

CURRICULUM VITAE

October 2023

NAME: Evan MITSOULIS

Professor Emeritus

BUSINESS ADRESS: School of Mining and Metallurgical Engineering

Section of Metallurgy & Materials Technology

National Technical University of Athens Zografou 157 80, Athens, GREECE

TELEPHONE (mobile) (30) 6945-909918

E-MAIL: mitsouli@metal.ntua.gr

DATE OF BIRTH: September 17, 1954

PLACE OF BIRTH: Athens, Greece

CITIZENSHIP: Greek, Canadian

EDUCATION:

1972-1977 National Technical University of Athens, Athens, Greece.

Dipl. Chem. Eng., 1977

Thesis Title: Production of Apple Wine

Supervised by: Dr. G. Valkanas

1977-1979 University of New Brunswick (UNB), Fredericton, N.B., Canada.

Master of Science in Engineering (M.Sc.E.), 1979

Thesis Title: Liquid Pool Fires Supervised by: Dr. F.R. Steward

1980-1984 McMaster University, Hamilton, Ontario, Canada.

Doctor of Philosophy (Ph.D.), 1984

Thesis Title: Finite Element Analysis of Two-Dimensional

Polymer Melt Flows

Supervised by: Dr. J. Vlachopoulos and Dr. F.A. Mirza

LANGUAGES: English, French, Greek (fluently), German, Italian (very well),

Spanish (reading ability)

EMPLOYMENT HISTORY:

Summer 1976: Staatliche Lehr- und Versuchsanstalt für Wein- und Obstbau,

Weinberg, W. Germany

Summer 1977: Institute for Agriculture and Wine Research, Athens, Greece

1977-1984: Teaching Assistant at UNB and McMaster University

1984-1989: Assistant Professor, Dept. Chem. Eng., University of Ottawa

1989-1994: Associate Professor, Tenured, Dept. Chem. Eng., University of Ottawa

1994-1999: Full Professor, Tenured, Dept. Chem. Eng., University of Ottawa

Director, CAMP - R&D

(Computer-Aided Materials Research - Rheology & Design)

1998-2022: Full Professor, School of Mining Eng. & Metallurgy, National

Technical University of Athens

Director, CAMP - R&D

(Computer-Aided Materials Research - Rheology & Design)

2023-today: Professor Emeritus

SABBATICAL LEAVES:

1990/10-1991/03: Visiting Professor, CEntre de Mise En Forme des matériaux -

CEMEF, Ecole des Mines de Paris, Sophia-Antipolis, France

1990/07-1990/10 and Visiting Professor, Department of Chemical Engineering, 1991/04-1991/07: National Technical University of Athens, Athens, Greece

1994/07-1994/12 and Visiting Professor, Department of Chemical Engineering, 1995/03-1995/08: National Technical University of Athens, Athens, Greece

1995/01-1995/03: Visiting Professor, Laboratoire de Rhéologie,

Université de Grenoble, Grenoble, France

AREAS OF INTEREST:

Computer Applications in Polymer Processing and Rheology CAD/CAM Techniques Simultaneous Fluid Flow, Heat and Mass Transfer in Chemical Engineering Systems Simulation of Porous Media for Enhanced Oil Recovery Expert Systems in Environmental Engineering

TEACHING EXPERIENCE:

A. Sept. 1984 – Dec. 1997: Full-time teaching at the University of Ottawa

Courses taught:

- 1. CHE1120 Introduction to Chemical Engineering
- 2. CHE2319 Elements of Chemical Process Synthesis
- 3. CHE2717 Introduction à l'analyse et la conception des procédés chimiques
- 4. CHE2719 Eléments de synthèse dans les procédés chimiques
- 5. CHE3321 Chemical Engineering Practice
- 6. CHE3327 Thermodynamic Analysis of Processes
- 7. CHE3331 Application of Mathematical Methods in Chemical Engineering
- 8. CHE4331 Application of Analytical Methods to Chemical Engineering Processes
- 9. CHE4333 Fundamentals of Polymer Processing
- 10. CHE4342 Plant Design-I
- 11. CHE4343 Computer-Aided Unit Design in Chemical Engineering

12. CHE8120 - Polymer Processing and Rheology (graduate course)

B. Jan. 1998 – Aug. 2022: Full-time teaching at the National Technical University of Athens

Courses taught:

- 1. Polymers and Composites
- 2. Polymer and Composite Processing
- 3. Automatic Process Control
- 4. Rheology and Polymer Processing (graduate course)
- 5. Dynamic and Mechanical Material Properties Rheology (graduate course)
- 6. Polymer Engineering (graduate course)
- 7. Numerical Methods in Non-Newtonian Fluid Processing (graduate course)
- 8. Polymer Processing (graduate course)
- **C.** Sept. 1977 July 1984: Teaching assistant at McMaster University and UNB in several courses including:
- Fluid Mechanics (also occasional lecturing)
- Chem. Eng. Lab in Unit Operations
- Computer Programming
- Heat Transfer
- Strength of Materials
- Chemistry Lab

EXTRA-CURRICULAR ACTIVITIES:

Swimming (Member of the National Swimming Team of Greece, 1970-1972) Jogging, Music, History, Philosophy

AWARDS:

- 1. *Best Technical Paper Award*, Extrusion Division, 1988 ANTEC, Society of Plastics Engineers, Atlanta, GA, USA, May 1988 (paper B13, republished as A28).
- 2. Award of Appreciation for Outstanding Service, Blow Molding Division, 1990 ANTEC, Society of Plastics Engineers, Dallas, TX, USA, May 1990 (paper B20).
- 3. Citation for one of the Best Technical Papers, Applied Rheology Special Interest Group, 1994 ANTEC, Society of Plastics Engineers, San Francisco, CA, USA, May 1994 (paper B32).
- 4. 3rd Best Presentation Award, THALES Awards of NTUA, 2005, for Basic Research, Athens, Greece, July 2005. "Development of Rheological Equations for Composite Materials with a Polymeric Matrix".

HONOURS:

- 1. Elected Fellow of the Chemical Institute of Canada (FCIC), March 1994.
- 2. Médaille d'Honneur, Société d'Encouragement au Progrès, France, September 2000.
- 3. Bingham Fluid Medal, 2nd Viscoplastic Workshop, Monte Verita, Switzerland, October 2007.
- 4. Elected Senior Member of the Society of Plastics Engineers (SSPE), USA, September 2008.
- 5. Elected Fellow of the Society of Plastics Engineers (FSPE), March 2009.

PROFESSIONAL MEMBERSHIP AND OTHER ACTIVITIES:

a) Professional Membership:

- 1. Technical Chamber of Greece (TEE) (1977).
- 2. Association of Professors of the University of Ottawa (APUO) (1984).
- 3. Society of Plastics Engineers (SPE) (1982).
- 4. Chemical Institute of Canada (CIC) (1983). (Elected Fellow, FCIC) (1994).
- 5. Canadian Rheology Group (CRG) (1983).
- 6. Canadian Society for Chemical Engineering (CSChE) (1983).
- 7. American Institute of Chemical Engineers (AIChE) (1983).
- 8. Society of Rheology (SOR) (1984).
- 9. Polymer Processing Society (PPS) (1985).
- 10. Association of Professional Engineers of Ontario (APEO) (Licensed Engineer, P.Eng.) (1989).
- 11. Computational Fluid Dynamics Society of Canada (CFDSC) (1992).
- 12. World User Association Computational Fluid Dynamics (WUA-CFD) (1992).
- 13. New York Academy of Sciences (1995).
- 14. Hellenic Society of Rheology (Founding Member and 1st President) (1996).
- 15. European Scientific Association for Material Forming (ESAFORM) (Member of the Scientific Advisory Committee) (1997).
- 16. Scientific Society of Technologists of Mineral Wealth (2002).

b) University Committees at the University of Ottawa:

- Commission on Graduate Studies in the Sciences (1991-1994; 1996).
- 2. Graduate Studies Coordinator (1991-1994, 1996).
- 3. CAD/CAM Committee of the Faculty of Engineering (1985-1989).
- 4. Departmental Teaching Personnel Committee (1985-1987, 1996-1997).
- 5. Coordinator for Engineering, Univ. of Ottawa Day (Open House) (1986-1990).
- 6. Faculty Council (1985-1986, 1995-1997).
- 7. Teaching Effectiveness Committee (1985-1990).
- 8. CIC-CSChE Student Chapter Advisor (1984-1988).
- 9. Engineering Computing Committee (1986-1990).
- 10. Engineering United Way Committee (1996-1997).
- 11. Departmental Curriculum Committee (1995-1997, Chairman from Feb. to Dec. 1997).

c) University Committees at the National Technical University of Athens:

- 1. Commission on Appraisal of NTUA Teaching and Services (1998-1999).
- 2. Senate Commission on University Building Projects (1998-present).
- 3. Deputy Member in Departmental Multipurpose Unit (1998-1999) and Member (1999-present).
- 4. Coordinator for Departmental Curriculum Guide (1998-present).
- 5. Coordinator for Section Research Guide (1998-present).
- 6. Executive Committee for Interdepartmental Graduate Programme "Automation Systems" (1999-2007).
- 7. Member of the Senate (2000-2001)

d) Other Duties:

- **Examiner** of Co-op reports, M.A.Sc. and Ph.D. theses.
- Regular Peer Reviewer for proposals submitted to NSERC (Canada), FCAR (Quebec), NSF (USA), ANSF (Australia).
- Peer Reviewer for proposals submitted to GGET (Greece) (PEPER 2000).
- Regular Journal Referee:
 - 1. Canadian Journal of Chemical Engineering
 - 2. American Journal of Chemical Engineering
 - 3. Polymer Engineering and Science
 - 4. Polymer Composites
 - 5. Advances in Polymer Technology
 - 6. International Polymer Processing
 - 7. Journal of Applied Polymer Science
 - 8. Journal of Rheology
 - 9. Journal of Non-Newtonian Fluid Mechanics
 - 10. Rheologica Acta
 - 11. Rubber Chemistry and Technology
 - 12. International Journal for Numerical Methods in Fluids
 - 13. Urban Atmosphere/Atmospheric Environment
 - 14. Journal of Engineering Mathematics
 - 15. Global Nest: The International Journal
 - 16. International Journal of Forming Processes
 - 17. Computer Methods in Applied Mechanics and Engineering
 - 18. Biotechnology Progress
 - 19. Chemical and Biochemical Engineering Quarterly
 - 20. Physics of Fluids
 - 21. Journal of Polymer Engineering
 - 22. Chemical Engineering and Science
 - 23. Journal of Fluids Engineering
 - 24. Journal of Plastic Film & Sheeting
 - 25. Industrial and Engineering Chemistry Research
 - 26. International Journal of Material Forming
- President (or Chair) and Organizer and regular Session Chair and Session
 Organizer in several International Conferences:

- 1. **President** of the 1st International Symposium on Rheology and Computational Fluid Mechanics organized by the Hellenic Society of Rheology in memory of Prof. T.C. Papanastasiou, in Nicosia, Cyprus, July 1996.
- 2. **President** of the 2nd International Symposium on Rheology organized by the Hellenic Society of Rheology in Herakleion, Crete, Greece, August 1998.
- 3. **Organizer** of an International Workshop on Numerical Simulation of Polymer Processing (NMPP 99), Paris, France, October 1999.
- 4. **Co-Chair** and **Organizer** of the PPS-2003, Europe/Africa Regional Meeting of the Polymer Processing Society, Athens, Greece, September 2003.
- 5. **President** and **Organizer** of the 4th International Symposium on Rheology organized by the Hellenic Society of Rheology in Athens, Greece, June 2004.
- 6. **President** and **Organizer** of the 5th International Symposium on Rheology organized by the Hellenic Society of Rheology in Rhodes, Greece, June 2007.
- 7. **President** and **Organizer** of the XVth International Workshop on Numerical Methods for Non-Newtonian Flows in Rhodes, Greece, June 2007.
- 8. **President** and **Organizer** of the PPS-2009, Europe/Africa Regional Meeting of the Polymer Processing Society, Larnaca, Cyprus, October 2009.
- 9. **President** and **Organizer** of the 6th International Symposium on Rheology organized by the Hellenic Society of Rheology in Athens, Greece, June 2011.
- Member of the Editorial Board of Scientific Journals and of the Scientific Committee of Conferences:

A. Scientific Journals

- 1. **Member** of the Editorial Board of the International Journal of Forming Processes (1997-2005).
- 2. **Member** of the Editorial Board of the "Rhéologie", Journal of the Groupe Français de Rhéologie (since 2001).
- 3. **Member** of the Editorial Board of the Journal "Applied Rheology" (since 2003).
- 4. **Member** of the Editorial Board of the Journal "Computer Methods in Materials Science" (since 2006).
- 5. **Member** of the Editorial Board of the "Journal of Non-Newtonian Fluid Mechanics" (from 2007 to 2021).
- 6. **Member** of the Editorial Board of the "International Journal of Polymer Materials" (since 2008).
- 7. **Member** of the Editorial Board of the International Journal of Material Forming (since 2008).

B. Scientific Conferences

- 1. **Member** of the Editorial Board of the 5th European Rheology Conference, Portoroz, Slovenia, September 1998.
- 2. **Member** of the Editorial Board of the 2nd ESAFORM Conference on Material Forming, Guimaraes, Portugal, April 1999.
- 3. **Member** of the Editorial Board of the 3rd ESAFORM Conference on Material Forming, Stuttgart, Germany, April 2000.
- 4. **Member** of the Editorial Board of the 5th ESAFORM Conference on Material Forming, Cracow, Poland, April 2002.

- 5. **Member** of the Editorial Board of the 6th ESAFORM Conference on Material Forming, Salerno, Italy, April 2003.
- 6. **Member** of the Editorial Board of the 8th ESAFORM Conference on Material Forming, Cluj-Napoca, Romania, April 2005.
- 7. **Member** of the Editorial Board of the 10th ESAFORM Conference on Material Forming, Zaragoza, Spain, April 2007.
- 8. **Member** of the Editorial Board of the 11th ESAFORM Conference on Material Forming, Lyon, France, April 2008.
- Secretary of the International Polymer Processing Society (since 2001).
- **Elected member** of the Board of Directors of the European Scientific Association for Material Forming (ESAFORM) (April 2002-April 2008).

RESEARCH GRANTS:

Agency	Amt. rec'd/annum	Period covered		
Rector's Fund (Univ. of Ottawa) (Operating)	8,000	1984-1985		
NSERC (Operating)	18,000	1985-1986		
Rector's Fund (Univ. of Ottawa)	5,000	1985		
NSERC (Operating)	17,280	1986-1988		
MCU (Prov. of Ontario) (Operating)	3,500	1987		
URF (Univ. of Ottawa) (Operating)	3,500	1987-1988		
Faculty Development Fund (Equipment)	5,000	1988 (Winter)		
NSERC (Operating)	30,000	1988-1990		
URF (Univ. of Ottawa) (Equipment)	2,500	1988 (Fall)		
URF (Univ. of Ottawa) (Equipment)	3,750	1989 (Spring)		
NSERC (Infrastructure)				
(with Profs. <u>Hornof</u> , Neale, Duvnjak)	15,000	1989-1990		
Dean's Fund (Operating)	14,000	1989-1991		
URF (Univ. of Ottawa) (Operating)	3,500	1990 (Winter)		
OCMR (Operating)				
(with Profs. Vlachopoulos, Hrymak				
of McMaster University)	64,000	1990-1992		
NSERC (Collaborative)	6,000	1990-1991		
NSERC (Operating)	34,000	1991-1993		
URF (Univ. of Ottawa) (Equipment)	2,500	1992 (Winter)		
OCMR (Operating)	40,000	1993-1994		
OCMR (Operating)	35,000	1994-1996		
NSERC (Operating)	31,740	1994-1998		
NSERC (Equipment)	32,509	1995		
OCMR (Equipment)	20,000	1995		
Univ. of Ottawa (Equipment)	5,834	1995		
OCMR (Operating)	45,000	1996-1997		
OCMR (Operating)	20,000	1997		
OCMR (Equipment)	9,000	1997		
NSERC (Operating)	32,780	1998-2002 *****		
PENED'99 (Operating)	45,000,000 drs	2000-2001		
(with Profs. Tsamopoulos, Univ. Patras, Spathis, NTUA)				

Greece-Germany (Collaborative) (with Prof. Münstedt, Univ. Erlangen) SOCRATES, Greece-Cyprus (Teaching) (with Prof. Georgiou, Univ. Cyprus) ARCHIMEDES, NTUA (Basic Research) Greece-Slovenia (Collaborative)	4,200,000 despenses for 3,000,000 despenses	or visits	2000-2001 2000-2012 2000-2001
(with Prof. Zupancic, Univ. Ljubljana)	4,200,000 drs.	2001-	2003
THALES, NTUA (Basic Research)	2,400,000 (€5,869.41)		2002-2004
Greece-Slovenia (Collaborative)	,		
(with Prof. Zupancic, Univ. Ljubljana)	4,200,000 drs. (€11,720)	2003-	2005
HERAKLEITOS, GGET (Basic Research)	€34,046.00		2002-2005
PIAM, EU (Basic Research)	€32,107.00		2004-2006
Greece-Slovenia (Collaborative)	•		
(with Prof. Zupancic, Univ. Ljubljana)	€11,740	2005-	2007
KARATHEODORI, NTUA (Basic Research)	€15,000.00		2007-2009
PEBE, NTUA (Basic Research)	€15,000.00		2009-2011
THALES, (Collaborative Basic Research)	€540,000.00)	2012-2015

SUPERVISORSHIPS:

(past)

