dispersion and Circular Dichroism in Organic Chemistry*", G.Snatzke, Ed., Heyden, London, p. 341 (1967)
2. P.Pino, A.Oschwald, F.Ciardelli, C.Carlini, **E.Chiellini**, "Stereoselection and stereoelection in  $\alpha$ -olefins polymerization" in "*Coordination Polymerization*", J.C.W.Chien, Eds. Academic Press, New York, p. 25 (1975)
3. F.Ciardelli, C.Carlini, **E.Chiellini**, P.Salvadori, L.Lardicci, O.Pieroni, "Circular dichroism and optical rotatory dispersion in "Polymer structure analysis", *Proc. 5th European Symposium on Polymer Spectroscopy*, D.O.Hummel, Ed., Verlag Chemie, Weinheim, p. 181 (1979)
4. F.Ciardelli, C.Carlini, **E.Chiellini**, P.Salvadori, L.Lardicci, R.Menicagli, C.Bertucci, "Application of chiroptical properties to conformational analysis of stereoregular polymers" in "*Preparation and Properties of Stereoregular Polymers*", R.W.Lenz and F.Ciardelli, Eds., Reidel, Dordrecht, p. 353 (1979)
5. F.Ciardelli, **E.Chiellini**, C.Carlini, "Synthesis of optically active polymers from unsaturated monomers" in "*Charged and reactive polymers*", E.Selegny, Ed., Reidel, Dordrecht, Vol. 5, p. 83 (1979)
6. **E.Chiellini**, R.W.Lenz, C.K.Ober, "Multicomponent polyesters systems with mesogenic units" in "*Polymer Blends: Processing, Morphology and Properties*", E.Martuscelli, R.Palumbo, M.Kryszewsky, Eds., Plenum Press, New York, p. 377 (1980)
7. **E.Chiellini**, "Reazioni su polimeri II" in "*Atti Scuola Convegno AIM*", Gargnano, p. 331 (1982)
8. **E.Chiellini**, R.Solaro, F.Masi, "Stereochemical aspects of the cationic polymerization of chiral alkyl vinyl ethers" in "*Coordination Polymerization*", C.C.Price and E.J.Vandenberg, Eds., Plenum Press, New York, p. 141 (1983)
9. M.F.Saettone, B.Giannaccini, P.Chetoni, G.Galli, **E.Chiellini**, "Bioerodible polymeric ophthalmic drug delivery systems. Preparation and evaluation of pilocarpine-containing inserts" in "*Polymers in Medicine I: Biomedical and Pharmacological Applications*", **E.Chiellini**, P.Giusti, Eds., Plenum Press, New York, p. 187 (1983)
10. **E.Chiellini**, "Trasformazioni chimiche di polimeri" in "*Macromolecole-Scienza e Tecnologia*", Edizioni AIM Pacini, Pisa, Vol. 1, p. 416 (1983)
11. **E.Chiellini**, "Reazioni di degradazione ossidativa di polimeri" in "*Macromolecole-Scienza e Tecnologia*", Edizioni AIM Pacini, Pisa, Vol. 1, p. 449 (1983)
12. **E.Chiellini**, G.Galli, R.W.Lenz, C.K.Ober, "Multicomponent segmented polyester systems containing mesogenic residues" in "*Polymer Blends: Processing Morphology and Properties*", M.Kryszewsky, A.Galeski and E.Martuscelli, Eds., Plenum Press, New York, p. 267 (1984)
13. **E.Chiellini**, R.Solaro, S.D'Antone, "Chiral polymer supported catalysts in phase transfer reactions" in "*Crown Ethers and Phase Transfer Catalysis in Polymer Science*", L.J.Mathias and C.Carraher, Eds., Plenum Press, New York, p. 227 (1984)
14. **E.Chiellini**, "Impiego di polimeri nel rilascio controllato di farmaci" in "*Atti Convegno Bioingegneria: Dalla Ricerca di Base all'Applicazione Chimica*", Bressanone (1984)
15. R.Solaro, G.Galli, A.Ledwith, **E.Chiellini**, "Fluorescence emission properties of optically active polymers containing carbazole and related units" in "*Polymer Photophysics*", D.Phillips, Ed., Chapman and Hall, London, p. 377 (1985)

16. V.Frosini, S.de Petris, G.Galli, **E.Chiellini**, "Solid state physics of thermotropic polyesters: internal friction of mesomorphic structures" in "*Recent Advances in Liquid Crystalline Polymers*", L.L.Chapoy, Ed., Applied Science, New York, p. 57 (1985)
17. **E.Chiellini**, G.Galli, "Chiral thermotropic liquid crystalline polymers", in "*Recent Advances in Liquid Crystalline Polymers*", L.L.Chapoy, Ed., Applied Science, New York, p. 15 (1985)
18. M.F. Saettone, B. Giannaccini, G. Marchesini, G. Galli, **E.Chiellini**, "Polymeric inserts for sustained ocular delivery of pilocarpine" in "*Polymers in Medicine II: Biomedical and Pharmaceutical Applications*", **E.Chiellini**, P.Giusti, C.Migliaresi, and L.Nicolais, Eds., Plenum Press, New York, p. 409 (1986)
19. **E.Chiellini**, G.Galli, "Chiral thermotropic liquid crystalline polymers: an overview" in "*Recent advances in mechanistic and synthetic aspects of polymerization*", M.Fontanille and A.Guyot, Eds., Reidel, Dordrecht, p. 425 (1987)