- 5 Ph.D. completed (Kiriakidis, Hannachi, Missirlis, Argyropaidas, Sofou)
- 7 M.A.Sc. completed (Wagner, Heng, Abdali, Atsbha, Barakos, Spanou, Beaulne)
- 9 M.Eng. completed (Chung, Iosipou, Athanasopoulos, Mihopoulos, Mavridis, Galazoulas, Ntagas, Psarreas, Kotsos)
- 11 B.A.Sc. completed (Sturgeon, Pham, Bhargava, Blackery, Argyropaidas, Kammer, Zisis, Panoglou, Papoulias, Matsoukas, Katopodis)
- 1 Post-doctoral fellow (Sept. 1988 April 1990) (X.-L. Luo)
- 1 Post-doctoral fellow (July 1990 Dec. 1991) (Park)
- 1 Post-doctoral fellow (Nov. 1991 May 1992) (Loest)
- 1 Post-doctoral fellow (Nov. 1991 Dec. 1992) (Kiriakidis)
- 1 Post-doctoral fellow (May 1994 Oct. 1995) (Erlikhman)
- 1 Post-doctoral fellow (Oct. 1995 Dec. 1995) (Kangni)
- 1 Post-doctoral fellow (Sept. 1996 Apr. 1997) (H.-Q. Luo)
- 1 Visiting Professor (Mar. 1993 Dec. 1993) (Kajiwara)
- 1 Research Assistant (Mar. 1994 Apr. 1995) (Barakos)
- 1 Research Assistant (Oct.-Dec. 1995) (Xie)
- 1 Research Assistant (Jan.-Apr. 1996) (Fatemi)
- 4 Research Assistants (Jan. 2000 Oct. 2001) (Missirlis, Beis, Latsa, Goulas)
- 2 Research Assistants (Jan. 2000 Oct. 2001) (Argyropaidas, Missirlis)
- 2 Research Assistants (Mar. 2003 Dec. 2003) (Mavridis, Kotsos)
- 2 Research Assistants (Oct. 2002 Oct. 2004) (Sofou, Papoulias)
- 2 Research Assistants (Oct. 2005 Oct. 2007) (Kotsos, Zisis)
- 2 Research Assistants (Feb. 2007 Feb. 2009) (Zisis, Sofou)
- 1 Research Assistant (Nov. 2009 Nov. 2011) (Zisis)
- 2 Post-doctoral fellows (Jan. 2012 2015) (Karapetsas, Zisis)

LIST OF PUBLICATIONS:

- A. In Refereed Journals: 175
- B. In Refereed Conference Proceedings: 136
- C. Abstracts Presented at Conferences and Workshops: 174
- D. Chapters in Books: 13
- E. Publications in Greek Journals and Periodicals: 3

TOTAL: 501

A. In Refereed Journals

- **175. Mitsoulis, E.,** Hatzikiriakos, S.G., "60 Years of the Kaye-Bernstein, Kearsley, Zapas Rheological Constitutive Law for Polymers", Phys. Fluids, **35**, 54 manuscript pages (2023).
- **174. Mitsoulis, E.,** Polychronopoulos, N.D., Hatzikiriakos, S.G., "Calendering of Thermoplastics: Models and Computations", Intern. Polym. Proc., **37**, 341-356 (2022).
- **173. Mitsoulis, E.,** Kontopoulou, M., "Special Issue for John Vlachopoulos", Intern. Polym. Proc., **37**, 339-340 (2022).
- **172.** Ghahramani, N., Georgiou, G.C., **Mitsoulis, E.,** Hatzikiriakos, S.G., "J.G. Oldroyd's Early Ideas Leading to the Modern Understanding of Wall Slip", J. Non-Newtonian Fluid Mech., **293**, 104566, DOI: 10.1016/j.jnnfm.2021.104566 (2021).
- 171. Stieger, S., Mitsoulis, E., Walluch, M., Ebner, C., Kerschbaumer, R.Ch., Haselmann, M., Mostafaiyan, M., Kämpfe, M., Kühnert, I., Wießner, S., and Friesenbichler, W., "On the Influence of Viscoelastic Modeling in Fluid Flow Simulations of Gum Acrylonitrile Butadiene Rubber", Polymers, 13, 2323, https://doi.org/10.3390/polym13142323, 1-18 (2021).
- **170. Mitsoulis, E.,** Hatzikiriakos, S.G., "Rheological Properties Related to Extrusion of Polyolefines", Polymers, **13**, 489, https://doi.org/10.3390/polym13040489, 1-12 (2021).
- **169**. Stieger, S., Kerschbaumer, R.Ch., **Mitsoulis, E.,** Fasching, M., Berger-Weber, G.R., Friesenbichler, W., and Sunder, J., "Contraction and Capillary Flow of a Carbon Black Filled Rubber Compound", Polym. Eng. Sci., October 2019, https://doi.org/10.1002/pen.25256, 1-12 (2019).
- **168**. Jabbari, M., McDonough, J., **Mitsoulis, E.,** Hattel, J.H., "Application of a Projection Method for Simulating Flow of a Shear-Thinning Fluid", Fluids, **4**, 124-140 (2019).
- **167**. Tomkovic, T., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Contraction Flow of Ionomers", J. Non-Newtonian Fluid Mech., **262**, 131-141 (2018).
- **166**. **Mitsoulis**, **E.**, Luger, H.-J., Miethlinger, J., and Friesenbichler, W., "Flow Behavior of a Polypropylene Melt in Capillary Dies", Intern. Polym. Proc., **33**, 642-651 (2018).

- **165**. **Mitsoulis, E.,** Battisti, M., Neunhäuserer, A., Perko, L., and Friesenbichler, W., "Flow Behavior of PP-Polymer Nanocomposites in Injection Molding Hyperbolical Dies", <u>Adv. Polym. Technol.</u>, 24 April 2018, https://doi.org/10.1002/adv.21975, 1-11 (2018).
- . Konaganti, V.K., Behzadfar, E., Kwak, R., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Transient Swell of a High Density Polyethylene Using Adjustable Gap Slit Die", Intern. Polym. Proc., **32**, 574-581 (2017).
- . **Mitsoulis, E.,** Battisti, M., Neunhäuserer, A., Perko, L., Friesenbichler, W., Ansari, M., Hatzikiriakos, S.G., "Flow Behavior of Rubber in Capillary and Injection Moulding Dies", Plastics, Rubber, Composites, **46**, 110-118 (2017).
- . **Mitsoulis, E.,** Battisti, M., Neunhäuserer, A., Perko, L., Friesenbichler, W., "Flow Behavior of PP-Polymer Nanocomposites in Capillary and Injection Molding Dies", Intern. Polym. Proc., **32**, 217-226 (2017).
- **161**. Voyiatzis, E., Tsenoglou, C.J., **Mitsoulis, E.,** "Tube Inflation of Viscoelastic Fluids at a Constant Growth Rate", Soft Materials, **15**, 121-131 (2017).
- . **Mitsoulis**, **E.**, Tsamopoulos, J., "Numerical Simulations of Complex Yield Stress Fluid Flows", Rheol. Acta, **56**, 231-258 (2017).
- . Konaganti, V.K., Derakhshandeh, M., Ebrahimi, M., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Non-Isothermal Extrudate Swell", Phys. Fluids, **28**, 123101, 1-19 (2016).
- . Konaganti, V.K., Ansari, M., **Mitsoulis, E.,** Hatzikiriakos, S.G., "The Effect of Damping Function on Extrudate Swell", J. Non-Newtonian Fluid Mech., **236**, 73-82 (2016).
- **157**. Jabbari, M., Bulatova, R., Tok, A.I.Y., Bahl, C.R.H., **Mitsoulis, E.,** Hattel, J.H., "Ceramic Tape Casting: A Review of Current Methods and Trends with Emphasis on Rheological Behavior and Flow Analysis", Mater. Sci. Eng. B, **212**, 39-61 (2016).
- . Konaganti, V.K., Behzadfar, E., Ansari, M., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Extrudate Swell of High-Density Polyethylenes in Slit (Flat) Dies", Intern. Polym. Proc., **31**, 262-272 (2016).
- . Konaganti, V.K., Ansari, M., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Extrudate Swell of a High-Density Polyethylene Melt: II. Modeling Using Integral and Differential Constitutive Equations", J. Non-Newtonian Fluid Mech., **225**, 94-105 (2015).
- **154.** Kountouriotis, Z., Georgiou, G.C., **Mitsoulis, E.,** "Numerical Study of the Combined Effects of Inertia, Slip, and Compressibility in Extrusion of Yield Stress Fluids", Rheol. Acta, **53**, 791-804 (2014).
- **153**. Othman, N., Ansari, M., Zisis, Th., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Entry Flows of Polylactides with Slip", J. Non-Newtonian Fluid Mech., **210**, 78-84 (2014).
- . Ardakani, H.A., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Capillary Flow of Milk Chocolate", J. Non-Newtonian Fluid Mech., **210**, 56-65 (2014).

- **151**. Ardakani, H.A., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Polytetrafluoroethylene (PTFE) Paste Extrusion: A Fibrillation Model and its Relation to Mechanical Properties", Intern. Polym. Proc., **28**, 306-313 (2013).
- **150**. Karapetsas, G., **Mitsoulis, E.,** "Some Experiences with the Slip Boundary Condition in Viscous and Viscoelastic Flows", <u>J. Non-Newtonian Fluid Mech.</u>, **198**, 96-108 (2013).
- **149.** Filali, A., Khezzar, L., **Mitsoulis, E.**, "Some Experiences with the Numerical Simulation of Newtonian and Bingham Fluids in Dip Coating", Comput. Fluids, **82**, 110-121 (2013).
- **148**. Ansari, M., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Capillary Extrusion and Swell of a HDPE Melt Exhibiting Slip", Adv. Polym. Technol., **32**, E369-E385 (2013).
- **147**. **Mitsoulis**, **E.**, Malamataris, N.A., "The Free (Open) Boundary Condition (FBC) in Viscoelastic Flow Simulations", Int. J. Mater. Form., **6**, 49-63 (2013).
- **146**. **Mitsoulis, E.,** Hatzikiriakos, S.G., "Capillary Extrusion Flow of a Fluoropolymer Melt", Int. J. Mater. Form., **6**, 29-40 (2013).
- **145**. Ardakani, H.A., **Mitsoulis, E.,** Hatzikiriakos, S.G., "A Simple Improved Mathematical Model for Polytetrafluoroethylene (PTFE) Paste Extrusion", Chem. Eng. Sci., **89**, 216-222 (2013).
- **144.** Kountouriotis, Z., Georgiou, G.C., **Mitsoulis, E.,**"On the Combined Effects of Slip, Compressibility, and Inertia on the Newtonian Extrudate-Swell Flow Problem", Comput. Fluids, **71**, 297-305 (2013).
- **143**. **Mitsoulis**, **E.**, Hatzikiriakos, S.G., "Annular Extrudate Swell of a Fluoropolymer Melt", Intern. Polym. Proc., **27**, 535-546 (2012).
- **142**. Dimakopoulos, Y., Karapetsas, G., Malamataris, N.A., **Mitsoulis, E.,** "The Free (Open) Boundary Condition at Inflow Boundaries", J. Non-Newtonian Fluid Mech., **187-188**, 16-31 (2012).
- **141**. Christodoulou, K.N., Hatzikiriakos, S.G., **Mitsoulis, E.,** "Numerical Simulation of the Wire-Pinning Process in PET Film Casting: Steady-State Results", <u>AIChE J.</u>, **58**, 1979-1986 (2012).
- **140**. **Mitsoulis**, **E.**, Malamataris, N.A., "The Free (Open) Boundary Condition with Integral Constitutive Equations", J. Non-Newtonian Fluid Mech., **177-178**, 97-108 (2012).
- **139**. **Mitsoulis, E.,** Hatzikiriakos, S.G., "Tubing Extrusion of a Fluoropolymer Melt", Intern. Polym. Proc., **27**, 259-269 (2012).
- **138**. **Mitsoulis, E.,** Malamataris, N.A., "Free (Open) Boundary Condition: Some Experiences with Viscous Flow Simulations", Int. J. Numer. Meth. Fluids, **68**, 1299-1323 (2012).
- **137**. **Mitsoulis, E.,** Georgiou, G.C., Kountouriotis, Z., "A Study of Various Factors Affecting Newtonian Extrudate Swell", Comput. Fluids, **57**, 195-207 (2012).
- **136**. Ansari, M., Zisis, Th., Hatzikiriakos, S.G., **Mitsoulis, E.,** "Capillary Flow of Low-Density Polyethylene", Polym. Eng. Sci., **52**, 649-662 (2012).
- 135. Ansari, M., Hatzikiriakos, S.G., Mitsoulis, E., "Slip Effects in HDPE Flows", J. Non-Newtonian Fluid Mech., 167-168, 18-29 (2012).

- **134**. Ardakani, H.A., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Thixotropic Flow of Toothpaste through Extrusion Dies", J. Non-Newtonian Fluid Mech., **166**, 1262-1271 (2011).
- **133**. **Mitsoulis, E.,** "Numerical Simulation of Viscoelastic Effects in Blade-over-Roll Coating Forming Flows", Comp. Meth. Mater. Sci., **10**, 156-166 (2010).
- **132**. **Mitsoulis, E.,** Athanasopoulos, G., "Numerical Simulation of Blade-over-Roll Coating Forming Flows", Comp. Meth. Mater. Sci., **10**, 214-224 (2010).
- **131.** Muravleva, L., Muravleva, E., Georgiou, G.C., **Mitsoulis, E.,** "Unsteady Circular Couette Flow of a Bingham Plastic with the Augmented Lagrangian Method", Rheol. Acta, **49**, 1197-1206 (2010).
- **130. Mitsoulis, E.,** "Some Issues Arising in Finding the Detachment Point in Calendering of Plastic Sheets", J. Plastic Film & Sheeting, **26**, 141-165 (2010).
- **129**. Ansari, M., Alabbas, A., Hatzikiriakos, S.G., **Mitsoulis, E.,** "Entry Flow of Polyethylene Melts in Tapered Dies", <u>Intern. Polym. Proc.</u>, **25**, 287-296 (2010).
- **128.** Mitsoulis, E., "Extrudate Swell of Boger Fluids", J. Non-Newtonian Fluid Mech., **165**, 812-824, 2010.
- 127. Muravleva, L., Muravleva, E., Georgiou, G.C., Mitsoulis, E., "Numerical Simulations of Cessation Flows of a Bingham Plastic with the Augmented Lagrangian Method", J. Non-Newtonian Fluid Mech., 165, 544-550 (2010).
- **126. Mitsoulis, E.,** "Fountain Flow Revisited: The Effect of Various Fluid Mechanics Parameters", <u>AIChE J.</u>, **56**, 1147-1162 (2010).
- **125. Mitsoulis, E.,** "Fountain Flow of Pseudoplastic and Viscoplastic Fluids", <u>J. Non-Newtonian Fluid Mech.</u>, **165**, 45-55 (2010).
- **124. Mitsoulis, E.,** "Effect of Viscoelasticity in Fountain Flow of Polyethylene Melts", Intern. Polym. Proc., **24**, 439-451 (2009).
- **123.** Hatzikiriakos, S.G., **Mitsoulis, E.,** "Slip Effects in Tapered Dies", Polym. Eng. Sci., **49**, 1960-1969 (2009).
- **122. Mitsoulis, E.,** Hatzikiriakos, S.G., "Rolling of Bread Dough: Experiments and Simulations", Food Bioprod. Proc., **87**, 124-138 (2009).
- **121**. **Mitsoulis, E.,** "Annular Extrudate Swell of Newtonian Fluids Revisited: Extended Range of Compressible Simulations", <u>J. Fluids Eng.</u>, **131**, 71203.1-10 (2009).
- **120. Mitsoulis, E.,** Hatzikiriakos, S.G., "Modelling PTFE Extrusion: The Effect of an Objective Flow Type Parameter", J. Non-Newtonian Fluid Mech., **159**, 41-49 (2009).
- **119. Mitsoulis, E.,** Galazoulas, S., "Simulations of Viscoplastic Flow past Cylinders in Tubes", J. Non-Newtonian Fluid Mech., **158**, 132-141 (2009).
- **118. Mitsoulis, E.,** Argyropaidas, I., "Numerical Simulation of Contraction and Expansion Flows of Langmuir Monolayers", J. Non-Newtonian Fluid Mech., **157**, 163-174 (2009).
- **117. Mitsoulis, E.,** Hatzikiriakos, S.G., "Steady Flow Simulations of Compressible PTFE Paste Extrusion under Severe Wall Slip", J. Non-Newtonian Fluid Mech., **157**, 26-33 (2009).
- **116. Mitsoulis, E.,** Hatzikiriakos, S.G., "Rolling of Mozzarella Cheese: Experiments and Simulations", J. Food Eng., **91**, 269-279 (2009).

- **115.** Beaulne, M., **Mitsoulis, E.,** "Rectilinear Viscoelastic Flows in Ducts", Comp. Meth. Mater. Sci., **8**, 121-129 (2008).
- **114. Mitsoulis, E.,** "Numerical Simulation of Calendering Viscoplastic Fluids", <u>J. Non-Newtonian Fluid Mech.</u>, **154**, 77-88 (2008).
- **113.** You, Z., Huilgol, R.R., **Mitsoulis, E.,** "Application of the Lambert W Function to Steady Shearing Flows of the Papanastasiou Model", <u>Intern. J. Eng. Sci.</u>, **46**, 799-808 (2008).
- **112.** Sofou, S., Muliawan, E.B., Hatzikiriakos, S.G., **Mitsoulis, E.,** "Rheological Characterization and Constitutive Modelling of Bread Dough", Rheol. Acta, **47**, 369-381 (2008).
- 111. Taliadorou, E., Georgiou, G.C., **Mitsoulis, E.,** "Numerical Simulation of the Extrusion of Strongly Compressible Newtonian Liquids", Rheol. Acta. 47, 49-62 (2008).
- **110**. **Mitsoulis**, **E.**, "Annular Extrudate Swell of Newtonian Fluids: Effects of Compressibility and Slip at the Wall", J. Fluids Eng., **129**, 1384-1393 (2007).
- 109. Alexandrou, A., Mitsoulis, E., "Transient Planar Squeeze Flow of Semi-Concentrated Fiber Suspensions Using the Dinh-Armstrong Model", J. Non-Newtonian Fluid Mech., 146, 114-124 (2007).
- **108**. **Mitsoulis**, **E.**, Delgadillo-Velazquez, O., Hatzikiriakos, S.G., "Transient Capillary Rheometry: Compressibility Effects", J. Non-Newtonian Fluid Mech., **145**, 102-108 (2007).
- **107**. Beaulne, M., **Mitsoulis, E.,** "The Effect of Viscoelasticity in the Film-Blowing Process", J. Appl. Polym. Sci., **105**, 2098-2112 (2007).
- **106**. Chatzimina, M., Xenophontos, C., Georgiou, G., Argyropaidas, I., **Mitsoulis, E.,** "Cessation of Annular Poiseuille Flows of Bingham Plastics", J. Non-Newtonian Fluid Mech., **142**, 135-142 (2007).
- **105**. **Mitsoulis**, **E.**, "Annular Extrudate Swell of Pseudoplastic and Viscoplastic Fluids", J. Non-Newtonian Fluid Mech., **141**, 138-147 (2007).
- **104**. Ochoa, I., Hatzikiriakos, S.G., **Mitsoulis, E.**, "Paste Extrusion of Polytetrafluoroethylene (PTFE): Temperature, Blending and Processing Aid Effects", Intern. Polym. Proc., **21**, 497-503 (2006).
- **103. Mitsoulis, E.,** Marangoudakis, S., Spyratos, M., Zisis, Th., Malamataris, N.A., "Pressure-Driven Flows of Bingham Plastics over a Square Cavity", J. Fluids Eng., **128**, 993-1003 (2006).
- **102**. Gustin, A., Zupancic, A., **Mitsoulis, E.,** "Pressure Drop Estimation for Polyamide-6 Flow through Spinnerets and Filters", J. Appl. Polym. Sci., **100**, 1577-1587 (2006).
- **101. Mitsoulis, E.,** Sofou, S., "Calendering Pseudoplastic and Viscoplastic Fluids with Slip at the Roll Surface", J. Appl. Mech., **73**, 291-299 (2006).
- **100.** Sofou, S., **Mitsoulis, E.,** "Roll-over-Web Coating of Pseudoplastic and Viscoplastic Fluids Using the Lubrication Approximation", J. Plastic Film & Sheeting, **21**, 307-333 (2005).

- **99**. Chatzimina, M., Georgiou, G.C., Argyropaidas, I., **Mitsoulis, E.,** Huilgol, R.R., "Cessation of Couette and Poiseuille Flows of a Bingham Plastic and Finite Stopping Times", J. Non-Newtonian Fluid Mech., **129**, 117-127 (2005).
- **98.** Mitsoulis, E., Matsoukas, A., "Free Surface Effects in Squeeze Flow of Bingham Plastics", J. Non-Newtonian Fluid Mech., **129**, 182-187 (2005).
- **97**. **Mitsoulis, E.,** "Multilayer Film Coextrusion of Polymer Melts: Analysis of Industrial Lines with the Finite Element Method", J. Polym. Eng., **25**, 393-410 (2005).
- **96**. **Mitsoulis, E.,** Kazatchkov, I.B., Hatzikiriakos, S.G., "The Effect of Slip in the Flow of a Branched PP Polymer: Experiments and Simulations", Rheol. Acta, **44**, 418-426 (2005).
- **95.** Sofou, S., **Mitsoulis, E.,** "Calendering of Pseudoplastic and Viscoplastic Sheets of Finite Thickness", J. Plastic Film & Sheeting, **20**, 185-222 (2004).
- **94.** Sofou, S., **Mitsoulis, E.,** "Calendering of Pseudoplastic and Viscoplastic Fluids Using the Lubrication Approximation", J. Polym. Eng., **24**, 505-522 (2004).
- **93**. Athanasopoulos, G., **Mitsoulis, E.,** "Upstream Kinematics and Coating Thickness in Blade Coating", Ind. Coat. Res., **5**, 59-80 (2004).
- **92**. **Mitsoulis, E.,** Huilgol, R.R., "Entry Flows of Bingham Plastics in Expansions", <u>J. Non-Newtonian Fluid Mech.</u>, **122**, 45-54 (2004).
- **91. Mitsoulis, E.,** "On Creeping Drag Flow of a Viscoplastic Flow past a Circular Cylinder: Wall Effects", Chem. Eng. Sci., **59**, 789-800 (2004).
- **90**. Beaulne, M., **Mitsoulis, E.,** "One-Dimensional Simulation of the M1 Fluid in a Spinline Rheometer", Intern. J. Form. Proc., 6, 123-146 (2003).
- **89**. **Mitsoulis, E.,** Hatzikiriakos, S.G., "Bagley Correction: The Effect of Contraction Angle and Its Prediction", Rheol. Acta, **42**, 309-320 (2003).
- **88**. **Mitsoulis, E.,** Schwetz, M., Münstedt, H., "Entry Flow of LDPE Melts in a Planar Contraction", J. Non-Newtonian Fluid Mech., **111**, 41-61 (2003).
- 87. Matsoukas, A., Mitsoulis, E., "Geometry Effects in Squeeze Flow of Bingham Plastics", J. Non-Newtonian Fluid Mech., 109, 231-240 (2003).
- **86**. Beaulne, M., **Mitsoulis, E.,** "Rheological Characterization of Fiber-Filled Polymer Composites via Constitutive Modeling", J. Reinf. Plast. Comp., **22**, 1625-1640 (2003).
- **85**. Zisis, Th., **Mitsoulis, E.,** "Viscoplastic Flow around a Cylinder Kept between Parallel Plates", J. Non-Newtonian Fluid Mech., **105**, 1-20 (2002).
- **84**. **Mitsoulis, E.,** Zisis, Th., "Flow of Bingham Plastics in a Lid-Driven Square Cavity", J. Non-Newtonian Fluid Mech., **101**, 173-180 (2001).
- 83. Mitsoulis, E., Hatzikiriakos, S.G., Christodoulou, K., Vlassopoulos, D., "Some Comments on 'Computational Analysis of Techniques to Determine Extensional Viscosity from Entrance Flows' [Rheol. Acta 39, 138-151 (2000)]", Rheol. Acta, 40, 401-402 (2001).
- **82**. **Mitsoulis, E.,** "Further Results for the Entry Flow of Fluid S1", <u>J. Non-Newtonian Fluid Mech.</u>, **97**, 149-158 (2001).

- **81**. **Mitsoulis, E.,** "Numerical Simulation of Entry Flow of the IUPAC-LDPE Melt", <u>J.</u> Non-Newtonian Fluid Mech., **97**, 13-30 (2001).
- **80**. Missirlis, K.A., Assimacopoulos, D., **Mitsoulis, E.,** Chhabra, R.P., "Wall Effects for Motion of Spheres in Power-Law Fluids", J. Non-Newtonian Fluid Mech., **96**, 459-471 (2001).
- **79**. **Mitsoulis, E.,** Beaulne, M., "Numerical Simulation of Rheological Effects in Fiber Spinning", Adv. Polym. Technol., **19**, 155-172 (2000).
- **78**. **Mitsoulis, E.,** "Three-Dimensional Non-Newtonian Computations of Extrudate Swell with the Finite Element Method", Comp. Meth. Appl. Mech. Eng., **180**, 333-344 (1999).
- 77. **Mitsoulis, E.,** "Computational Rheology with Integral Constitutive Equations", <u>Appl.</u> Rheol., **9**, 198-203 (1999).
- **76**. Beaulne, M., **Mitsoulis, E.,** "Numerical Simulation of the Film-Casting Process", Intern. Polym. Proc., **14**, 261-275 (1999).
- **75**. Beaulne, M., **Mitsoulis, E.,** "Numerical Simulation of the Film-Blowing Process", Intern. J. Form. Proc., **1**, 451-484 (1998).
- **74.** Voivontas, D., Papafotiou, K., Assimacopoulos, D., **Mitsoulis, E.,** "A Hybrid Expert-Procedural System for the Design of Reverse-Osmosis Desalination Plants", Can. J. Chem. Eng., **76**, 1102-1109 (1998).
- **73**. **Mitsoulis, E.,** Hatzikiriakos, S.G., Christodoulou, K., Vlassopoulos, D., "Sensitivity Analysis of the Bagley Correction to Shear and Extensional Rheology", Rheol. Acta, 37, 438-448 (1998).
- **72**. **Mitsoulis, E.,** "Numerical Simulation of Entry Flow of Fluid S1", <u>J. Non-Newtonian Fluid Mech.</u>, **78**, 187-201 (1998).
- **71**. Missirlis, K.A., Assimacopoulos, D., **Mitsoulis, E.,** "A Finite Volume Approach in the Simulation of Viscoelastic Expansion Flows", J. Non-Newtonian Fluid Mech., **78**, 91-118 (1998).
- **70**. **Mitsoulis, E.,** "Numerical Simulation of Confined Flow of Polyethylene Melts around a Cylinder in a Planar Channel", <u>J. Non-Newtonian Fluid Mech.</u>, **76**, 327-350 (1998).
- **69**. **Mitsoulis, E.,** "Effect of Rheological Properties on the Drag Coefficient for Creeping Motion around a Sphere Falling in a Tightly-Fitting Tube", J. Non-Newtonian Fluid Mech., **74**, 263-283 (1998).
- **68**. Pham, T.V. and **Mitsoulis, E.,** "Viscoplastic Flows in Ducts", Can. J. Chem. Eng., **76**, 120-125 (1998).
- **67**. Beaulne, M., **Mitsoulis, E.,** "Creeping Flow of a Sphere in Tubes Filled with Herschel-Bulkley Fluids", J. Non-Newtonian Fluid Mech., **72**, 55-71 (1997).
- **66**. Blackery, J., **Mitsoulis, E.,** "Creeping Flow of a Sphere in Tubes Filled with a Bingham Plastic Material", J. Non-Newtonian Fluid Mech., **70**, 59-77 (1997).

- **65**. Hatzikiriakos, S.G., **Mitsoulis, E.,** "Excess Pressure Losses in the Capillary Flow of Molten Polymers", Rheol. Acta, **35**, 545-555 (1996).
- **64. Mitsoulis, E.,** "Professor's T.C. Papanastasiou's Contributions to Rheology and Computational Fluid Mechanics", Rheol. Acta, **35**, 525-530 (1996).
- **63**. Nenes, A., Assimacopoulos, D., Markatos, N., **Mitsoulis, E.,** "Simulation of Airlift Pumps for Deep Water Wells", Can. J. Chem. Eng., **74**, 448-456 (1996).
- **62**. Barakos, G., **Mitsoulis, E.,** "Viscoelastic Simulations of Stratified Bicomponent Extrusion through Slit Dies", Intern. Polym. Proc., **11**, 147-153 (1996).
- **61**. Barakos, G., **Mitsoulis, E.,** "Non-Isothermal Viscoelastic Simulations of Extrusion through Dies and Prediction of the Bending Phenomenon", J. Non-Newtonian Fluid Mech., **62**, 55-79 (1996).
- **60.** Barakos, G., **Mitsoulis, E.,** Tzoganakis, C., Kajiwara, T., "Rheological Characterization of Controlled-Rheology Polypropylenes Using Integral Constitutive Equations", J. Appl. Polym. Sci., **59**, 543-556 (1996).
- **59**. Kajiwara, T., Barakos, G., **Mitsoulis, E.,** "Rheological Characterization of Polymer Solutions and Melts with an Integral Constitutive Equation", Int. J. Polymer Analysis & Characterization, **1**, 201-215 (1995).
- **58**. Barakos, G., **Mitsoulis, E.,** "Numerical Simulation of Viscoelastic Flow around a Cylinder Using an Integral Constitutive Equation", J. Rheol., **39**, 1279-1292 (1995).
- **57**. Barakos, G., **Mitsoulis, E.,** "A Convergence Study for the Numerical Simulation of the IUPAC-LDPE Extrusion Experiments", J. Non-Newtonian Fluid Mech., **58**, 315-329 (1995).
- **56**. Barakos, G., **Mitsoulis, E.,** "Numerical Simulation of Extrusion through Orifice Dies and Prediction of Bagley Correction for an IUPAC-LDPE Melt", <u>J. Rheol.</u>, **39**, 193-209 (1995).
- **55**. Pham, T.V., **Mitsoulis, E.,** "Entry and Exit Flows of Casson Fluids", <u>Can. J. Chem.</u> Eng., **72**, 1080-1084 (1994).
- **54**. Park, H.J., Kim, D., Lee, K.-J., **Mitsoulis, E.,** "Numerical Simulation of Converging Channel Flow of the Fluid M1 Using an Integral Constitutive Equation", <u>J. Non-Newtonian Fluid Mech.</u>, **52**, 69-89 (1994).
- **53**. Barakos, G., **Mitsoulis, E.,** Assimacopoulos, D., "Natural Convection Flow in a Square Cavity Revisited: Laminar and Turbulent Models with Wall Functions", Int. J. Num. Meth. Fluids, **18**, 695-719 (1994).
- **52**. Arampatzis, G., Assimacopoulos, D., **Mitsoulis, E.,** "Treatment of Numerical Diffusion in Strong Convective Flows", Int. J. Num. Meth. Fluids, **18**, 313-331 (1994).
- **51**. Loest, H., Lipp, R., **Mitsoulis, E.,** "Numerical Flow Simulation of Viscoplastic Slurries and Design Criteria for a Tape Casting Unit", J. Amer. Ceram. Soc., **77**, 254-262 (1994).
- **50**. Alexopoulos, A., Assimacopoulos, D., **Mitsoulis, E.,** "Model for Traffic Emissions Estimation", Atmos. Environ., Pt. B Urban Atm., **27**, 435-446 (1993).

- **49**. **Mitsoulis, E.,** "Numerical Simulation of Planar Entry Flow for a Polyisobutylene Solution Using an Integral Constitutive Equation", J. Rheol., **37**, 1029-1040 (1993).
- **48**. Hannachi, A., **Mitsoulis, E.,** "Sheet Coextrusion of Polymer Solutions and Melts: Comparison between Simulation and Experiments", <u>Adv. Polym. Technol.</u>, **12**, 217-231 (1993).
- **47**. Kiriakidis, D.G., Park, H.J., **Mitsoulis, E.,** Vergnes, B., Agassant, J.-F., "A Study of Stress Distribution in Contraction Flows of an LLDPE Melt", <u>J. Non-Newtonian</u> Fluid Mech., **47**, 339-356 (1993).
- **46**. Kiriakidis, D.G., **Mitsoulis, E.,** Neale, G.H., "Computer Simulations of Immiscible Displacement in a Porous Medium Containing a Region of Different Wettability", <u>J.</u> Can. Petr. Technol., **32**, 21-25 (1993).
- **45**. Kiriakidis, D.G., **Mitsoulis, E.,** "Viscoelastic Simulations of Extrudate Swell for an HDPE Melt through Slit and Capillary Dies", <u>Adv. Polym. Technol.</u>, **12**, 107-117 (1993).
- **44**. Loest, H., **Mitsoulis, E.,** Spauszus, S., "Free Surface Measurements and Numerical Simulations of Ceramic Tape Casting", <u>Interceram</u>, **42**, 80-84 (1993).
- **43**. **Mitsoulis, E.,** Abdali, S.S., Markatos, N.C., "Flow Simulation of Herschel-Bulkley Fluids through Extrusion Dies", Can. J. Chem. Eng., **71**, 147-160 (1993).
- **42**. Kiriakidis, D.G., Neale, G.H., **Mitsoulis, E.,** "Slow Immiscible Displacement Flow in Disordered Porous Media", Can. J. Chem. Eng., **70**, 1220-1223 (1992).
- **41**. Park, H.J., Kiriakidis, D.G., **Mitsoulis, E.,** Lee, K.-J., "Birefringence Studies in Die Flows of an HDPE Melt", J. Rheol., **36**, 1563-1583 (1992).
- **40**. Abdali, S.S., **Mitsoulis, E.,** Markatos, N.C., "Entry and Exit Flows of Bingham Fluids", J. Rheol., **36**, 389-407 (1992).
- **39**. Park, H.J., **Mitsoulis, E.,** "Numerical Simulation of Circular Entry Flows of Fluid M1 Using an Integral Constitutive Equation", J. Non-Newtonian Fluid Mech., **42**, 301-314 (1992).
- **38**. Hannachi, A., **Mitsoulis, E.,** "Numerical Analysis of Multilayer Forward Roll Coating: Power-Law Fluids", J. Plast. Film & Sheet., **7**, 317-331 (1991).
- 37. Kiriakidis, D.G., Neale, G.H., Mitsoulis, E., "The Effects of Capillary Forces on the Island Size Distribution in Two-Fluid Immiscible Displacement Flow in Porous Media", J. Phys. A: Math. & Gen., 24, 3797-3805 (1991).
- **36**. Kiriakidis, D.G., **Mitsoulis, E.,** Neale, G.H., "Linear Displacement of a Wetting Fluid by an Immiscible Non-Wetting Fluid in a Porous Medium: A Predictive Algorithm", Can. J. Chem. Eng., **69**, 557-563 (1991).
- 35. Kiriakidis, D.G., **Mitsoulis, E.,** Neale, G.H., "Numerical Simulations of Radial Displacement of a Wetting Fluid by a Non-Wetting Fluid in a Porous Medium", <u>J. Phys. A: Math. & Gen.</u>, 23, 5089-5094 (1990).
- **34**. Luo, X.-L., **Mitsoulis, E.,** "An Efficient Algorithm for Strain History Tracking in Finite Element Computations of Non-Newtonian Fluids with Integral Constitutive Equations", Int. J. Num. Meth. Fluids, **11**, 1015-1031 (1990).