20. M.F.Saettone, B.Giannaccini, G.Leonardi, D.Monti, P.Chetoni, G.Galli, **E.Chiellini**, "Inserts for sustained ocular delivery of pilocarpine:evaluation of a series of partial esters of (maleic acid-alkyl vinyl ether) alternating copolymers" in "*Polymers in Medicine III: Biomedical and Pharmaceutical Applications*", C. Migliaresi, L.Nicolais, P.Giusti, **E.Chiellini**, eds., Elsevier, Amsterdam, p. 209 (1988)
21. **E.Chiellini**, R.W.Lenz, "Liquid crystal polymers with main chain mesogens" in "*Comprehensive Polymer Science*", Pergamon Press, Oxford, Vol. 5, p. 701 (1989)
22. **E.Chiellini**, S.Faggioni, R.Solaro, "Biodegradable polyesters based on glyceric acid derivatives" in "*Polymers in Medicine and Surgery*", PRI, London, p. 39/1 (1989)
23. **E.Chiellini**, "Isomeria strutturale e sterica" in "*Polimeri liquido cristallini termotropici*", IX Convegno Italiano Scienza Macromolecole, Bologna, p. 159 (1990)
24. R.Solaro, E.Casini, **E.Chiellini**, S.Casella, C.Leporini, A.Corti, G.Picci, "Biodegradable polyesters based on C<sub>3</sub> and C<sub>4</sub> hydroxyacids", *Prep. II Arab Int. Conf. Mat. Sci.* Alexandria, Egypt, Vol I, p. 273 (1990)
25. **E.Chiellini**, "Fondamenti di chimica macromolecolare. 1 - Sintesi di polimeri" in "*Recenti Acquisizioni nel rilascio, direzionamento e somministrazione di farmaci*", SCI, p.1 (1990)
26. **E.Chiellini**, "Fondamenti di chimica macromolecolare. 2 - Caratterizzazione di polimeri" in "*Recenti Acquisizioni nel rilascio, direzionamento e somministrazione di farmaci*", SCI, p.41 (1990)
27. **E.Chiellini**, G.Leonardi, R.Solaro, "Polimeri di interesse farmaceutico: potenzialità e limiti" in "*Recenti Acquisizioni nel rilascio, direzionamento e somministrazione di farmaci*", SCI, p. 53 (1990)
28. S.Casella, C.Leporini, A.Corti, G.Picci, **E.Chiellini**, E.Casini, R.Solaro, "Culture substrate effect in the production of poly( $\beta$ -hydroxybutyrate) by *Rhizobium hedysari*" in "*New Biosynthetic Biodegradable Polymers of Industrial Interest from Microorganism*", E.A.Dawes, Ed., Kluwer Academic Publ., p. 73 (1990)
29. **E.Chiellini**, G.Galli, A.S.Angeloni, M.Laus, "Synthesis and chemical modifications of chiral liquid crystalline poly(ester- $\beta$ -sulfide)s", *ACS Symp. Ser.*, **435**, p. 79 (1990)
30. R.Solaro, L.Bemporad, **E.Chiellini**, "Novel hydroxyl containing polyesters and related polymers viable to the formulation of drug release systems", in "*Synthetic Polymers as Drug Carriers. Interactions with Blood*", A.Baszkin, P.Ferruti, M.A.Marchisio, M.C.Tanzi, Eds., ALFA, Brescia, p. 71 (1991)
31. **E. Chiellini**, F. Cioni, S. Trusendi, "Chiral Thermotropic liquid crystalline polymers: Design and perspectives in coating techniques" in *Proceedings of the 17th International Conference on Organic Coatings Science and Technology*, Luzern, July 1991 (1991)
32. A.Corti, G.Vallini, A.Pera, F.Cioni, R.Solaro, **E.Chiellini**, "Starch filled polyethylene in composting environment: evidences for polyethylene matrix oxidation", in "*Biodegradable Polymers and Plastics*" M. Vert, J. Feijen, A.C. Albertsson, G. Scott, **E. Chiellini** Eds., Royal Soc.Chem. Publ., Cambridge, U.K., p. 245 (1992)
33. **E.Chiellini**, G.Galli, A.S.Angeloni, M.Laus, "Liquid crystal polymers with chiral sulfoxide groups as potential NLO materials" in "*Organic Materials for Nonlinear Optics – III*", Oxford, Proceedings (1992)
34. **E.Chiellini**, G.Galli, A.S.Angeloni, M.Laus, D.Caretti, "Chiral liquid-crystalline copolymers for electrooptical applications", *ACS Symp.Ser.*, **493**, p. 280 (1992)
35. **E.Chiellini**, S.D'Antone, R.Solaro, F.Masi, F.Menconi, L.Barazzoni, "Polymerization of C<sub>2</sub>-C<sub>6</sub>  $\alpha$ -olefins in the presence of modified Ziegler-Natta catalysts based on Titanium halides and organoaluminum sulfates", *ACS Symp. Ser.*, **496**, p. 56 (1992)
36. L.Komitov, S.T.Lagerwall, B.Stebler, **E.Chiellini**, G.Galli, A.Strigazzi, "On the electroclinic effect in smectic A\* polymers and low molar mass analogues" in "*Modern topics in liquid crystals*", A. Buka Ed., World Scientific, p. 301 (1993)



37. **E.Chiellini**, G.Galli, A.S.Angeloni, M.Laus, "Liquid crystal polymers with chiral sulfoxide groups as potential non-linear optic materials" in "*Organic materials for non-linear optics III*", G.J. Ashwell and D. Bloor Eds; Royal Soc. Chem., London, p. 169 (1993)