- . Hannachi, A., **Mitsoulis, E.,** "Deformation Fields and Residence Time Distributions in Some Polymer Melt Flows", Intern. Polym. Proc., **5**, 244-251 (1990).
- **32**. Luo, X.-L., **Mitsoulis, E.,** "A Finite Element Study of Viscoelastic Effects in Double-Layer Coextrusion of Polymer Melts", <u>Adv. Polym. Technol.</u>, **10**, 47-54 (1990).
- . Hannachi, A., **Mitsoulis, E.,** "Numerical Analysis of Multilayer Forward Roll Coating", J. Plast. Film & Sheet., **6**, 170-190 (1990).
- . **Mitsoulis**, E., "Numerical Simulation of Carbon-Black Filled Polymer Flows in Contractions", Plast. & Rubber Czech., **27**, 193-198 (1990).
- **29**. Luo, X.-L., **Mitsoulis, E.,** "A Numerical Study of the Effect of Elongational Viscosity on Vortex Growth in Contraction Flows of Polyethylene Melts", <u>J. Rheol.</u>, **34**, 309-342 (1990).
- . **Mitsoulis**, **E.,** "Further Simulations of Viscoelastic Entry Flows Using a Heuristic Approach", J. Reinf. Plast. Comp., **9**, 251-265 (1990).
- . Luo, X.-L., **Mitsoulis, E.,** "Memory Phenomena in Extrudate Swell Simulations from Annular Dies", J. Rheol., **33**, 1307-1327 (1989).
- . **Mitsoulis, E.,** "Streamline-Upwind/Petrov-Galerkin Finite Element Methods in Polymer Processing", Chem. Eng. Technol., **12**, 269-273 (1989).
- **25**. Hannachi, A., **Mitsoulis, E.,** "Multilayer Calendering of Coextruded Sheets", <u>J. Plast.</u> Film & Sheet., **5**, 104-129 (1989).
- . Heng, F.L., **Mitsoulis, E.,** "Numerical Simulation of Wire-Coating Coextrusion", Intern. Polym. Proc., **4**, 44-56 (1989).
- . **Mitsoulis**, E., "Influence of Inertia and Viscoelasticity in Entry Flows through an Abrupt Annular Contraction", J. Appl. Polym. Sci., **37**, 627-643 (1989).
- . Heng, F.L., **Mitsoulis, E.,** "Errors in Omitting Radial Convection in Polymer Melt Flow Simulations", Numer. Heat Transfer, **13**, 499-513 (1988).
- **21**. **Mitsoulis**, **E.**, "Multilayer Sheet Coextrusion: Analysis and Design", <u>Adv. Polym. Technol.</u>, **8**, 225-242 (1988).
- . **Mitsoulis, E.,** Wagner, R., Heng, F.L., "Numerical Simulation of Wire-Coating Low-Density Polyethylene: Theory and Experiments", Polym. Eng. Sci., **28**, 291-310 (1988).
- . **Mitsoulis, E.,** Heng, F.L., "Extrudate Swell of Newtonian Fluids from Converging and Diverging Annular Dies", Rheol. Acta, **26**, 414-417 (1987).
- . **Mitsoulis, E.,** Heng, F.L., "Numerical Simulation of Coextrusion from a Circular Die", J. Appl. Polym. Sci., **34**, 1713-1725 (1987).
- 17. Mitsoulis, E., "Use of Double Nodes in the Numerical Simulation of Multilayered Flows of Immiscible Fluids", Commun. Appl. Num. Meth., 3, 71-76 (1987).
- **16**. **Mitsoulis**, **E.,** "Fluid Flow and Heat Transfer in Wire Coating: A Review", <u>Adv.</u> Polym. Technol., **6**, 467-487 (1986).
- . **Mitsoulis, E.,** "The Numerical Simulation of Boger Fluids: A Viscometric Approximation Approach", Polym. Eng. Sci., **26**, 1552-1562 (1986).

- **14**. **Mitsoulis, E.,** "Extrudate Swell in Double-Layer Flows", <u>J. Rheol.</u>, **30(S)**, S23-S44 (1986).
- **13**. **Mitsoulis, E.,** "Extrudate Swell of Newtonian Fluids from Annular Dies", <u>AIChE J.,</u> **32**, 497-500 (1986).
- **12**. **Mitsoulis, E.,** "Finite Element Analysis of Wire Coating", Polym. Eng. Sci., **26**, 171-186 (1986).
- 11. Wagner, R., Mitsoulis, E., "Effect of Die Design on the Analysis of Wire Coating", Adv. Polym. Technol., 5, 305-325 (1985).
- **10**. **Mitsoulis, E.,** Vlachopoulos, J., "Effect of Reynolds Number in Laminar Flow through a Sudden Planar Contraction", <u>AIChE J.</u>, **31**, 1736-1739 (1985).
- 9. Vlachopoulos, J., Mitsoulis, E., "An Appraisal of the Exit Pressure Method for Normal Stress Measurements", J. Polym. Eng., 5, 173-182 (1985).
- 8. Mitsoulis, E., Vlachopoulos, J., Mirza, F.A., "A Numerical Study of the Effect of Normal Stresses and Elongational Viscosity on Entry Vortex Growth and Extrudate Swell", Polym. Eng. Sci., 25, 677-689 (1985).
- 7. Mitsoulis, E., Vlachopoulos, J., Mirza, F.A., "Simulation of Vortex Growth in Planar Entry Flow of a Viscoelastic Fluid", J. Appl. Polym. Sci., 30, 1379-1391 (1985).
- **6. Mitsoulis, E.,** Vlachopoulos, J., Mirza, F.A., "Calendering Analysis without the Lubrication Approximation", Polym. Eng. Sci., **25**, 6-18 (1985).
- **5. Mitsoulis, E.,** Vlachopoulos, "Non-Isothermal Creeping Flow through Parallel Plates and a Sudden Planar Contraction", Can. J. Chem. Eng., **62**, 837-844 (1984).
- **4. Mitsoulis, E.,** Vlachopoulos, J., Mirza, F.A., "Simulation of Extrudate Swell from Long Slit and Capillary Dies", Polym. Proc. Eng., **2,** 153-177 (1984).
- 3. Mitsoulis, E., Vlachopoulos, "The Finite Element Method for Flow and Heat Transfer Analysis", Adv. Polym. Technol., 4, 107-121 (1984).
- **2**. **Mitsoulis, E.,** Vlachopoulos, J., Mirza, F.A., "Numerical Simulation of Entry and Exit Flows in Slit Dies", Polym. Eng. Sci., **24**, 707-715 (1984).
- 1. Mitsoulis, E., Vlachopoulos, J., Mirza, F.A., "Finite Element Analysis of Two-Dimensional Polymer Melt Flows", Polym. Proc. Eng., 1, 283-308 (1983-4).

B. In Refereed Conference Proceedings

- **136. Mitsoulis, E.,** (**Invited Keynote Paper**) "55 Years of the K-BKZ Constitutive Relation in Polymer Rheology and Processing", P. SAHA 18, UTB, POLYMERS: Site of Advanced Horizons and Ambits, Tomas Bata University in Zlin, paper L04, Zlin, CZECH REPUBLIC, May 2, 2018, pp.1-4.
- **135.** Konaganti, V.K., Ansari, M., **Mitsoulis, E.,** Hatzikiriakos, S.G., (**Invited Keynote Paper**) "The Extrudate Swell of HDPE: Rheological Effects", Novel Trends in Rheology VI Conference, Ed. M. Zatlukal, Zlin, CZECH REPUBLIC, July 26-27, 2017, pp. 1-11.

- **134**. **Mitsoulis, E.,** "Viscoelastic Simulations with Integral Models at Extremely High Shear Rates", 8th GRACM International Congress on Computational Mechanics, Ed. N. Pelekasis, Volos, GREECE, July 2015, paper NNF-1, pp. 1-10.
- 133. Jorstad, J., Alexandrou, A.N., Mitsoulis, E., "Semi-Solid Metal Processing: "Unlimited" Flow Velocity without Turbulence in Thin Cast Sections", 13th International on Semi-Solid Processing of Alloys and Composites (S2P-2014), Muscat, Oman, September 2014; also in Solid State Phenomena, Trans. Tech. Publications, Switzerland, Vol. 217, pp. 159-165 (2015).
- **132.**Othman, N., Ansari, M., Zisis, Th., **Mitsoulis, E.**, Hatzikiriakos, S.G., "Flow of Polylactides in Capillary Rheometers: Experiments and Simulations", <u>ICCE-22</u>, <u>Proceedings of the 22nd International Conference on Composites or Nano Engineering</u>, Ed. D. Hui, St. Julian's, Malta, July 2014, Math-1, paper 2, pp. 1-2.
- **131.Mitsoulis, E.**, Othman, N., Zisis, Th., Hatzikiriakos, S.G., "Capillary Flow of Polylactides", Proceedings of the 30th International Meeting of the Polymer Processing Society, Eds. S.C. Jana, J. Maia, Cleveland, OH, USA, June 2014, paper 04-16, pp. 1-4.
- **130.Mitsoulis, E., (Invited Keynote Paper)** "50 Years of the K-BKZ Constitutive Relation in Polymer Rheology and Processing", Proceedings of the 29th Annual Meeting of the Polymer Processing Society, Ed. V. Altstaedt, Nuremberg, GERMANY, July 2013, paper O-01, pp. 1-4.
- **129.Mitsoulis, E.**, Zisis, Th., "Tanner's Simple Model of Crystallization for Power-Law Fluids Extended", Proceedings of the 29th Annual Meeting of the Polymer Processing Society, Ed. V. Altstaedt, Nuremberg, GERMANY, July 2013, paper O-02, pp. 1-4.
- **128.Mitsoulis, E.,** Hatzikiriakos, S.G., "Tubing Extrusion of a Fluoropolymer Melt", Proceedings of the 28th Annual Meeting of the Polymer Processing Society, Ed. K. Suchiva, Pattaya, THAILAND, December 2012, paper O-01-092, pp. 1-4.
- **127.Mitsoulis, E.,** Ansari, M., Hatzikiriakos, S.G., "Capillary Extrusion and Swell of a HDPE Melt Exhibiting Slip", Proceedings of the 28th Annual Meeting of the Polymer Processing Society, Ed. K. Suchiva, Pattaya, THAILAND, December 2012, paper O-01-091, pp. 1-4.
- **126**. **Mitsoulis, E.,** Hatzikiriakos, S.G., "CFD in the Capillary Rheometry of Polyethylene Melts", SIMULTECH 2012, 2nd International Conference on Simulation and Modeling Methodologies, Technologies and Applications, Rome, ITALY, July 2012, Paper #C123, pp. 1-5.
- 125. Mitsoulis, E. (Invited Paper) "Some Issues Arising in Finding the Detachment Point in Calendering of Plastic Sheets", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 2012, Vol. 58, Orlando, Florida, USA, April 2012, paper # 1249115.
- **124**. **Mitsoulis, E.,** Zisis, Th., Ansari, M., Hatzikiriakos, S.G. (**Invited Keynote Paper**) "Flow Behavior of Different Polyethylenes in Capillary Flow", Proceedings

- of the Society of Plastics Engineers Annual Technical Conference, ANTEC 2012, Vol. 58, Orlando, Florida, USA, April 2012, paper # 1249101, pp. 1-6.
- **123**. **Mitsoulis, E.,** Zisis, Th., Ansari, M., Hatzikiriakos, S.G., "A Comprehensive Study of Low-Density Polyethylene in Capillary Flow", Proceedings of the Society of Plastics Engineers European Technical Conference, EUROTEC 2011, Barcelona, SPAIN, November 2011, paper 193, pp. 1-5.
- **122**. Anvari Ardakani, H., Hatzikiriakos, S.G., Zisis, Th., **Mitsoulis, E.,** "Computational Rheology of a Thixotropic Toothpaste", 7th GRACM International Congress on Computational Mechanics, Eds. A.G. Boudouvis, G.E. Stavroulakis, Athens, GREECE, June 2011, paper CR-154, pp. 1-7.
- 121. Christodoulou, K., Hatzikiriakos, S.G., Mitsoulis, E., "Finding the Wetting and Pinning Points in the Wire-Pinning Process of Film Casting", 7th GRACM International Congress on Computational Mechanics, Eds. A.G. Boudouvis, G.E. Stavroulakis, Athens, GREECE, June 2011, paper CR-153, pp. 1-9.
- **120**. **Mitsoulis, E.,** Malamataris, N.A., "Free (Open) Boundary Condition Revisited: Suitable and Unsuitable Applications", 7th GRACM International Congress on Computational Mechanics, Eds. A.G. Boudouvis, G.E. Stavroulakis, Athens, GREECE, June 2011, paper CR-152, pp. 1-12.
- 119. Mitsoulis, E., Georgiou, G.C., "Capillary Effects in Extrudate Swell Simulations: Are the Pressures Affected?", 7th GRACM International Congress on Computational Mechanics, Eds. A.G. Boudouvis, G.E. Stavroulakis, Athens, GREECE, June 2011, paper CR-151, pp. 1-8.
- **118. Mitsoulis, E.**, Georgiou, G., "Some Experiences in Extrudate-Swell Simulations: The Effect of Various Fluid Mechanics Parameters" ("Εμπειρίες από Προσομοιώσεις Εκβολής Ρευστού υπό την Επίδραση Διαφόρων Παραμέτρων της Ρευστομηχανικής"), Proceedings of the 8th Panhellenic Scientific Congress on Chemical Engineering, Ed. M. Assael, Dept. Chem. Eng., Aristotle University of Thessaloniki, Thessaloniki, GREECE, May 2011, paper TP2-4, pp. 1-7.
- 117. Anvari Ardakani, H., Hatzikiriakos, S.G., Zisis, Th., Mitsoulis, E., "Processing Characteristics of Toothpaste in Capillary Dies", Proceedings of the 27th Annual Meeting of the Polymer Processing Society, Ed. M. Bousmina, Marrakech, MOROCCO, May 2011, paper OP18-515, pp. 1-6.
- **116.** Ansari, M., Hatzikiriakos, S.G., **Mitsoulis, E.**, "A Comprehensive Study of Molten LDPE in Capillary Flow", Proceedings of the 27th Annual Meeting of the Polymer Processing Society, Ed. M. Bousmina, Marrakech, MOROCCO, May 2011, paper OP18-513, pp. 1-13.
- **115.Mitsoulis, E.,** Zisis, Th., Hatzikiriakos, S.G., "Issues in the Modeling of Paste Extrusion", Proceedings of the 26th Annual Meeting of the Polymer Processing Society, Eds. A.N. Hrymak, U. Sundararaj, Banff, CANADA, July 2010, paper G12-35, pp. 1-7.
- **114.Mitsoulis, E.** (Invited Paper) "Fountain Flow Revisited: What New We Learned since JV's Work in the 80's", Proceedings of the 26th Annual Meeting of the

- <u>Polymer Processing Society</u>, Eds. A.N. Hrymak, U. Sundararaj, Banff, CANADA, July 2010, paper IO2-75, pp. 1-12.
- **113.Mitsoulis, E. (Invited Keynote Paper)** "Calendering: From JV's Early Work to the Present", Proceedings of the 26th Annual Meeting of the Polymer Processing Society, Eds. A.N. Hrymak, U. Sundararaj, Banff, CANADA, July 2010, paper IO2-74 KN, pp. 1-9.
- **112. Mitsoulis, E.**, Hatzikiriakos, S.G., "Simulation of Paste Extrusion through Tapered Dies", Proceedings of PPS 2009 Europe-Africa Regional Meeting of the Polymer Processing Society, Eds. E. Mitsoulis, G.C. Georgiou, Larnaca, CYPRUS, October 2009, paper 200, pp. 200.1-200.7.
- 111. Mitsoulis, E., "Fountain Flow Analysis of Pseudoplastic and Viscoplastic Materials", Proceedings of PPS 2009 Europe-Africa Regional Meeting of the Polymer Processing Society, Eds. E. Mitsoulis, G.C. Georgiou, Larnaca, CYPRUS, October 2009, paper 199, pp. 199.1-199.8.
- **110.** Taliadorou, E., Georgiou, G., **Mitsoulis, E.**, "Numerical Simulations of Foam Extrusion", Proceedings of PPS 2009 Europe-Africa Regional Meeting of the Polymer Processing Society, Eds. E. Mitsoulis, G.C. Georgiou, Larnaca, CYPRUS, October 2009, paper 193, pp. 193.1-193.6.
- **109.** Hatzikiriakos, S.G., **Mitsoulis, E.**, "A Comprehensive Experimental Study of Polytetrafluoroethylene Paste Extrusion", Proceedings of PPS 2009 Europe-Africa Regional Meeting of the Polymer Processing Society, Eds. E. Mitsoulis, G.C. Georgiou, Larnaca, CYPRUS, October 2009, paper 38, pp. 38.1-38.3.
- **108**. Hatzikiriakos, S.G., Stamboulides, Ch., **Mitsoulis, E.,** "Polytetrafluoroethylene (PTFE) Paste Extrusion: Experiments and Flow Simulations", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 2009, Vol. 55, Chicago, Illinois, USA, June 2009, pp. 1147-1151.
- **107. Mitsoulis, E.,** Hatzikiriakos, S.G., "Modelling Teflon Extrusion: The Effect of an Objective Flow-Type Parameter" ("Μοντελοποίηση Εκβολής Τεφλόν: Επίδραση Αντικειμενικής Παραμέτρου Τύπου Ροής"), Proceedings of the 7th Panhellenic Scientific Congress on Chemical Engineering, Eds. C. Kravaris, G. Lyberatos, S. Pavlou, Tziola Tech. Publ., Dept. Chem. Eng., University of Patras, Patras, GREECE, June 2009, paper TP1-5, 1-4.
- **106. Mitsoulis, E.**, Hatzikiriakos, S.G., "Analytical and Numerical Solutions for the Effect of Slip in Tapered Extrusion Dies" ("Αναλυτικές και Αριθμητικές Επιλύσεις για την Επίδραση της Ολίσθησης σε Μήτρες Εκβολής με Επικλινή Τοιχώματα"), Proceedings of the 7th Panhellenic Scientific Congress on Chemical Engineering, Eds. C. Kravaris, G. Lyberatos, S. Pavlou, Tziola Publ., Dept. Chem. Eng., University of Patras, Patras, GREECE, June 2009, paper MS10-4, 1-4.
- **105.Mitsoulis, E.**, Hatzikiriakos, S.G., "Slip Effects in Tapered Dies", Proceedings of the 25th Annual Meeting of the Polymer Processing Society, Eds. A. Misra, A. Ghosh, Goa, INDIA, March 2009, paper GSX-PP6, pp. 1-2.
- **104**. **Mitsoulis, E.**, Zisis, Th., Hatzikiriakos, S.G., "Simulation of Structure in Flow of Poly-Tetra-Fluoro-Ethylene (PTFE) Paste through Contractions", Proceedings of