38. **E.Chiellini**, L.Bemporad, E.Dossi, C.Fichi, D.Giannasi, F.Morganti, R.Solaro, "New bioerodible-biodegradable hydrophilic polymers for biomedical applications", *Proceedings of the II Kyoto Siena Symposium*, p. 133 (1993)
39. R.Solaro, S.D'Antone, **E.Chiellini**, A.Rehab, A.Akelah, R.Issa, "Hydrogel-type Polymers in the Controlled Release of Phytodrugs" in "*Polymers from Agricultural Coproducts*", M.L.Fishman, R.B.Friedman, S.J. Huang Eds., ACS **575**, p. 112 (1994)
40. **E.Chiellini**, "Status of government policy, regulation and standards on the issue of biodegradable plastic materials in Italy" in "*Biodegradable Plastics and Polymers*", Y.Doï, K. Fukuda, Eds., Elsevier, p. 273 (1994)
41. **E.Chiellini**, M.Laus, "Liquid-crystalline polymers, main-chain" in "*The Encyclopedia of Advanced Materials*", D.Bloor, M.C.Flemings, R.J.Brook, S.Mahajan, R.W.Cahn Eds., Pergamon press, p. 1304 (1994)
42. **E.Chiellini**, R.Solaro, "Biodegradable polymeric materials based on polysaccharides derivatives" in "*Proceedings of S.P.R.I. Workshop on Sugarbeet and Sugarcane*", Helsinki, August, p. 235 (1994)
43. E.GrilloFernandes, I.Giolito, **E.Chiellini**, "Thermo-optical analysis of polypropilene-liquid crystalline polymer blends" in "*2° SIAP/4° SLAP/6° IMC*", Gramado - Brasil, 4-8 Settembre, **1**, p. 246 (1994)
44. G.Barsotti, **E.Chiellini**, E.Dossi, D.Giannasi, S.Giovannetti, G.Mazzanti, R.Solaro, "New Polymeric Hydrogels for the Removal of Uraemic Toxins" in "*Advanced Biomaterials in Biomedical Engineering and Drug Delivery Systems*", N.Ogata, S.W.Kim, J.Feijen, T.Okano, (Eds), Springer-Verlag Tokyo, p. 299 (1996)
45. **E.Chiellini**, R.Solaro, "Functional Synthetic and Semisynthetic Polymers in Biomedical Applications" in "*Advanced Biomaterials in Biomedical Engineering and Drug Delivery Systems*", N.Ogata, S.W.Kim, J. Feijen, T.Okano, (Eds), Springer-Verlag Tokyo, p. 28 (1996)
46. E.E.Chiellini, **E.Chiellini**, D.Giannasi, E.GrilloFernandes, R.Solaro, "New Polymeric Hydrogels for the Controlled Release of Proteic Drugs. DSC Investigation of Water Structure" in "*Advanced Biomaterials in Biomedical Engineering and Drug Delivery Systems*", N.Ogata, S.W.Kim, J.Feijen, T.Okano, (Eds) Springer-Verlag Tokyo, p. 347 (1996)
47. M.C.Breschi, **E.Chiellini**, F.Morganti, R.Solaro, "New Structurally modified cyclodextrins for controlled release of antihypertensive drugs" in "*Advanced biomaterials in Biomedical Engineering and Drug Delivery Systems*", N.Ogata, S.W.Kim, J.Feijen, T.Okano, Eds., Springer-Verlag Tokyo, p. 355 (1996)
48. **E.Chiellini**, E.Dossi, G.Mazzanti, R.Solaro, "New Polymeric Materials for the Treatment of Chronic Uremia", *Proceedings of the III Kyoto-Siena Symposium*, p. 111 (1996)
49. E.E.Chiellini, D.Giannasi, R.Solaro, **E.Chiellini**, E.GrilloFernandes, "Hybrid polymeric hydrogels for the controlled release of proteic drugs. DSC investigation of water structure" in "*Frontiers in Biomedical Polymer Applications*", Vol. 1, Ed R.M. Ottenbrite, Technomic Publ. Co.Inc., Basel, p. 13 (1998)
50. M.C.Breschi, **E.Chiellini**, F.Morganti, R.Solaro, "Inclusion complexes of antihypertensive drugs with new modified b-cyclodextrins" in "*Frontiers in Biomedical Polymer Applications*", Vol. 1, Ed. R.M. Ottenbrite, Technomic Publ. Co.Inc., Basel, p. 129 (1998)
51. **E.Chiellini**, M.Laus, "Main Chain Liquid Crystalline Semiflexible Polymers" in "*Handbook of Liquid Crystals - High Molecular Weight Liquid Crystals*", Vol. 3, Eds D.Demus, J.Goodby, G.W.Gray, H.-W.Spiess, V.Vill, Wiley-VCH, Weinheim, p. 26 (1998)
52. **E.Chiellini**, R.Bizzarri, P.Bonaguidi, P.Talamelli, R.Solaro, "Multifunctional Hydrophilic Polymers" in "*Proceedings of the American Chemical Society - Division of Polymeric Materials: Science & Engineering*", Vol. 79, p. 240 (1998)
53. **E.Chiellini**, E.E.Chiellini, F.Chiellini, R.Solaro, "Design of Polymeric Systems for Targeted Administration of Peptide and Protein Drugs" in "*Polymer Preprints, Division of Polymer Chemistry*", Inc. American Chemical Society, Vol. 39, No. **2** p. 182 (1998)
54. **E.Chiellini**, E.E.Chiellini, F.Chiellini, R.Solaro, J.Tomasi, V.Freecer, S.Miertus, "Modeling of the 3D Structure of IFN- $\alpha$ -k, Characterization of Its Surface Molecular Properties and Preliminary Evaluation of Its Interactions with b-Cyclodextrin Derivatives" in "*Frontiers in Biomedical Polymer Applications*", Vol. 2, Technomic, p. 31-49 (1999)
55. A.S.Angeloni, M.C.Bignozzi, **E.Chiellini**, G.Galli, M.Laus, "Poly(4'-ethoxy-4-(6-vinyloxyhexane) azobenzene)" in "*Macromolecular Syntheses*", vol.12, C.K.Ober (ed.), Wiley, New York, p. 153 (2000)
56. M.Laus, A.S.Angeloni, G.Galli, **E.Chiellini**, "Poly(ester- $\beta$ -sulphide)" in "*Macromolecular Syntheses*", Vol.12, C.K.Ober (ed.), Wiley, New York, p. 45 (2000)

57. A.S. Angeloni, M. Laus, **E. Chiellini**, G. Galli and C.K. Ober, "Poly[4-[(6-perdeuteromethacryloyloxy)hexyl-1-oxy]-4'-methoxyazobenzene]]" in *"Macromolecular Syntheses"*, Vol. 12, C.K. Ober Ed., Wiley, New York, p. 37 (2000)
58. **E. Chiellini**, "Environmentally Degradable Plastics. An Overview" in the *"Proceedings of the ICS-UNIDO on Environmentally Degradable Polymers - Plastic Materials and the Environment"*, Doha (Qatar), March 21-25, p. 1-20 (2000)
59. **E. Chiellini**, A. Corti, R. Solaro, A. Ceccanti, "Environmentally Degradable Plastics. Poly(vinyl alcohol) - A case study" in the *"Proceedings of the ICS-UNIDO on Environmentally Degradable Polymers - Plastic Materials and the Environment"*, Doha (Qatar), March 21-25, p. 103-118 (2000)
60. **E. Chiellini**, P. Cinelli, A. Corti, E.-R. Kenawy, S. Miertus, "Environmentally Degradable Plastic Composites Based on Waste Gelatin" in the *"Proceedings of the ICS-UNIDO on Environmentally Degradable Polymers - Plastic Materials and the Environment"*, Doha (Qatar), March 21-25, p. 119-131 (2000)
61. I.E. Serthatli, Y. Hepuzer, Y. Yagci, **E. Chiellini**, A. Rosati, G. Galli, "Design, Synthesis and Thermal Behavior of Liquid Crystalline Block Copolymers by Using Transformation Reactions", in *"Tailored Polymers & Applications"*, Y. Yagci, M.K. Mishra, O. Nuyken, K. Ito, G. Wnek (Eds.), VSP Publ., Utrecht, p. 175 (2000)
62. R. Bizzarri, F. Chiellini, **E. Chiellini**, C.K. Ober, W.M. Saltzman, R. Solaro, "New Biomaterials for Tissue Engineering" in *"Cornell Polymer Outreach Programme - 11th Annual Symposium"*, Cornell, P29 (2000)
63. R. Bizzarri, F. Chiellini, **E. Chiellini**, C.K. Ober, W.M. Saltzman, R. Solaro, "New Biomaterials for Tissue Engineering", *PolyMillennial 2000 - Symposium on Biorelated Materials*, Waikoloa, Hawaii (2000)
64. **E. Chiellini**, E.E. Chiellini, F. Chiellini, R. Solaro, "Design of Polymeric Systems for Targeted Administration of Peptide and Protein Drugs" in *"Polymeric Drugs & Drug Delivery Systems"*, Technomic Publ., Lancaster (USA), R.M. Ottenbrite & S.W. Kim Eds., p. 57 (2001)
65. **E. Chiellini**, P. Cinelli, S.H. Imam, L. Mao, "Composite Films Based on Poly(Vinylalcohol) and Lignocellulosic Fibres: Preparation and Characterization" in *"Biorelated Polymers - Sustainable Polymer Science and Technology"*, **E. Chiellini**, H. Gil, G. Brauneegg, J. Buchert, P. Gatenholm, M. van der Zee, Eds., Kluwer Academic/Plenum Publishers, New York (USA), p. 87 (2001)
66. **E. Chiellini**, P. Cinelli, E. Grillo Fernandes, E.-R. Kenawy, A. Lazzeri, "Composite Materials Based on Gelatin and Fillers From Renewable Resources: Thermal and Mechanical Properties" in *"Biorelated Polymers - Sustainable Polymer Science and Technology"*, **E. Chiellini**, H. Gil, G. Brauneegg, J. Buchert, P. Gatenholm, M. van der Zee, Eds., Kluwer Academic/Plenum Publishers, New York (USA), p. 101 (2001)
67. F. Schellauf, E. Grillo Fernandes, G. Brauneegg, **E. Chiellini**, "Properties of PHAs and Their Correlation to Fermentation Conditions" in *"Biorelated Polymers - Sustainable Polymer Science and Technology"*, **E. Chiellini**, H. Gil, G. Brauneegg, J. Buchert, P. Gatenholm, M. van der Zee, Eds., Kluwer Academic/Plenum Publishers, New York (USA), p. 115 (2001)
68. **E. Chiellini**, A. Corti, M. Kowalczyk, R. Solaro, "Biodegradation of Poly(vinyl alcohol)/Poly(*b*-Hydroxybutyrate) Graft Copolymers and Relevant Blends" in *"Biorelated Polymers - Sustainable Polymer Science and Technology"*, **E. Chiellini**, H. Gil, G. Brauneegg, J. Buchert, P. Gatenholm, M. van der Zee, Eds., Kluwer Academic/Plenum Publishers, New York (USA), p. 329 (2001)
69. **E. Chiellini**, R. Bizzarri, F. Chiellini, "Chemical Modification of Natural and Synthetic Polyesters" in *"Biopolymers, Vol. 4 - Polyesters III (Part B)"*, Wiley-VCH Verlag GmbH, Germany, pp. 29-374 (2001)