- <u>PPS 2008 Americas Regional Meeting of the Polymer Processing Society</u>, Eds. D. Hirt and A. Ogale, Charleston, South Carolina, USA, October 2008, pp. T1AM-1-4.
- **103. Mitsoulis, E.**, Zisis, Th., Hatzikiriakos, S.G., "Steady Capillary Flow of Polytetrafluoroethylene (PTFE) Paste: Experiments and Simulations", Proceedings of the 7th Hellenic Polymer Conference, Ioannina, GREECE, October 2008, paper 032.
- 102. Mitsoulis, E., Zisis, Th., Hatzikiriakos, S.G., "Influence of Compressibility in Polymer Melt Flows", 6th GRACM International Congress on Computational Mechanics, Eds. D.G. Talaslidis, G.D. Manolis, and A.G. Sextos, Aristotle University of Thessaloniki, Thessaloniki, GREECE, June 2008, paper 1205, pp. 1-6.
- 101. Hatzikiriakos, S.G., Mitsoulis, E., Zisis, Th., (Invited Keynote Paper) "Simulation of Poly-Tetra-Fluoro-Ethylene (PTFE) Paste in Contraction Flows", Proceedings of the 24th Annual Meeting of the Polymer Processing Society, Ed. G. Titomanlio, Univ. Salerno, Salerno, ITALY, June 2008, paper S08-125, pp. 1-5.
- 100. Mitsoulis, E., Zisis, Th., Hatzikiriakos, S.G. (Invited Keynote Paper) "Modeling of Paste Extrusion in Semi-Solid State", Proceedings of the 11th ESAFORM Conference on Material Forming, Ed. Ph. Boisse, INSA, Lyon, FRANCE, April 2008, paper 164, pp. 1-4. (Reproduced in Int. J. Mater. Form., 1 (Supplement), 771-774, 2008).
- **99. Mitsoulis, E.**, Sofou, S., Muliawan, E.B., Hatzikiriakos, S.G., "Calendering of Viscoplastic Materials: Theory and Experiments" ("Κυλίνδρωση Ιξωδοπλαστικών Υλικών: Θεωρία και Πειράματα"), Proceedings of the 6th Panhellenic Scientific Congress on Chemical Engineering, Eds. P. Taoukis, I. Tzigounakis, E. Gogou, Dept. Chem. Eng., National Technical University of Athens, Athens, GREECE, May 2007, pp. 1069-1072.
- **98. Mitsoulis, E., (Invited Keynote Paper)** "Non-Isothermal Die Extrusion of Pastes: Experiments and Simulations", Proceedings of the 23rd Annual Meeting of the Polymer Processing Society, Eds. L.A. Pessan, E. Hage Jr, Salvador, BRAZIL, May 2007, paper KN15-12, pp. 1-16.
- **97. Mitsoulis, E.**, Gustin, A., Zupancic, A., "Polyamide-6 Flow through Wire-Mesh Filters: Experiments and Simulations", Proceedings of the 23rd Annual Meeting of the Polymer Processing Society, Eds. L.A. Pessan, E. Hage Jr, Salvador, BRAZIL, May 2007, paper P15-29, pp. 1-8.
- **96**. **Mitsoulis, E.**, Sofou, S., Muliawan, E.B., Hatzikiriakos, S.G., "Calendering and Rolling of Viscoplastic Materials: Theory and Experiments", Proceedings of the 10th ESAFORM Conference on Material Forming, Eds. E. Cueto, F. Chinesta, AIP, Zaragoza, SPAIN, April 2007, pp. 830-834.
- 95. Mitsoulis, E., (Invited Keynote Paper) "Past and New Developments in the Numerical Simulation of Polymer Flows with the K-BKZ Model", Proceedings of the 10th ESAFORM Conference on Material Forming, Eds. E. Cueto, F. Chinesta, AIP, Zaragoza, SPAIN, April 2007, pp. 1496-1499.
- **94.** Georgiou, G., **Mitsoulis, E.**, "Extrudate Swell of Strongly Compressible Foamed Products", Proceedings of the 6th Hellenic Conference on Polymers, Patras, GREECE, November 2006, pp. 136-138.

- **93. Mitsoulis, E.**, Hatzikiriakos, S.G., Ochoa, I., "Start up of Capillary Flow of Polytetrafluoroethylene (PTFE) Paste: Experiments and Simulations", Proceedings of the 6th Hellenic Conference on Polymers, Patras, GREECE, November 2006, pp. 110-112.
- **92. Mitsoulis, E.**, Hatzikiriakos, S.G., Ochoa, I., "Start up of Capillary Flow of Polytetrafluoroethylene (PTFE) Paste: Experiments and Simulations", Proceedings of the 22nd Annual Meeting of the Polymer Processing Society, Yamagata, JAPAN, July 2006, paper G09-36, pp. 1-2.
- 91. Argyropaidas, I., Mitsoulis, E., Georgiou, G., "Flow Cessation of Viscoplastic Fluids in Poiseuille Flows", Proceedings of the International Conference of Computational Mehods in Sciences and Engineering 2005 (ICCMSE 2005), Ed. T.E. Simos, Loutraki, GREECE, October 2005, vol. 4, pp. 33-36.
- **90**. **Mitsoulis**, **E.**, "Fountain Flow Revisited: The Effect of Viscoelasticity on the Free Surface", 5th GRACM Congress on Computational Mechanics, Eds. G. Georgiou, P. Papanastasiou, and M. Papadrakakis, University of Cyprus, Limassol, CYPRUS, June 2005, pp. 645-652.
- **89**. **Mitsoulis**, **E.**, Matsoukas, A., "The Shape of Free Surface in Squeeze and Fountain Flows", Proceedings of the 21st Annual Meeting of the Polymer Processing Society, Leipzig, GERMANY, June 2005, paper SL7-9, pp. 1-16.
- **88**. Chatzimina, M., Georgiou, G., **Mitsoulis, E.**, Huilgol, R.R., "Cessation Times in Viscometric Flows of Bingham Plastics" ("Χρόνοι Διακοπής σε Ιζωδομετρικές Ροές Πλαστικών Bingham"), Proceedings of the 5th Panhellenic Scientific Congress on Chemical Engineering, Ed. M. Assael, Dept. Chem. Eng., Aristotle University of Thessaloniki, Thessaloniki, GREECE, May 2005, pp. 545-548.
- **87. Mitsoulis, E.,** Matsoukas, A., "The Fountain Phenomenon in Squeeze Flow of Non-Newtonian Fluids" ("Το Φαινόμενο Πίδακα σε Ροή Συμπίεσης μη-Νευτωνικών Υλικών"), Proceedings of the 5th Panhellenic Scientific Congress on Chemical Engineering, Ed. M. Assael, Dept. Chem. Eng., Aristotle University of Thessaloniki, Thessaloniki, GREECE, May 2005, pp. 65-68.
- **86**. Sofou, S., **Mitsoulis, E.**, "Analysis and Simulations of the Roll-over-Web Coating Process" ("Ανάλυση και Προσομοιώσεις της Διεργασίας Επίστρωσης Ταινίας με Κύλινδρο"), Proceedings of the 5th Panhellenic Scientific Congress on Chemical Engineering, Ed. M. Assael, Dept. Chem. Eng., Aristotle University of Thessaloniki, Thessaloniki, GREECE, May 2005, pp. 61-64.
- **85**. **Mitsoulis, E., (Invited Keynote Paper)** "Numerical Simulation of Plastic Sheath Coating of Telephone Wires", Proceedings of the 8th ESAFORM Conference on Material Forming, Cluj-Napoca, ROMANIA, April 2005, pp. 877-880.
- **84. Mitsoulis, E.,** "Activities of CAMP-R&D (Computer-Aided Materials Processing Rheology and Design) Laboratory", (in Greek) Proceedings of the 2nd Panhellenic Plastics Conference, Athens, GREECE, March 2005, pp. 1-5.
- 83. Mitsoulis, E., Kotsos, P., (Invited Keynote Paper) "1-D vs 2-D Analysis of Wire Coating for Pseudoplastic and Viscoplastic Materials", Proceedings of PPS 2004

- Americas Regional Meeting of the Polymer Processing Society, Eds. E. Hage Jr and L.A. Pessan, Florianopolis, BRAZIL, November 2004, pp. K-10-2.
- **82**. Chatzimina, M., Georgiou, G.C., **Mitsoulis, E.,** Huilgol, R.R., "Finite Stopping Times in Couette and Poiseuille Flows of Viscoplastic Fluids", Proceedings of the XIVth International Congress on Rheology, Eds. J.C. Hyun, S.J. Lee, C. Kim, J.W. Lee, Korean Society of Rheology, Seoul, KOREA, August 2004, pp. NF22.1-NF22.4.
- **81.** Mitsoulis, E., Sofou, S., "Calendering of Viscoplastic Materials", Proceedings of MACRO 2004, World Polymer Congress, Paris, FRANCE, July 2004, pp. 6.2.1.1-6.2.1.2
- **80. Mitsoulis, E.**, Hatzikiriakos, S.G., "The Effect of Slip in the Rheology of a Branched PP Melt", Proceedings of MACRO 2004, World Polymer Congress, Paris, FRANCE, July 2004, pp. 6.1.4.1-6.1.4.2.
- **79. Mitsoulis, E.**, Sofou, S., "Engineering Quantities in Calendering of Pseudoplastic and Viscoplastic Materials", Proceedings of the 20th Annual Meeting of the Polymer Processing Society, Akron, OH, USA, June 2004, paper 158, pp. 1-2.
- **78**. **Mitsoulis**, **E.**, "Numerical Simulation of Plastic Sheet Solidification by Using Chilling Rolls", Proceedings of the 7th ESAFORM Conference on Material Forming, CD-ROM 099, MS08, Trondheim, NORWAY, April 2004, pp. 099.1-099.4.
- **77. Mitsoulis, E.**, Matsoukas, A., "Numerical Simulation of Bingham Plastics in a Squeeze-Flow Plastometer", Proceedings of the 19th Annual Meeting of the Polymer Processing Society, RMIT, Melbourne, AUSTRALIA, July 2003, paper 343, pp. 1-10.
- **76. Mitsoulis, E.**, Hatzikiriakos, S.G., "Bagley Correction: The Effect of Contraction Angle for a Branched PP Melt", Proceedings of the 19th Annual Meeting of the Polymer Processing Society, RMIT, Melbourne, AUSTRALIA, July 2003, paper 342, pp. 1-9.
- **75. Mitsoulis, E.,** Matsoukas, A., Argyropaidas, J., "Experiments and Simulations of Viscoplastic Materials in a Squeeze-Disk Plastometer" ("Πειράματα και Προσομοιώσεις Ιζωδοπλαστικών Υλικών σε Πλαστόμετρο Συμπίεσης Δίσκων"), Proceedings of the 4th Panhellenic Scientific Congress on Chemical Engineering, Ed. S. Pavlou, Dept. Chem. Eng., University of Patras, Patras, GREECE, May 2003, pp. 61-64.
- **74**. **Mitsoulis, E., (Invited Keynote Paper)** "Tape-Casting of Viscoplastic Slurries", Proceedings of the 6th ESAFORM Conference on Material Forming, Ed. V. Brucato, Nuova Ipsa Editore, Salerno, ITALY, April 2003, pp. 727-730.
- **73**. **Mitsoulis, E.**, "Activities of CAMP-R&D (Computer-Aided Materials Processing Rheology and Design) Laboratory", (in Greek) <u>Proceedings of the 1st Panhellenic Plastics Conference</u>, Athens, GREECE, March 2003, pp. 1-5.
- **72. Mitsoulis, E.**, "Differences in Behaviour of Two Similar LDPE Melts", <u>Proceedings of the Asia-Australia Regional Meeting of the Polymer Processing Society</u>, Taipei, TAIWAN, November 2002, pp. 131-132.
- 71. Florjancic, U., Zupancic, A., Mitsoulis, E., Argyropaidas, G., "Rheology of Hydrophilic Polymers Used in Mixing", Proceedings of the 6th European Rheology

- <u>Conference EURHEO 2002</u>, Eds. H. Muenstedt, J. Kaschta, A. Merten, Erlangen, GERMANY, September 2002, pp. 395-396.
- **70**. **Mitsoulis, E.,** Missirlis, K., Argyropaidas, G., "Flow of Polymer Melts: Comparison of Simulations with Experiments", Proceedings of the 6th European Rheology Conference EURHEO 2002, Eds. H. Muenstedt, J. Kaschta, A. Merten, Erlangen, GERMANY, September 2002, pp. 165-166.
- **69**. **Mitsoulis, E.,** Argyropaidas, J., "Computations of Viscoelastic Flows with Free Surfaces and the Finite Element Method", 4th GRACM Congress on Computational Mechanics, Ed. D.T. Tsahalis, University of Patras, Patras, GREECE, June 2002, pp. 610-617.
- **68**. **Mitsoulis, E.,** Mihopoulos, A., Kammer, D. "Computations of Viscoplastic Flow around Cylinders with the Finite Element Method", 4th GRACM Congress on Computational Mechanics, Ed. D.T. Tsahalis, University of Patras, Patras, GREECE, June 2002, pp. 618-625.
- **67. Mitsoulis, E.,** Kammer, D., Zisis, Th., "Flow of Viscoplastic Materials around Cylinders", Proceedings of the 18th Annual Meeting of the Polymer Processing Society, University of Minho, Guimaraes, PORTUGAL, June 2002, paper 5, pp. 1-10.
- **66**. **Mitsoulis, E., (Invited Plenary Paper)** "The Effect of Rheology in Polymer Processing: A Simulation Point of View", Proceedings of the Nordic Society of Rheology Conference 2002, Ed. S.L. Mason, Gothenburg, SWEDEN, June 2002, pp. 3-10.
- 65. Mitsoulis, E., (Invited Keynote Paper) "Determination of Elongational Viscosity in a Spin-Line Rheometer by Inverse Analysis", Proceedings of the 5th ESAFORM Conference on Material Forming, Eds. M. Pietrzyk, Z. Mitura, J. Kaczmar, Akademia Gorniczo-Hutnicza, Krakow, POLAND, April 2002, pp. 179-182.
- **64**. **Mitsoulis, E.**, Goulas, G., Latsa, M., Missilis, K., Beis, M., "The Effect of Biaxial Extension in Film Blowing", Proceedings of the Europe-Africa Regional Meeting of the Polymer Processing Society, Antalya, TURKEY, October 2001, pp. 133-134.
- **63**. **Mitsoulis, E.**, Zisis, Th., Kammer, D., "New Simulation Results on Flow of Bingham Plastics", Proceedings of the 3rd Pacific Rim Conference on Rheology, Vancouver, CANADA, July 2001, paper 162, pp. 1-4.
- **62. Mitsoulis, E.,** Argyropaidas, J., "Numerical Simulation of the Film-Blowing Process: New Considerations" ("Αριθμητική Προσομοίωση της Διεργασίας «Εκβολή με Εμφύσηση»: Νέες Θεωρήσεις"), Proceedings of the 3rd Panhellenic Scientific Congress on Chemical Engineering, Ed. J. Palyvos, Dept. Chem. Eng., NTUA, Athens, GREECE, May 2001, pp. 509-512.
- **61**. **Mitsoulis, E.**, Missirlis, K., Argyropaidas, J., "Numerical Simulation of Contraction and Expansion Flows of Langmuir Monolayers", Proceedings of the 17th Annual Meeting of the Polymer Processing Society, Canadian Society of Rheology, Montreal, CANADA, May 2001, paper 54, pp. 1-14.
- **60**. **Mitsoulis, E.,** Hatzikiriakos, S.G., "The Effect of Contraction Angle on the Entrance Pressure Loss", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 2001, Vol. 47, Dallas, Texas, USA, May 2001, pp. 1920-1924.

- **59**. **Mitsoulis**, **E.**, Argyropaidas, J., Missirlis, K., "Recent Developments in the Simulation of Industrial Film Blowing Lines", Proceedings of the 4th ESAFORM Conference on Material Forming, Liege, BELGIUM, April 2001, pp. 349-352.
- **58**. **Mitsoulis, E.**, "Simulations of Immiscible Displacement in Underground Reservoirs" ("Προσομοιώσεις Εκτόπισης σε Υπόγειους Ταμιευτήρες Πετρελαίου"), <u>Proceedings of the 3rd Congress of Mineral Wealth</u>, Athens, GREECE, November 2000, Vol. B, pp. 489-495.
- **57. Mitsoulis, E.,** "New Perspectives for Research and Development in the Area of New Materials" ("Νέες Προοπτικές για την Έρευνα και Τεχνολογία στον Τομέα των Σύγχρονων Υλικών"), Proceedings of the 3rd Congress of Mineral Wealth, Athens, GREECE, November 2000, Vol. B, pp. 409-415.
- **56. Mitsoulis, E.,** (**Invited Plenary Paper**) "Recent Advances in the Numerical Simulation of Polymer Processing", Proceedings of the 35th Colloque Annuel du Groupe Français de Rhéologie, Grenoble, FRANCE, October 2000, pp. 1-13.
- 55. Nistoran, D., Balan, C., Mitsoulis, E., Panaitescu, V., Weis, J., "Experimental and Numerical Investigations on the Planar Open Channel Flow of a Weakly Elastic PIB Solution", Proceedings of the XIIIth International Congress on Rheology, Eds. D.M. Binding, N.E. Hudson, J. Mewis, J.-M. Piau, C.J.S. Petrie, P. Townsend, M.H. Wagner, and K. Walters, British Society of Rheology, Cambridge, UK, August 2000, pp. 2-238-240.
- **54. Mitsoulis, E.,** "Flow of Polyethylene Melts through Contractions: Comparison of Simulations with Experiments", Proceedings of the XIIIth International Congress on Rheology, Eds. D.M. Binding, N.E. Hudson, J. Mewis, J.-M. Piau, C.J.S. Petrie, P. Townsend, M.H. Wagner, and K. Walters, British Society of Rheology, Cambridge, UK, August 2000, pp. 2-184-186.
- **53**. **Mitsoulis, E., (Invited Plenary Paper)** "Viscoelasticity in Polymer Processing: Where We Stand at the Year 2000", Proceedings of the Europe-Africa Regional Meeting of the Polymer Processing Society, Zlin, CZECH REPUBLIC, August 2000, pp. 18-19.
- **52. Mitsoulis, E.**, (**Invited Keynote Paper**) "Multilayer Film Coextrusion of Polymer Melts", Proceedings of the 3rd ESAFORM Conference on Material Forming, Stuttgart, GERMANY, April 2000, pp. IV-31-34.
- **51. Mitsoulis, E.,** Missirlis, K.A., Assimacopoulos, D. "Wall Effects for Motion of a Sphere in Shear-Thinning Fluids", 3rd National Congress on Computational Mechanics, Eds. N. Aravas and J.T. Katsikadelis, University of Thessaly Press, Volos, GREECE, June 1999, pp. 821-828.
- **50. Mitsoulis, E.,** Beaulne, M., "Some Issues Arising in the Numerical Simulation of Fiber Spinning", Proceedings of the 15th Annual Meeting of the Polymer Processing Society, Eds. P.G.M. Kruijt, H.E.H. Meijer, F.N. van de Vosse, MATE, Eindhoven Institute of Technology, 's-Hertogenbosch, THE NETHERLANDS, June 1999, paper 83, p. 1-20.
- **49**. **Mitsoulis, E.**, "Three-Dimensional Non-Newtonian Computations of Extrudate Swell with the Finite Element Method", (in Greek), <u>Proceedings of the 2nd Panhellenic</u>

- <u>Scientific Congress on Chemical Engineering</u>, Eds. M. Assael, N. Andritsos, A. Lemonidou, M.B. Tsilinikou, Tziola Publ., Thessaloniki, GREECE, May 1999, pp. 689-692.
- . **Mitsoulis**, **E.**, (**Invited Paper**) "Quasi Two-Dimensional Simulations of the Film-Casting Process for Polymers", Proceedings of the 2nd ESAFORM Conference on Material Forming, Guimaraes, PORTUGAL, April 1999, pp. 81-84.
- . **Mitsoulis, E.,** "Strain-Thickening in Planar Flows", Proceedings of the 5th European Rheology Conference, Eds. I. Emri, R. Cvelbar, Steinkopff, Ljubljana, SLOVENIA, September 1998, pp. 151-152.
- **46**. **Mitsoulis, E.**, Beaulne, M., (**Inviter Paper**) "Film Blowing Simulations with Integral Constitutive Equations", Proceedings of the 1st ESAFORM Conference on Material Forming, Sophia-Antipolis, FRANCE, March 1998, pp. 445-448.
- . **Mitsoulis, E.**, Triantafillopoulos, N., "Viscoelasticity in Blade Coating of Non-Newtonian Fluids", Proceedings of the 1997 TAPPI Advanced Coating Fundamentals Symposium, Philadelphia, PA, USA, May 1997, pp. 27-41.
- . **Mitsoulis, E.**, "Viscoelastic Modelling in Polymer Processing", Proceedings of the 1st Panhellenic Scientific Congress on Chemical Engineering, Patras, GREECE, May 1997, pp. 843-848.
- . **Mitsoulis, E.**, Kim, D., Park, H.J., Lee, K.-J., "Numerical Simulation of Rheological Effects in Fiber Spinning", Proceedings of the 1st European Congress on Chemical Engineering, ECCE1, Vol. 3, AIDIC Publishing Co., Florence, ITALY, May 1997, pp. 2073-2076.
- . **Mitsoulis, E.,** Pham, T.V., "Numerical Simulation of Rheological Effects in Blade Coating Flows", Proceedings of XIIth International Congress on Rheology, Eds. A. Ait-Kadi, J.M. Dealy, D.F. James, and M.C. Williams, Chem. Eng. Dept., Univ. Laval, Quebec City, CANADA, August 1996, pp. 423-424.
- . **Mitsoulis, E.,** "Professor's T.C. Papanastasiou's Contributions to Rheology and Computational Fluid Mechanics", Proceedings of the Symposium on Rheology and Computational Fluid Mechanics, Ed. G. Georgiou, Response Advertising Agency, Nicosia, CYPRUS, July 1996, pp. 1-5.
- **40**. Hatzikiriakos, S.G., **Mitsoulis, E.,** "Simulation of the Bagley Correction in the Capillary Flow of a Linear Low Density Polyethylene", <u>Proceedings of the Symposium on Rheology and Computational Fluid Mechanics</u>, Ed. G. Georgiou, Response Advertising Agency, Nicosia, CYPRUS, July 1996, pp. 61-67.
- . **Mitsoulis, E.,** "Viscoplastic Modelling in Materials Processing", Proceedings of 2nd National Congress on Computational Mechanics, Eds. D.A. Sotiropoulos and D.E. Beskos, Technical University of Crete, Chania, Crete, GREECE, June 1996, pp. 231-238.
- **38**. Missirlis, K.A., Assimacopoulos, D., **Mitsoulis, E.,** "Viscoelastic Simulations of Expansion Flows Using the Finite Volume Method", <u>Proceedings of 2nd National Congress on Computational Mechanics</u>, Eds. D.A. Sotiropoulos and D.E. Beskos, Technical University of Crete, Chania, Crete, GREECE, June 1996, pp. 706-713.

- 37. Mitsoulis, E., Hatzikiriakos, S., "Numerical Simulation of Polymer Melt Flow for Determination of Excess Pressure Losses", Basel World CFD User Days 1996, Proceedings of Third World Conference in Applied Computational Fluid Dynamics, Eds. A. Muller, B. Loffler, W. Habashi, M. Bercovier, Oberli Druck & Medien Zentrum-Basel, Freiburg i. Br., GERMANY, May 1996, pp. 27.47-27.52.
- **36**. **Mitsoulis, E.,** Barakos, G., (**Invited Paper**) "Evaluation of Integral Constitutive Equations in Viscoelastic Modelling of Polymer Melts", Proceedings of the 5th International Conference on Numerical Methods in Industrial Forming Processes NUMIFORM '95, Eds. S.-F. Shen and P.R. Dawson, Balkema, Rotterdam, Cornell Univ., Ithaca, New York, USA, June 1995, pp. 125-131.
- 35. Mitsoulis, E., Barakos, G., "Viscoelastic Effects in Stratified Bicomponent Extrusion", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 1995, Vol. 41, Boston, Massachussetts, USA, May 1995, pp. 217-221.
- **34**. **Mitsoulis**, **E.**, Barakos, G., "Upwinding Schemes in Viscoelastic Modelling of Polymeric Liquids", Proceedings of the 4th European Rheology Conference, Eds. C. Gallegos, A. Guerrero, J. Muñoz, M. Berjano, Steinkopff, Seville, SPAIN, September 1994, pp. 356-358.
- 33. Mitsoulis, E., Barakos, G., "Numerical Simulation of Highly Viscoelastic Flows with Thermal Effects", Basel World CFD User Days 1994, Proceedings of Second World Conference in Applied Computational Fluid Dynamics, Ed. M. Bercovier, International High-Tech Forum, Basel, SWITZERLAND, May 1994, pp. 19.9-19.14.
- **32**. **Mitsoulis, E.,** Barakos, G., "Differences in Behaviour of Various Polyethylene Melts through Numerical Simulation", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 1994, Vol. 40, San Francisco, California, USA, May 1994, pp. 1247-1252.
- **31.** Kiriakidis, D.G., **Mitsoulis, E.,** "Viscoelastic Behaviour of Polyethylene Melts in Extrusion Processes", 3rd Panhellenic Congress on Polymers, Ed. T.C. Papanastasiou et al., Thessaloniki, GREECE, December 1993, pp. 547-553.
- **30**. **Mitsoulis, E.,** Atsbha, H., Kiriakidis, D.G., "Flow of Viscoelastic Liquids around Spheres", Proceedings of International Symposium on Advances in Structured and Heterogeneous Continua, Eds. D.A. Siginer and Y.G. Yanovsky, Allerton Press, Inc., Moscow, RUSSIA, August 1993, pp. 287-300.
- **29**. **Mitsoulis**, **E.**, Hannachi, A., "Coextrusion Stability Studies of Polymeric Liquids", Proceedings of 42nd Canadian Chemical Engineering Conference, Ed. R. Luus, Toronto, Ontario, CANADA, October 1992, pp. 535-536.
- **28**. **Mitsoulis**, **E.**, Kiriakidis, D.G., "3-D Oil Displacement in Porous Media", Proceedings of 42nd Canadian Chemical Engineering Conference, Ed. R. Luus, Toronto, Ontario, CANADA, October 1992, pp. 405-406.
- 27. Mitsoulis, E., Park, H.J., "Extrudate Swell in Polymer Melt Flows through Short and Long Dies", Proceedings of XI International Congress of Rheology, Eds. P.

- Moldenaers and R. Keunings, Elsevier Sci. Publ., Brussels, BELGIUM, August 1992, pp. 385-387.
- **26**. **Mitsoulis, E.,** Park, H.J., "Simulation of Viscoelastic Phenomena in Extrusion Flows of Polymer Melts", Basel World User Days CFD 1992, Proceedings of First World Conference in Applied Computational Fluid Dynamics, Ed. M. Bercovier, International High-Tech Forum, Basel, SWITZERLAND, May 1992, pp. 17.1-17.8.
- **25**. **Mitsoulis, E.,** Park, H.J., "Effect of Die Length in Extrusion Flows of Polymer Melts", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 1992, Vol. 38, Detroit, Michigan, USA, May 1992, pp. 421-425.
- **24**. Hannachi, A., **Mitsoulis, E.,** "Some Problems in the Numerical Simulation of Coextrusion Flows", <u>TAPPI Proceedings</u>, Vol. 1, TAPPI Press, Boston, Massachussetts, USA, October 1990, pp. 405-410.
- **23**. **Mitsoulis, E.,** Luo, X.-L., "Convergence Studies in the Numerical Simulation of Viscoelastic Melts Using the K-BKZ Model", Proceedings of the 3rd European Rheology Conference, Ed. D.R. Oliver, Elsevier Appl. Sci., Edinburgh, UNITED KINGDOM, September 1990, pp. 361-364.
- **22**. **Mitsoulis, E.,** Hannachi, A., "Numerical Simulation of Sheet Extrusion Cooling Using Chilling Rolls", Proceedings of the 9th International Heat Transfer Conference, Ed. G. Hetsroni, Hemisphere Publ. Corp., Jerusalem, ISRAEL, August 1990, Vol. 4, pp. 353-358.
- **21**. **Mitsoulis, E.,** Luo, X.-L., "Viscoelastic Effects in Coextrusion Flows of Polymer Melts", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 1990, Vol. 36, Dallas, Texas, USA, May 1990, pp. 156-159.
- 20. Mitsoulis, E., Hannachi, A., "Analysis and Design for Multilayer Parison Coextrusion in Blow Molding", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 1990, Vol. 36, Dallas, Texas, USA, May 1990, pp. 747-750.
- 19. Kiriakidis, D.G., Neale, G.H., Mitsoulis, E., "Prediction of Immiscible, Two-Phase Flow in Porous Media", Proceedings of the 5th International Research Conference, Institut Français du Pétrole, Arles, FRANCE, May 1990, pp. 79-82.
- **18**. **Mitsoulis**, **E.**, Hannachi, A., "Numerical Analysis of Multilayer Calendering", Proceedings PACIFICHEM '89, Honolulu, Hawaii, USA, December 1989.
- 17. Luo, X.-L., Mitsoulis, E., "A Streamline Finite Element Computation for an Annular Extrusion Flow of a Non-Newtonian Fluid", Proceedings of the 8th International Conference on Numerical Methods in Laminar and Turbulent Flow, Eds. C. Taylor, P. Gresho, R.L. Sani, J. Haüser, Pineridge Press, Swansea, UNITED KINGDOM, July 1989, pp. 1451-1460.
- **16**. **Mitsoulis, E.,** "Viscoelastic Origin of Bagley Correction in Polymer Melts", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 1989, Vol. 35, New York, New York, USA, May 1989, pp. 187-190.
- 15. Mitsoulis, E., "Computer-Aided Design of Coextrusion Dies for Polymer Melts", Proceedings of International Conference on Advances in Chemical Engineering, ICACE, Kanpur, INDIA, January 1989; also in Recent Advances in Chemical

- Engineering, Eds. D.N. Saraf and D. Kunzru, Tata McGraw-Hill, New Delhi, INDIA, 1989, pp. 388-394.
- **14**. **Mitsoulis, E.,** Heng, F.L., "Finite Element Analysis of Wire-Coating Coextrusion", <u>Proceedings of X International Congress of Rheology</u>, Ed. P.H.T. Uhlherr, Australian Society of Rheology, Vol. 2, Sydney, AUSTRALIA, August 1988, pp. 128-130.
- 13. Mitsoulis, E., "A Heuristic Approach to Modelling Viscoelasticity in Polymer Processing", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 1988, Vol. 34, Atlanta, Georgia, USA, April 1988, pp. 140-144.
- **12**. **Mitsoulis, E.,** Wagner, R., "Computer-Aided Analysis of the Wire-Coating Process", Proceedings of World Congress III of Chemical Engineering, Vol. IV, Tokyo, JAPAN, September 1986, pp. 534-537.
- 11. Mitsoulis, E., Wagner, R., "Numerical Analysis of Coating Organic Compounds on Wires", Proceedings of the 12th International Conference on Organic Coatings Science and Technology, Athens, Greece, July 1986; also in Advances in Organic Coatings Science and Technology Series, Vol.10, Ed. A.V. Patsis, Technomic Publ. Co. Inc., Lancaster, Pennsylvania, USA, 1988, pp. 199-202.
- 10. Mitsoulis, E., "Extrudate Swell in Multilayer Polymer Melt Flows", Proceedings of the 2nd European Rheology Conference, Eds. H. Giesekus, M.F. Hibberd, Prague, CZECHOSLOVAKIA, June 1986; also in Rheologica Acta, 26, 1988, pp. 131-134.
- **9**. Heng, F.L., **Mitsoulis, E.,** Prinos, P., "Modeling of Flow under Sluice Gates with FEM", Proceedings of the VI International Conference on Finite Elements in Water Resources, Eds. A. Sa da Costa, A. Melo Baptista, W.G. Gray, C.A. Brebbia, G.F. Pinder, Springer-Verlag, Lisbon, PORTUGAL, June 1986, pp. 677-686.
- 8. Mitsoulis, E., "Melt Flow in Polymer Processing Using Finite Elements", Proceedings of the 4th International Conference on Numerical Methods in Laminar and Turbulent Flow, Eds. C. Taylor, M.D. Olson, P.M. Gresho, W.G. Habashi, Pineridge Press, Swansea, UNITED KINGDOM, July 1985, pp. 1413-1424.
- 7. **Mitsoulis, E.,** "Wire-Coating Analysis without the Lubrication Approximation", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 1985, Vol. 31, Washington, D.C., USA, May 1985, pp. 139-143.
- **6**. Vlachopoulos, J., **Mitsoulis, E.,** Mirza, F.A., "Finite Element Analysis of Polymeric Liquid Flows", Proceedings of IX International Congress of Rheology, Eds. B. Mena, A. Garcia-Rejon, C. Rangel-Nafaile, Universidad Nacional Autonoma de Mexico, Acapulco, MEXICO, October 1984, pp. 655-662.
- **5. Mitsoulis, E.,** Vlachopoulos, J., Mirza, F.A., "Finite Element Analysis of Flow through Dies and Extruder Channels", Proceedings of the Society of Plastics Engineers Annual Technical Conference, ANTEC 1984, Vol. 30, New Orleans, Louisiana, USA, May 1984, pp. 53-58.
- **4.** Vlachopoulos, J., **Mitsoulis, E.,** Mirza, F.A., "Prediction of Vortex Growth at the Entry and Extrudate Swell at the Exit for Viscoelastic Flow through Dies",

- <u>Proceedings of "Modeling '84"</u>, Industrial Materials Research Institute, Montreal, Quebec, CANADA, January 1984, pp. 5.1-5.22.
- **3. Mitsoulis, E.,** Vlachopoulos, J. Mirza, F.A., "Finite Element Modeling of Polymer Melt Flow", Proceedings of 33rd Canadian Chemical Engineering Conference, Toronto, Ontario, CANADA, October 1983, pp. 647-652.
- Mitsoulis, E., Vlachopoulos, J. Mirza, F.A., "Finite Element Analysis of Calendering", Proceedings of 4th International Conference on Mathematical Modelling in Science and Technology, Zurich, SWITZERLAND, August 1983, Eds. X.J.R. Avula, R.E. Kalman, A.I. Liapis, E.Y. Rodin, Pergamon Press, New York, 1984, pp. 430-434.
- 1. Vlachopoulos, J., Agur, E.E., **Mitsoulis, E.,** "Analysis of Plastics Extrusion and Calendering by Numerical Methods", <u>Proceedings of PACHEC '83</u>, Vol. II, Seoul, KOREA, May 1983, pp. 124-129.