70. **E. Chiellini**, F. Chiellini, P. Cinelli, *Polymers from Renewable Resources in Degradable Polymers: Principles and Applications - Second Edition*, G. Scott Ed., 2<sup>nd</sup> Edition, Kluwer Academic Publishers, Dordrecht (NL), pp. 163-233 (2002)
71. **E. Chiellini**, F. Chiellini, P. Cinelli, V. Ivanova Ilieva, "Biobased Polymeric Materials for Agriculture Applications" in *"Biodegradable Polymers & Plastics"*, **E. Chiellini** & R. Solaro, Eds., Kluwer Academic/Plenum Press, London (UK), pp. 185-210 (2003)
72. A. Corti, F. Cristiano, R. Solaro, **E. Chiellini**, "Biodegradable Hybrid Polymeric Materials Based on Lignin and Synthetic Polymers" in *"Biodegradable Polymers & Plastics"*, **E. Chiellini** & R. Solaro, Eds. New York (USA), pp. 141-153 (2003)
73. F. Signori, R. Solaro, **E. Chiellini**, P.A.M. Lips, P.J. Dijkstra, J. Feijen, "Segmented Polyetheresters Containing Hydrogen Bonding Units" in *"Biodegradable Polymers & Plastics"*, **E. Chiellini** & R. Solaro, Eds., New York (USA), pp. 261-271 (2003)
74. D. Castiello, **E. Chiellini**, P. Cinelli, A. Corti, S. D'Antone, M. Puccini, M. Salvatori, S. Vitolo, "Polyethylene-Collagen Hydrolyzate Thermoplastic Blends: A New REutilization Route to Transform a WASTE of the Leather Industry into Environmentally Degradable Plastics", in *"Proceedings of the IULTCS II. EUROCONGRESS - Innovation and New Technologies for the Future of Global Leather Industry"*, Istanbul, (2006)

75. **E.Chiellini**, P.Cinelli, A.Corti, "Developments & Future Trends for Environmentally Degradable Plastics" in *"Renewable Resources and Renewable Energy: A Global Challenge"*, S. M.Graziani & P. Fornasiero (Eds), CRC Press, pp. 63-118 (2007)
76. A.M.Bianucci, **E.Chiellini**, I.Massarelli, "Computer-Aided Drug Discovery (CADD)-Efficiency Requirements in the Use of Software" in *"Monographs Computational Science" - Europe*, (2008)
77. **E.Chiellini**, A.Barghini, P.Cinelli, V.Ivanova Ilieva, "Overview of Environmentally-Compatible Polymeric Materials for Food Packaging" in *"Environmentally Compatible Food Packaging"*, **E.Chiellini** Eds. Woodhead Publishing Ltd, Cambridge (U.K.), Chapter 15, pp. 371-395 (2008)
78. G.Swift, R.Baciu, **E.Chiellini**, "Environmentally Degradable Polyolefins in ACS Symposium Series No. 1004/Trends" in *"Polymer Degradation and Performance"*, M C.Celina, J. S.Wiggins, N.Billingham, Eds., ACS, Washington, DC (USA), pp. 2-16 (2008)
79. S.K.Samal, F.Chiellini, C.Bartoli, E.GrilloFernandes, **E.Chiellini**, "Hybrid Hydrogels Based on Poly(vinylalcohol)-Chitosan Blends and Relevant CNT Composites" in *"Hydrogels - Biological Properties and Applications"*, R.Barbucci, Eds. Springer-Verlag, Milan (Italy), pp. 67-78 (2009)
80. A.M.Piras, C.Errico, M.Dash, M.Ferri, **E.Chiellini**, F.Chiellini, "Polymeric Nanoparticles for Targeted Release of Conventional and Macromolecular Drugs (preparation and characterization aspects)" in *"NANOPARTICLES: Synthesis, Characterization and Applications"*, R.S.Chaughule and R.Ramanujan, Eds., American Scientific Publishers, Stevenson Ranch, CA (USA), pp. 293-333 (2010)
81. N.Detta, D.Puppi, C.Errico, F.Chiellini, A.M.Piras, **E.Chiellini**, "Polymeric Nanofibre Constructs in Drug Delivery and Tissue Engineering" in *"NANOPARTICLES: Synthesis, Characterization and Applications"*, R.S.Chaughule and R.Ramanujan, Eds., American Scientific Publishers, Stevenson Ranch, CA (USA) - Chapter 9, pp. 271-291 (2010)
82. **E.Chiellini**, A.Corti, S.D'Antone, D.Wiles, "Oxobiodegradable Polymers: Present Status and Perspectives" in *"Handbook of Biodegradable Polymers"*, A.Lendlein & M.Schroeter, Eds., Wiley-VCH, Weinheim (Germany), pp. 379-397 (2011)
83. **E.Chiellini**, A.Corti, "Developments & Future Trends for Environmentally Degradable Plastics" in *"Renewable Resources and Renewable Energy: A Global Challenge"*, 2<sup>nd</sup> Edition, P.Fornasiero & S.M. Graziani, Eds., Taylor & Francis, London (UK), pp. 91-141 (2011)
84. M.El-Newehy, A.Barghini, S.Cometa, S.Miertus, **E.Chiellini**, "Polymeric Materials from Renewable Resources. Blends of Poly (3-Hydroxybutyrate) and Cellulose Acetate Derived from Rice Straw & Bagasse", in *"Renewable Resources and Renewable Energy: A Global Challenge"*, 2<sup>nd</sup> Edition, P. Fornasiero & S. M.Graziani, Eds., Taylor & Francis Group LLC, London (UK), pp. 159-187 (2011)