C. Abstracts Presented at Conferences and Workshops

- **174**. **Mitsoulis, E.,** "60 Years of the K-BKZ Constitutive Relation for Polymers", Proceedings of the 19th International Congress on Rheology (ICR2023), Ed. D. Vlassopoulos, Paper S11-297, Athens, GREECE, July-August 2023.
- **173**. **Mitsoulis, E.,** Kerschbaumer, R., Holzer, C., Friesenbichler, W., "Capillary Flow Behavior of a Gum Acrylonitrile Butadiene Rubber Compound", Proceedings of 38th International Meeting of the Polymer Processing Society, Ed. R. Hufenus, Paper S11-295, St Gallen, SWITZERLAND, May 2023.
- **172**. **Mitsoulis, E.,** Hatzikiriakos, S.G., (**Keynote Lecture**), "60 Years of the K-BKZ Constitutive Relation for Polymers", Proceedings of the 38th International Meeting of the Polymer Processing Society, Ed. R. Hufenus, Paper S11-297, St Gallen, SWITZERLAND, May 2023.
- **171.Mitsoulis, E.**, (**Invited Lecture**), "Viscous and Viscoelastic Material Laws for Polymer Melts and Its Importance for Flow Simulation", 30th Leoben-Conference on Polymer Engineering and Science and Farewell Colloquium of Walter Friesenbichler, Leoben, AUSTRIA, September 2022.
- **170.Mitsoulis, E., (Invited Lecture),** "Advances in Rheology and Polymer Processing: A Modeling and Simulation Point of View", 10th International Meeting of the Hellenic Society of Rheology, Skiathos, GREECE, July 2022.
- **169**. **Mitsoulis, E.,** Polychronopoulos, N.D., Hatzikiriakos, S.G., (**Keynote Lecture**), "The Calendering Process: Models and Computations", Proceedings of the 37th International Meeting of the Polymer Processing Society, Ed. T. Kajiwara, Paper G10-220, Fukuoka, JAPAN, April 2022.
- **168.** Tomkovic, T., Hatzikiriakos, S.G., **Mitsoulis, E.**, "Capillary Flow of Ionomers and their Corresponding Copolymers: Effects of Ionic and Hydrogen Bonding Associations", Proceedings of the 13th Hellenic Polymer Society International

- <u>Conference</u>, Ed. H. Iatrou, Virtual Event, Paper OP20, Athens, GREECE, December 2021.
- . **Mitsoulis, E.,** Stieger, S., Kerschbaumer, R., Friesenbichler, W., (**Keynote Lecture**), "Capillary Flow Behavior of an SBR Rubber Compound", Proceedings of the 36th International Meeting of the Polymer Processing Society, Ed. A. Ajji, Paper S08-169, Montreal, CANADA, September 2021.
- **166**. **Mitsoulis**, **E.**, Stieger, S., Kerschbaumer, R., Friesenbichler, W., (**Keynote Lecture**), "Capillary Flow Behavior of a Rubber Compound", <u>Proceedings of PPS-2019 Europe-Africa Regional Meeting of the Polymer Processing Society</u>, Ed. S. Sinha Ray, Paper S09-253, Pretoria, SOUTH AFRICA, November 2019.
- . **Mitsoulis, E.,** Neunhäuserer, A., Stieger, S., Friesenbichler, W., "Capillary Flow Behavior of a Rubber Compound", 9th International Meeting of the Hellenic Society of Rheology, Samos, GREECE, June 2019.
- **164.**Tomkovic, T., **Mitsoulis, E.**, Hatzikiriakos, S.G., "Rheology of Poly(Ethylene-Co-Methacrylic Acid) Ionomers", 9th International Meeting of the Hellenic Society of Rheology, Samos, GREECE, June 2019.
- **163.**Tomkovic, T., **Mitsoulis, E.**, Hatzikiriakos, S.G., "Capillary Flow of Ionomers and their Corresponding Copolymers: Effects of Ionic and Hydrogen Bonding Associations", Proceedings of the 35th International Meeting of the Polymer Processing Society, Ed. Y. Menceloglu, Paper S12-196, Çeşme, TURKEY, May 2019.
- . **Mitsoulis, E.,** Stieger, S., Kerschbaumer, R., Neunhäuserer, A., Friesenbichler, W. (**Keynote Lecture**), "Rheology and Capillary Flow Behavior of an HNBR Rubber Compound", Proceedings of the 35th International Meeting of the Polymer Processing Society, Ed. Y. Menceloglu, Paper S15-315, Çeşme, TURKEY, May 2019.
- . Friesenbichler, W., Stieger, S., **Mitsoulis, E.,** "Viscosity and Viscoelastic Behaviour of Rubber Compounds", Europe Rubber Industry Forum 2019: All about Compounding, Ed. H.-J. Graf, Vienna, AUSTRIA, May 2019.
- . **Mitsoulis, E.,** Neunhäuserer, A., Stieger, S., Friesenbichler, W., "Capillary Flow Behavior of a Rubber Compound", Proceedings of PPS-2018 Americas Regional Meeting of the Polymer Processing Society, Eds. J. Mead, M. Sobkowicz-Kline, Paper S10-140, Boston, MA, USA, November 2018.
- . **Mitsoulis, E.,** "Flow Behavior of PP-Polymer Nanocomposites in Injection Molding Hyperbolical Dies", 12th Hellenic Polymer Society International Conference, Ioannina, GREECE, October 2018.
- **158**. Friesenbichler, W., Neunhäuserer, A., **Mitsoulis, E.,** "Viscosity Measurements for Rubber Compounds How to Correct Dissipative Heating?", <u>DKT 2018 Deutsche Kautschuk Tagung</u>, Nuremberg, GERMANY, July 2-5, 2018.
- . **Mitsoulis, E.,** Neunhäuserer, A., Stieger, S., Friesenbichler, W., "Flow Behavior of PP-Polymer Nanocomposites in Injection Molding Hyperbolical Dies", Proceedings of the 34rd International Meeting of the Polymer Processing Society, Ed. S.-J. Liu, paper G10-111, Taipei, TAIWAN, May 2018.

- **156.**Tomkovic, T., **Mitsoulis, E.**, Hatzikiriakos, S.G., "Rheology and Capillary Flow of Ionomers", AERC 2018, 12th Annual European Rheology Conference, Sorrento, ITALY, April 2018.
- **155**. **Mitsoulis**, **E.**, Luger, H.-J., Neunhäuserer, A., Friesenbichler, W., Miethlinger, J., "Flow Behavior of Polypropylene Melt in Capillary Dies", Proceedings of the 33rd International Meeting of the Polymer Processing Society, Ed. O. Manero, paper S03-205, Cancun, MEXICO, December 2017.
- **154.**Konaganti, V.K., **Mitsoulis, E.**, Hatzikiriakos, S.G., "The Dependence of Extrudate Swell on Rheological Parameters", 8th International Meeting of the Hellenic Society of Rheology, Limassol, CYPRUS, July 2017.
- **153. Mitsoulis, E.,** "Viscoelastic Simulations with Integral Models at Extremely High Shear Rates", 18th International Workshop on Numerical Methods for Non-Newtonian Flows, Vancouver, CANADA, June 2017.
- **152.**Konaganti, V.K., Ansari, M., **Mitsoulis, E.**, Hatzikiriakos, S.G., "The Effect of Damping Function on Extrudate Swell", 11th Hellenic Polymer Society International Conference, Herakleion, GREECE, November 2016.
- **151.Mitsoulis, E.**, Konaganti, V.K., Hatzikiriakos, S.G. (**Keynote Lecture**), "Extrudate Swell of HDPE Melts in Axisymmetric and Planar Flows", Proceedings of PPS-2016

 <u>Asia/Australia Regional Meeting of the Polymer Processing Society</u>, Ed. Qi Wang, Paper KN-S08-5, Chengdu, CHINA, October 2016.
- **150.Mitsoulis, E.**, Konaganti, V.K., Hatzikiriakos, S.G., "Extrudate Swell of a High-Density Polyethylene Melt: Modeling Using Integral and Differential Constitutive Equations", Proceedings of the 32nd International Meeting of the Polymer Processing Society, Ed. A. Maazouz, paper KN-S10-21, Lyon, FRANCE, July 2016.
- **149.Mitsoulis, E., (Keynote Lecture)**, "Some Experiences on Extrudate Swell with the K-BKZ Model", Proceedings of PPS-2015 Europe-Africa Regional Meeting of the Polymer Processing Society, Eds. C. Holzer, S. Laske, M. Payer, Paper MOD77, Graz, AUSTRIA, September 2015.
- **148**. **Mitsoulis**, **E.**, "Integral Constitutive Equations in Rheology and Polymer Processing: From Tanner's Early Work to the Present", A Special Rheology Symposium in Honor of Professor Roger I. Tanner, Paper 2, Samos, GREECE, June 29-July 2 2015.
- **147.Mitsoulis, E.,** Perko, L., Battisti, M., Friesenbichler, W., "Flow Behavior of PP-Polymer Nanocomposites in Injection Molding Dies", Proceedings of the 31th International Meeting of the Polymer Processing Society, Ed. J.K. Kim, Paper ORG10-02, Jeju Island, KOREA, June 2015.
- **146**. **Mitsoulis, E.,** "20 Years of Working Together in Rheology with SGH: What We Have Learned", Mason Award Symposium of CSR, Paper 2, Montreal, CANADA, May 2015.
- **145**. **Mitsoulis, E.,** Perko, L., Battisti, M., Friesenbichler, W., "*Capillary Flow Behaviour of PP-Polymer Nanocomposites*", <u>AERC 2015</u>, 10th Annual European Rheology Conference, Paper CR23, Nantes, FRANCE, April 2015.

- **144**. Konaganti, V.K., Ansari, M., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Extrudate Swell of Molten Polymers: Experiments and Simulations", Proceedings of the 10th Hellenic Polymer Society Conference, Patras, GREECE, December 2014.
- **143**. Konaganti, V.K., Ansari, M., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Extrudate Swell of a HDPE Melt", Proceedings of PPS 2014 Europe-Africa Regional Meeting of the Polymer Processing Society, Tel Aviv, ISRAEL, October 2014.
- **142**. **Mitsoulis, E.,** Perko, L., Friesenbichler, W., "Capillary Flow Behavior of a Rubber Compound", Proceedings of PPS 2014 Europe-Africa Regional Meeting of the Polymer Processing Society, Tel Aviv, ISRAEL, October 2014.
- **141**. Othman, N., Zisis, Th., **Mitsoulis, E.,** Hatzikiriakos, S.G., "Experiments and Simulations in Capillary Flows of Polylactides", 7th International Meeting of the Hellenic Society of Rheology, Herakleion, Crete, GREECE, July 2014.
- **140**. **Mitsoulis, E.,** "Viscoelasticity: From JV's Early Work to the Present", 7th International Meeting of the Hellenic Society of Rheology, Herakleion, Crete, GREECE, July 2014.
- **139. Mitsoulis, E.,** (**Plenary Lecture**), "Flow of Polymers through Dies: Integral K-BKZ Models with Wall Slip", Polimer 2014, Warsaw, POLAND, April 2014.
- **138. Mitsoulis, E.**, Zisis, Th., Othman, N., Hatzikiriakos, S.G., "Rheology of Polylactides: Experiments and Simulations", AERC 2014, 9th Annual European Rheology Conference, Paper FM16, Karlsruhe, GERMANY, April 2014.
- 137. Kountouriotis, Z., Georgiou, G.C., Mitsoulis, E., "Numerical Study of the Combined Effects of Yield Stress, Slip and Compressibility in Extrusion", AERC 2013, 8th Annual European Rheology Conference, Paper PO19, Leuven, BELGIUM, April 2013.
- 136. Mitsoulis, E., Karapetsas, G., "Some Experiences with the Slip Boundary Condition in Viscous and Viscoelastic Flows", <u>AERC 2013</u>, 8th Annual European Rheology Conference, Paper PO1, Leuven, BELGIUM, April 2013.
- **135.** Ardakani, H.A., **Mitsoulis, E.**, Zisis, Th., Hatzikiriakos, S.G., "Simple Models for PTFE Paste Extrusion", <u>AERC 2013</u>, 8th Annual European Rheology Conference, Paper SP3, Leuven, BELGIUM, April 2013.
- **134**. Ardakani, H.A., **Mitsoulis, E.**, Hatzikiriakos, S.G.,"Polytetrafluoroethylene (PTFE) Paste Extrusion: Scale-up Studies", 62nd Canadian Chemical Engineering Conference, Vancouver, CANADA, October 2012.
- **133**. **Mitsoulis, E.**, "Pressure Drop Predictions in Capillary Flow of Polymer Melts: 30 Years in the Making", XVIth International Congress on Rheology, Lisbon, PORTUGAL, August 2012.
- **132. Mitsoulis, E.**, (**Plenary Lecture**), "Polymer Processing in 2011: Where Do We Stand? A Simulation Point of View", Proceedings of PPS 2011 Asia-Australia Regional Meeting of the Polymer Processing Society, Ed. H. Nazockdast, Kish Island, IRAN, November, 2011.

- **131**. Ardakani, H.A., Hatzikiriakos, S.G., Zisis, Th., **Mitsoulis, E.**, "Study of Toothpaste as a Thixotropic Material", VPF2011, 4thWorkshop on "Visco-plastic Fluids, from Theory to Application", Rio de Janeiro, BRAZIL, November 2011.
- **130**. **Mitsoulis, E.,** Hatzikiriakos, S.G., "The Effect of Slip in the Flow of a HDPE Melt: Experiments and Simulations", 6th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2011.
- **129**. Anvari Ardakani, H., Hatzikiriakos, S.G., Zisis, Th., **Mitsoulis, E.,** "Rheology and Processing of Toothpaste", 6th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2011.
- **128**. **Mitsoulis, E.,** Malamataris, N.A., "The Free Boundary Condition in Viscoelastic Flow Simulations", 6th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2011.
- **127. Mitsoulis, E.**, Ansari, M., Alabbas, A., Hatzikiriakos, S.G., "The Bagley Correction of Molten Polyethylenes", Proceedings of PPS 2010 Europe-Africa Regional Meeting of the Polymer Processing Society, Eds. M. Cakmak, Y. Menceloglu, Y. Ulcer, Istanbul, TURKEY, October, 2010.
- **126.** Apostolopoulou, M., **Mitsoulis, E.**, Ardakani-Anvari, H., Hatzikiriakos, S.G., "Rheology of Toothpaste: a Semi-Solid, Yield Stress, Thixotropic Material", Proceedings of PPS 2010 Europe-Africa Regional Meeting of the Polymer Processing Society, Eds. M. Cakmak, Y. Menceloglu, Y. Ulcer, Istanbul, TURKEY, October, 2010.
- **125.Mitsoulis, E.,** (**Plenary Lecture**), "Advances in Polymer Processing: A Modeling and Simulation Point of View (or Where We Stand in the Year 2010)", <u>ASPM2010</u>, <u>Austrian-Slovenian Polymer Meeting</u>, Leoben, AUSTRIA, September, 2010.
- **124.Mitsoulis, E.**, (**Invited Paper**), "Modeling and Simulation of Viscoelasticity with Integral Constitutive Equations", Symposium on New Frontiers in Chemical and Biochemical Engineering, Thessaloniki, GREECE, November, 2009.
- **123.Mitsoulis, E.**, Alexandrou, A., "Calendering of Viscoplastic Materials", VPF2009, 3rd Workshop on "Visco-plastic Fluids, from Theory to Application", Limassol, CYPRUS, November 2009.
- **122.Mitsoulis, E.**, "Steady Simulations of Fountain Flow of Viscoplastic Fluids", VPF2009, 3rd Workshop on "Visco-plastic Fluids, from Theory to Application", Limassol, CYPRUS, November 2009.
- **121.Mitsoulis, E.**, Hatzikiriakos, S.G., "Modelling Teflon Extrusion: The Effect of an Objective Flow-Type Parameter", <u>AERC 2009</u>, 5th Annual European Rheology Conference, Cardiff, UK, April 2009.
- **120.Mitsoulis, E.**, Alexandrou, A., "Transient Simulations of Calendering Viscoplastic Fluids", <u>AERC 2009</u>, 5th Annual European Rheology Conference, Cardiff, UK, April 2009.
- **119.Mitsoulis, E.**, Hatzikiriakos, S.G., "PTFE Extrusion in Semi-Solid State: Issues of Modeling and Simulation", 58th Canadian Chemical Engineering Conference, Ottawa, CANADA, October 2008.