85. D.Puppi, F.Chiellini, M.Dash, **E.Chiellini**, "Biodegradable Polymers for Biomedical Applications", in *"Biodegradable Polymers: Processing, Degradation and Applications"*, G.P. Felton, Eds., Nova Science Publishers, New York (USA), pp. 545-604, (2011)
86. M.Köller, A.Salerno, A.Reiterer, H.Malli, K.Malli, K.H.Kettl, M.Narodoslawsky, H.Schnitzer, **E.Chiellini**, G. Braunnegg, "Sugarcane as Feedstock for Biomediated Polymer Production", in *"Sugarcane: Production, Cultivation and Uses - Book Series: Agriculture Issues and Policies"*. J.F.Gonsalves, K.D.Correia, Eds., Nova Science Publs, Inc, pp. 105-136 (2012)
87. **E.Chiellini**, A.Corti, "Oxo-biodegradable Plastics: Who They Are & to What They Serve - Present Status & Future Perspectives", in *"Polyolefin Compounds & Materials"*, M.A-A. Alma'adeed & I.Krupa,Eds-Springer Series on Polymer & Composite Materials, pp. 341-354 (2016)
88. L.PerezAmaro, M.A.Abdelwahab, A.Morelli, F.Chiellini, **E.Chiellini**, "Bacterial Polyesters: The Issue of Their Market Acceptance and Potential Solutions", M.Koller Eds., "Microbial Biopolyesters Production, Performance and Processing: Bioengineering, Characterization, and Sustainability", Ebook series: Recent Advances in Biotechnology. pp. 14-74 (eISBN 9781681083735). Bentham Publishers, (2016)
89. F.Zia, M.N.Anjum, M.J.Saif, T.Janil, K.Malik, I.Bibi, M.A.Zia, **E.Chiellini**, "Alginate-Poly(ethylene glycol) and Poly(ethylene oxide) Blend Materials in Algae Based Polymers, Blends and Composites", in *"Chemistry for Biotechnology and Materials Science"*, Elsevier Inc, pp. 581-601 (2017)
90. **E.Chiellini**, S.Cometa, A.Corti, "Polymeric Materials & Relevant Plastic Goods: Present Status & Future Perspective", in *"Taylor & Francis Encyclopedia"*, (in press), (2018)
91. L.G.PerezAmaro, V.Baldoneschi, D.Barsi, T.Guazzini, V.Ivanovallieva, A.Domenichelli, I.Chicca, **E.Chiellini**. "Polyhydroxyalkanoates (PHAs) Based Materials in Food Packaging Applications. State of the Art and Future Perspectives" in *"The Handbook of Polyhydroxyalkanoates"*, M.Köller Ed., Vol. 3 Chapter 12 (2020)

## LIST OF PATENTS

1. **E.Chiellini**, G.Galli, F.M.Saettone, B.Giannaccini, "Matrici polimeriche per il rilascio protratto di farmaci oftalmici, inserti oculari con esse ottenuti e loro procedimento di preparazione", *Ital. Patent* n. **48110** (1986)
2. **E.Chiellini**, R.Solaro, L.Bemporad, "Nuovi poliesteri funzionali da derivati glicidici ed anidridi cicliche" (New functional polyesters from glycidyl derivatives and cyclic anhydrides), *Ital. Pat. Appl.* **LU17713A/90** (1990)
3. **E.Chiellini**, R.Solaro, L.Bemporad, "Nuovi policarbonati da derivati glicidici ed anidride carbonica" (New polycarbonates from glycidyl derivatives and carbon dioxide), *Ital. Pat. Appl.* **LU17714A/90** (1990)
4. **E.Chiellini**, R.Solaro, S.D'Antone, L.Bemporad, "Nuovi derivati polifunzionali delle ciclodestrine" (New polyfunctional cyclodextrine derivatives), *Ital. Pat. Appl.* **01242214** (1990)
5. **E.Chiellini**, R.Solaro, G.Leonardi, R.Lisciani, "Idrogeli a base di policarbossilati sintetici e proteine per il rilascio controllato di farmaci e procedimento per la loro preparazione" (Hydrogels based on synthetic polycarboxylates and proteins for the controlled release of drugs and procedure for their preparation), *Ital. Pat. Appl.* **RM91A000260** (1991)
6. **E.Chiellini**, R.Solaro, S.D'Antone, L.Bemporad, "Polyfunctional derivatives of cyclodextrin", *Eur. Pat. Appl.* **91830497.3** (1991)
7. **E.Chiellini**, R.Solaro, L.Bemporad, "Functional Polyesters from Glycidyl Derivatives and Cyclic Anhydrides or Carbon Dioxide", *Eur. Pat. Appl.* **EP 0 486 437 B1** (1991)
8. **E.Chiellini**, R.Solaro, G.Leonardi, R.Lisciani, G.Mazzanti, "Synthetic polycarboxylates and proteins hydrogels for drug sustained release and process for the production thereof", *Eur. Pat. Appl.* **0 509 968 A1** (1992)
9. G.Barsotti, **E.Chiellini**, S.Giovanetti, G.Mazzanti, R.Solaro, "Uso di sostanze e composizioni di natura polimerica per il trattamento dell'Uremia tramite il controllo di fattori tossici e/o dipsogenici e dell'equilibrio idrico-salino", *Ital. Patent.Appl.* **01274002** (1994)
10. **E.Chiellini**, L.Komitov, S.T.Lagerwall, B.Stebler, A.Strigazzi, "Dispositivo elettro-ottico a cristalli liquidi con strati di allineamento mediatori di commutazione", *Ital. Pat.* (to INFM), **1258411 (RM 92 A000509)** (1996)
11. M.Biasci, **E.Chiellini**, M.Laus, A.Rinaldi, "Procedimento per la Produzione di un Materiale Polimerico Composito a Base di PVC Intercalato su un'argilla Organofila e Materiale Polimerico Così Ottenuto.", *Ital. Pat. Appl. (to Laviosa)*, **FI/011938/IN** (1996)
12. A.Carlsson, **E.Chiellini**, E.E.Chiellini, F.Chiellini, J.Cowdall, J.Davies, G.Mazzanti, M.Roberts, E.Soderlind, R.Solaro, "Microparticelle per il rilascio controllato di molecole biologicamente attive e loro uso in terapia, profilassi e diagnostica in vitro e in vivo", *Ital. Pat. Appl.* **RM97A0418** (1997)
13. A.Carlsson, **E.Chiellini**, E.E.Chiellini, J.Cowdall, J.Davies, G.Mazzanti, M.Roberts, E.Soderlind, R.Solaro, "Microparticelle a base di materiali polimerici ibridi per il rilascio controllato di molecole biologicamente attive, procedimento per la loro preparazione e usi in terapia, profilassi e diagnostica in vitro e in vivo", *Ital. Pat. Appl.* **RM97A0417** (1997)
14. **E.Chiellini**, G.Galli, L.Komitov, S.T.Lagerwall, B.Stebler, A.Strigazzi, "Dispositivo elettroottico a cristalli liquidi polimerici e relativo processo di realizzazione", *Italian Patent (to CNR)* **1277946** (Appl. RM95/A000615) (1997)
15. E.Bargiacchi, **E.Chiellini**, G.Costa, S.Miele, "Procedimento per la Formulazione di un Fertilizzante Azotato Stabile in Forma Liquida per il Rilascio dell'Azoto Protratto nel Tempo, *Brevetto Int.* n. **MI98A 001786** (1998)
16. A.Carlsson, **E.Chiellini**, E.E.Chiellini, J.Cowdall, J.Davies, G.Mazzanti, M.Roberts, E.Soderlind, R.Solaro, "Microparticles based on hybrid polymeric materials for controlled release of biologically active molecules. A process for preparing the same and their uses for in vivo and in vitro therapy, prophylaxis and diagnostics" PCT (to ISI, Polymer Lab, Scotia LipidTeknik), **PCT/IT98/00191** (1998)
17. A.Carlsson, **E.Chiellini**, E.E.Chiellini, F.Chiellini, J.Cowdall, J.Davies, G.Mazzanti, M.Roberts, E.Soderlind, R.Solaro, "Microparticles for controlled delivery of biologically active molecules and their employment for in vitro and in vivo therapy, prophylaxis and diagnostics", PCT (to ISI, Polymer Lab, Scotia LipidTeknik), **PCT/IT98/00192** (1998)
18. L.Andruzzi, **E.Chiellini**, G.Galli, M.Laus, M.Dahling, T.Undrum, "Block copolymers with perfluorinated side-chain blocks and the preparation thereof", *Norwegian Patent (to Jotun)*, **1999.0119** (1999)

19. E.Bargiacchi, **E.Chiellini**, P.Cinelli, A.Corti, S.Magni, S.Miele, "Liquid and Semi-dry Self Consisting Mulch", *Italian Patent Appl.* (to Sipcam) (1999)
20. L.Andruzzi, **E.Chiellini**, G.Galli, M.Laus, M.Dahling, T.Undrum, "Block Copolymers with Perfluorinated Side-Chain Blocks by Controlled Radical Polymerization", *PCT Application* (to Jotun) (1999)
21. E.Bergamini, Z.Gori, F.Lenci, A.Sgarbossa, **E.Chiellini**, R.Bizzarri. "Composizioni Contendenti Dolicolo per Uso Dermatologico e Cosmetico". *Brevetto Italiano MI2002A 001204* (2002)
22. A.Barban, E.Bargiacchi, **E.Chiellini**, L.Foschi, S.Magni, S.Miele. "Metodo di Trattamento di una Traversina in Legno di un Binario Ferroviario". *Brevetto Italiano (MI 2004) - A001050* (2004)
23. A.Barban, E.Bargiacchi, **E.Chiellini**, L.Foschi, S.Magni, S.Miele, G.Severin. "Manufatto Cementizio e Relativo Metodo di Fabbricazione", *Brevetto Italiano (MI 2004) A001052* (2004)
24. M.Bertolucci, **E.Chiellini**, G.Galli, E.M.Lien, M.Dahling, T.Undrum. "Polymer, fremgansmate for fremstilling, avendelse og sammensetning inneholdende polymeren", *EU PAT n. 2003 0756* (2004)
25. N. Moszner, U. Salz, V. Rheinberger, G. Galli, M. Ragnoli, **E. Chiellini**, "Dental Material with Unusual Florine Distribution", *European Patent* (applicant Ivoclar AG) 05105472.4 (2005)
26. L.Komitov, **E.Chiellini**, A.Morelli, G.Galli, "Alignment layer for LCD", *European Patent n. EP08159070* (assigned to L. Komitov, SE) (2008)
27. **E.Chiellini**, F.Chiellini, C.Errico, N.Detta, A.M.Piras, D.Puppi, "Procedimento e Dispositivo di Produzione di Strutture Tubolari in Materiali Polimerici Termoplastici" *Brevetto Italiano n. RM2009A00285* a INSTM (2009)
28. C. Errico, F. Chiellini, N. Detta, A.M. Piras, D. Puppi, **E. Chiellini**, "Procedimento e Dispositivo di Elettrofilatura per la Produzione di Nano/Microfibre Polimeriche Unidirezionate", *Brevetto Italiano n. RM2009A00286* a INSTM (2009)
29. E.Chiellini, L.Landini, "Sacco Autosaldante Idrosolubile e Biodegradabile e Chiusura Ermetica", *Italian Patent RM2006U000057* (2010)
30. G.Galli, E.Martinelli, **E.Chiellini**, D.Williams, C.Davies, "Biofouling Resistant Composition", *European Patent, Application Numbers 1115524.9-2109* (2011)
31. **E.Chiellini**, M.Bernabò, L.Landini, "Contenitore rigido idrosolubile a rilascio controllato del suo contenuto", *Italian Patent RM2011A000594* (2011)
32. **E.Chiellini**, F.Chiellini, P.M.Ferruti, A.M.Piras, E.Ranucci, "Nanoparticelle a base di matrici macromolecolari biodegradabili ottenute per combinazione elettrostatica tra poliammidoammine e polisaccaridi", MI2012A001728 assigned to INSTM Consortium (2012)
33. **E.Chiellini**, F.Chiellini, P.M.Ferruti, A.M.Piras, E.Ranucci, "Nanoparticelle polimeriche a base di matrici poli(amidoamminiche) biodegradabili reticolate mediante funzionalità covalenti suscettibili di attacco idrolitico", MI2012A001729 assigned to INSTM Consortium (2012)
34. **E.Chiellini**, M.Bernabò, L.Landini, "Biodegradable water soluble rigid container with controlled release of its content", *IPN WO 2013/069037 A1* (2013)
35. T.Guazzini, L.Perez Amaro, L.Landini, F.Sandias, **E.Chiellini**. "Gioco masticabile idrosolubile per animali"- "Commestible chewable hydrosoluble item for animals", *Italian Patent Application* (to New Project S.r.l.) (2020)
36. L.G.PerezAmaro, V.Baldoneschi, T.Guazzini, D.Barsi, L.Landini, F.Sandias, **E.Chiellini**. "Pigmento per la tintura di fibre, filati, tessuti e capi di abbigliamento", *PCT/IT/2020/000036* (to Antica Valseschio S.r.l.) (2020)
37. L.G.PerezAmaro, T.Guazzini, L.Landini, F.Sandias, **E.Chiellini**. "Metodo di tintura tracciante per fibre, filati, tessuti e capi di abbigliamento ", *PCT/IT/2020/000037* (to Antica Valseschio S.r.l.) (2020)
38. L.G.PerezAmaro, A.Domenichelli, L.Landini, F.Sandias, **E.Chiellini**. "Metodo per tintura per fibre naturali a base proteica per ottenimento di filati, tessuti e capi di abbigliamento con proprietà fluorescente", *PCT/IT/2020/000038* (to Antica Valseschio S.r.l.) (2020)

## LIST OF MEMBERSHIPS

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- ◆ American Chemical Society
- ◆ American Chemical Society, Division of Polymeric Materials Science & Engineering & Polymer Division
- ◆ International Liquid Crystal Society
- ◆ European Degradable Polymer Society (EDPS)
- ◆ Bio/Environmentally Polymer Society (BEPS)
- ◆ Advisory Board of Oxo-Biodegradable- Plastics – Federation (OBPF)

## REPRESENTATIVE POSITIONS

- 1986-1994 - Elected Member of the Advisory Committee for Chemical Sciences of the Ministry of the University and Scientific & Technological Research of Italy
- 1990-1994 - Member of the Executive Board of the International Liquid Crystal Society
- 1992-1998 - President of the Italian Society of Liquid Crystals.
- 1995-2009 - Elected Member of the Scientific Committee of the Interuniversity Consortium of Materials Science & Technology (INSTM).
- 1995-2010 - Director of the INSTM Section on "Polymeric Materials for Environmental & Biomedical Applications"
- 1999-2005 - Member of the Executive Board of Bio/Environmentally Polymer Society (BEPS)  
- President pro-tempore of the European Degradable Polymer Society (EDPS)
- 2002-2010 - President of the Consociated Doctorate Research Course in Biomaterials (University of Pisa) (<http://www.dcci.unipi.it/biomateriali>) – BIOS Doctorate Research School [[www.bios-school.org](http://www.bios-school.org)]
- 2013-2015 - Member of the Directive Committee of the Italian Association of Ecocompatible Plastics (AssoEcoPlast).
- 2013-2017 - Co-opted Member of the Scientific Advisory Committee of the Interuniversity National Consortium for Materials Science & Technology (INSTM).
- 2016 – date - Member of the Advisory Committee of Oxo – Biodegradable Plastics Federation.

## AWARDS

- Various Medals Gained as Member of a Rowing Team in Nationals & International Competitions.
- Medals Gained by My German Pointer Dogs in Work Competitions.
- "Giulio Natta" 2018 Chemistry Award.