- **118.Mitsoulis, E.**, Hatzikiriakos, S.G., "Rolling of Mozzarella Cheese and Bread Dough", 58th Canadian Chemical Engineering Conference, Ottawa, CANADA, October 2008.
- 117.Mitsoulis, E., "New Results for Calendering Viscoplastic Materials", Mason Award Symposium of the Canadian Society of Rheology, Hamilton, CANADA, November 2007.
- **116.** Huilgol, R.R., You, Z., **Mitsoulis, E.**, "Application of the Lambert W Function to Obtain Analytic Solutions for the Papanastasiou Model", Workshop on "Viscoplastic Fluids, from Theory to Application", Monte Verita, SWITZERLAND, October 2007.
- **115.Mitsoulis, E.**, "Drag Flow of Viscoplastic Fluids past Cylinders: Comparison between Experiments and Simulations", Workshop on "Visco-plastic Fluids, from Theory to Application", Monte Verita, SWITZERLAND, October 2007.
- 114. Gustin, A. Zupancic, A., Zumer, M., Mitsoulis, E., "Influence of Rheological Properties on the Extrusion of PA6 in Industrial Spinning Plants", EPF-2007, European Polymer Congress 2007, Portoroz, SLOVENIA, July 2007.
- 113. Sirakov, I., Mitsoulis, E., "Viscoelastic Analysis of Complex Flows: From the Constitutive Model through the Numerical Simulations and Their Experimental Validation", 15th International Workshop on Numerical Methods for Non-Newtonian Flows, Rhodes, GREECE, June 2007.
- **112**. Taliadorou, E., Georgiou, G., **Mitsoulis, E.,** "Numerical Simulation of the Extrusion of Strongly Compressible Liquid Foams", 15th International Workshop on Numerical Methods for Non-Newtonian Flows, Rhodes, GREECE, June 2007.
- **111**. Gustin, A., Zupancic, A., **Mitsoulis, E.,** "Predicting the Behaviour of Nylon-6 through Industrial Spin Packs", 15th International Workshop on Numerical Methods for Non-Newtonian Flows, Rhodes, GREECE, June 2007.
- 110. Muliawan, E., Hatzikiriakos, S.G., Sofou, S., Mitsoulis, E., "Rheological Characterization of Foodstuff Used in Rolling Experiments and Modeling via Integral Constitutive Equations", 15th International Workshop on Numerical Methods for Non-Newtonian Flows, Rhodes, GREECE, June 2007.
- **109**. **Mitsoulis**, **E.**, Argyropaidas, I., "Squeeze Flow of Carbopol Gels", 15th International Workshop on Numerical Methods for Non-Newtonian Flows, Rhodes, GREECE, June 2007.
- **108**. **Mitsoulis, E.,** Sofou, S., "Numerical Simulation of Calendering Viscoplastic Materials", 15th International Workshop on Numerical Methods for Non-Newtonian Flows, Rhodes, GREECE, June 2007.
- **107**. Muliawan, E., Hatzikiriakos, S.G., Sofou, S., **Mitsoulis, E.,** "Rheological Characterization of Foodstuff Used in Rolling Experiments and Modeling via Integral Constitutive Equations", 5th International Meeting of the Hellenic Society of Rheology, Rhodes, GREECE, June 2007.
- 106.Mitsoulis, E., (Invited Keynote Paper), "Recent Advances in the Numerical Simulation of Viscoelastic Flows in Polymer Processing with Integral Constitutive Equations", EUPOC 2007, Europolymer Conference 2007: From Polymer Structure and Rheology to Process Modeling, Gargnano, ITALY, May 27-June 1, 2007.

- **105.** Zupancic, A., Gustin, A., **Mitsoulis, E.**, "Flow of Polyamide-6 through Industrial Filtering Elements in Spinning Operations", <u>AERC 2007</u>, 4th Annual European Rheology Conference, Naples, ITALY, April 2007.
- **104.**Taliadorou, E., Georgiou, G., **Mitsoulis, E.**, "Extrudate Swell of Strongly Compressible Liquid Foams", <u>AERC</u> 2007, 4th Annual European Rheology Conference, Naples, ITALY, April 2007.
- **103.**Huilgol, R.R., You, Z., **Mitsoulis, E.**, "Application of the Lambert W-Function to Obtain Analytic Solutions for the Papanastasiou Model", <u>AERC 2007</u>, 4th Annual <u>European Rheology Conference</u>, Naples, ITALY, April 2007.
- **102.**Gustin, A., Zupancic, A., **Mitsoulis, E.**, "Flow of Nylon-6 through Spinnerets and Filters: Experiments and Simulations", Proceedings of PPS 2006 Europe-Africa Regional Meeting of the Polymer Processing Society, Pretoria, SOUTH AFRICA, October 2006.
- **101.Mitsoulis, E.,** "Annular Extrudate Swell: Effects of Compressibility and Slip at the Wall", Proceedings of PPS 2006 Europe-Africa Regional Meeting of the Polymer Processing Society, Pretoria, SOUTH AFRICA, October 2006.
- **100.Mitsoulis, E.**, Marangoudakis, S., Spyratos, M., Zisis, Th., Malamataris, N., "Pressure-Driven Flows of Bingham Plastics over a Square Cavity", <u>AERC 2006</u>, 3rd Annual European Rheology Conference, Hersonisos, Crete, GREECE, April 2006.
- **99. Mitsoulis, E.**, Sofou, S., "Extrudate Swell of Pseudoplastic and Viscoplastic Fluids from Annular Dies", <u>AERC 2006</u>, 3rd <u>Annual European Rheology Conference</u>, Hersonisos, Crete, GREECE, April 2006.
- **98. Mitsoulis, E.**, Alexandrou, A., "Transient Simulations of Squeeze Flow of Semi-Concentrated Fiber Suspensions", <u>AERC 2006</u>, 3rd <u>Annual European Rheology</u> Conference, Hersonisos, Crete, GREECE, April 2006.
- **97.** Chatzimina, M., Xenofontos, C., Georgiou, G., Argyropaidas, I., **Mitsoulis, E.**, Huilgol, R.R., "*Cessation of Annular Poiseuille Flows of a Bingham Plastic*", <u>AERC 2006</u>, 3rd Annual European Rheology Conference, Hersonisos, Crete, GREECE, April 2006.
- **96. Mitsoulis, E.**, Argyropaidas, I., Georgiou, G., Chatzimina, M., Huilgol, R.R., (**Invited Paper**), "Finite Stopping Times in Couette and Poiseuille Flows of Viscoplastic Fluids: Theory and Simulations", <u>BIRS Workshop on "Visco-plastic Fluids</u>, from Theory to Application", Banff, CANADA, October 2005.
- **95. Mitsoulis, E.**, Ochoa, I., Hatzikiriakos, S.G., "Paste Extrusion of PTFE: Experiments and Simulations", 77th Annual Meeting of the Society of Rheology, Vancouver, CANADA, October 2005.
- **94.** Chatzimina, M., Georgiou, G., **Mitsoulis, E.**, Huilgol, R.R., "Finite Stopping Times in Cessation Flows of Bingham Plastic Fluids: A Numerical Study", <u>AERC 2005</u>, 2nd Annual European Rheology Conference, Grenoble, FRANCE, April 2005.
- **93.** Gustin, A., Zupancic-Valant, A., **Mitsoulis, E.**, "Modelling of Polyamide 6 Extrusion through Industrial Spin Packs", <u>AERC 2005</u>, 2nd Annual European Rheology <u>Conference</u>, Grenoble, FRANCE, April 2005.

- **92. Mitsoulis, E.**, Psarreas, A., Ntagas, G., "Start-up Couette and Poiseuille Flows of Yield-Stress Fluids", HSR 2004, 4th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2004.
- **91. Mitsoulis, E.,** Galazoulas, S., "The Effect of Rheology on the Drag and Stability of Cylinders Moving in Yield-Stress Fluids", <u>HSR 2004</u>, 4th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2004.
- **90. Mitsoulis, E.,** Papoulias, C., "The Effect of Glass-Fiber Content on the Rheology of Semi-Concentrated Polymer Composites", HSR 2004, 4th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2004.
- **89.** Mitsoulis, E., Kotsos, P., "Rheological Effects in Wire Coating", HSR 2004, 4th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2004.
- **88. Mitsoulis, E.,** Matsoukas, A., "Squeeze Flow of Yield-Stress Fluids: Theory and Experiments", HSR 2004, 4th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2004.
- **87. Mitsoulis, E.**, Sofou, S., "Simulations of Herschel-Bulkley Flow in Roll Coating", HSR 2004, 4th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2004.
- **86. Mitsoulis, E.**, Hatzikiriakos, S.G., "The Effect of Slip in the Flow of a Branched PP Melt: Simulations and Experiments", HSR 2004, 4th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2004.
- **85**. Chatzimina, M., Georgiou, G.C., **Mitsoulis, E.,** Huilgol, R.R., "Time-Dependent Couette and Poiseuille Cessation Flows of Bingham Fluids", <u>HSR 2004, 4th International Meeting of the Hellenic Society of Rheology</u>, Athens, GREECE, June 2004.
- **84.** Guštin, A., **Mitsoulis, E.**, Zupančič, A., "Polyamide-6: Pressure Drop Estimation through Wire Mesh Filters and Spinnerets", <u>HSR 2004</u>, 4th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2004.
- 83. Slemenik Perše, L., Žumer, M., Zupančič, A., Bouras, A., Boudouvis, A., Mitsoulis, E., "Laminar Mixing of Non-Newtonian Fluids in Agitated Vessels with Baffled Impellers: Experiments and Simulations", HSR 2004, 4th International Meeting of the Hellenic Society of Rheology, Athens, GREECE, June 2004.
- **82.** Slemenik Perse, L., Zupancic, A., **Mitsoulis, E.**, "Laminar Mixing of Non-Newtonian Fluids in Helical-Ribbon Mixers", Proceedings of PPS 2003 Europe-Africa Regional Meeting of the Polymer Processing Society, Athens, GREECE, September 2003.
- **81. Mitsoulis, E.**, Psarreas, A., Ntagas, G., "Time-Dependent Flows of Yield-Stress Fluids in Mold Cavities", Proceedings of PPS 2003 Europe-Africa Regional Meeting of the Polymer Processing Society, Athens, GREECE, September 2003.
- **80. Mitsoulis, E.**, Galazoulas, S., "Drag and Stability of Cylinders Moving in Yield-Stress Fluids", Proceedings of PPS 2003 Europe-Africa Regional Meeting of the Polymer Processing Society, Athens, GREECE, September 2003.
- **79. Mitsoulis, E.,** Papoulias, C., "Modelling the Rheology of Semiconcentrated Polymer Composites", Proceedings of PPS 2003 Europe-Africa Regional Meeting of the Polymer Processing Society, Athens, GREECE, September 2003.

- **78. Mitsoulis, E.**, Matsoukas, A., "Squeeze Flow of Yield-Stress Fluids: Theory and Experiments", Proceedings of PPS 2003 Europe-Africa Regional Meeting of the Polymer Processing Society, Athens, GREECE, September 2003.
- **77. Mitsoulis, E.,** Sofou, S., "Calendering Analysis of Pseudoplastic and Viscoplastic Materials", Proceedings of PPS 2003 Europe-Africa Regional Meeting of the Polymer Processing Society, Athens, GREECE, September 2003.
- **76. Mitsoulis, E.**, Hatzikiriakos, S.G., Gotsis, A.D., "Modeling the Bagley Correction in Flow through Dies: Simulations and Experiments", Proceedings of PPS 2003 Europe-Africa Regional Meeting of the Polymer Processing Society, Athens, GREECE, September 2003.
- **75. Mitsoulis, E.,** Huilgol, R., "Finite Stopping Times in Couette and Poiseuille Flows of Viscoplastic Fluids", 13th International Workshop on Numerical Methods for Non-Newtonian Flow, Lausanne, SWITZERLAND, June 2003.
- **74**. **Mitsoulis, E.,** "Flow of Viscoplastic Fluids through Expansions and Contractions", 13th International Workshop on Numerical Methods for Non-Newtonian Flow, Lausanne, SWITZERLAND, June 2003.
- **73**. **Mitsoulis, E.,** (**Invited Keynote Paper**), "Flow of Viscoplastic Materials in Benchmark Geometries", (in Greek), 5th Panhellenic Congress on Polymers, Herakleion, Crete, GREECE, December 2001.
- **72**. **Mitsoulis, E.,** Hatzikiriakos, S.G., "Some Success Stories in the Numerical Simulation of Polymer Flows with the K-BKZ Model", 73rd Annual Meeting of the Society of Rheology, Bethesda, Maryland, USA, October 2001.
- **71**. **Mitsoulis, E.,** "New Developments in Predicting Strain Hardening with Integral Constitutive Equations", 12th International Workshop on Numerical Methods for Non-Newtonian Flow, Monterey, California, USA, July 2001.
- **70**. **Mitsoulis, E.**, Hatzikiriakos, S.G., "The Behaviour of Branched PP in Rheometry", Proceedings of the 3rd Pacific Rim Conference on Rheology, Vancouver, CANADA, July 2001.
- **69**. **Mitsoulis, E.,** Athanasopoulos, G., "Modeling of Viscous Effects in Blade Coating Flows", HSR 2001, 3rd International Meeting of the Hellenic Society of Rheology, Patras, GREECE, June 2001.
- **68**. **Mitsoulis, E.,** Beaulne, M., Kammer, D., Zissis, A., "Modeling of Viscoplastic Lid-Driven Cavity Flow Using Finite Element Simulations", HSR 2001, 3rd International Meeting of the Hellenic Society of Rheology, Patras, GREECE, June 2001.
- 67. Mitsoulis, E., (Invited Keynote Paper), "Methods for Viscoelastic Simulation", Workshop on Constitutive Equations and Solvers: Current Status Initiative, University of Bradford, Bradford, UNITED KINGDOM, January 2001.
- **66**. Schwetz, M., **Mitsoulis, E.,** "Flow of Polymer Melts: Measurements and Simulations", Workshop for German-Greek Joint Research and Technology Programs focused on Materials Research, FORTH-HELLAS, Heraklion, Crete, GREECE, December 2000.

- **65**. **Mitsoulis**, **E.**, Hatzikiriakos, S.G., "Effect of Contraction Angle on the End Pressure in Capillary Rheometry", 16th Annual Meeting of the Polymer Processing Society, Shanghai, CHINA, June 2000.
- **64. Mitsoulis, E.,** "The High Non-Linearity of Rheological Constitutive Equations for Polymers", 1st Interdisciplinary Symposium on Non-Linear Problems, NTUA, Athens, GREECE, January 2000.
- 63. Mitsoulis, E., "Shear-Free Flows: Film Blowing, Fiber Spinning, Film Casting", NMPP '99, Workshop on Numerical Simulation of Polymer Processing, Ed. E. Mitsoulis, Paris, FRANCE, October 1999.
- **62**. **Mitsoulis, E.,** Beaulne, M., "The Effect of Rheology in Film Casting", 71st Annual Meeting of the Society of Rheology, Madison, Wisconsin, USA, October 1999.
- **61**. **Mitsoulis, E.,** Beaulne, M., "Viscoplastic and Viscoelastic Flows in Generalized Ducts", EURORHEO'99-3 Southern Europe Conference on Rheology, Falerna Lido, ITALY, September 1999.
- **60**. **Mitsoulis**, E., "Flow of LDPE through Contractions: Comparison of Simulations with Experiments", 11th International Workshop on Numerical Methods for Non-Newtonian Flow, Vaalsbroek, The NETHERLANDS, August 1999.
- **59**. **Mitsoulis, E.,** "Numerical Simulation of Flows of Polymer Solutions and Melts through Contractions", 70th Annual Meeting of the Society of Rheology, Monterey, California, USA, October 1998.
- **58**. Beaulne, M., **Mitsoulis, E.,** "Numerical Simulation of Polymer Melt Spinning", <u>48th</u> Canadian Chemical Engineering Conference, London, Ontario, CANADA, October 1998.
- **57**. **Mitsoulis, E.,** Beaulne, M., "Some Experiences with Modelling Shear-Free Flows in Polymer Processing", 2nd Meeting of the Hellenic Society of Rheology and International Symposium, Heraklion, Crete, GREECE, August 1998.
- **56**. **Mitsoulis, E.,** Beaulne, M., "Film Casting Simulations with Integral Constitutive Equations", North American Meeting of the Polymer Processing Society, Toronto, Ontario, CANADA, August 1998.
- **55**. **Mitsoulis, E., (Invited Keynote Paper)**, "Viscoelastic Modelling in Flows through Extrusion Dies", 14th Annual Meeting of the Polymer Processing Society, Yokohama, JAPAN, June 1998.
- **54**. **Mitsoulis, E.,** "Rheological Implications in the Processing of Polymer Films and Fibers", (in Greek), 4th Panhellenic Congress on Polymers, Patras, GREECE, November 1997.
- **53**. Beaulne, M., **Mitsoulis, E.,** "Rheological Effects in the Manufacturing of Polymer Films and Fibers", 47th Canadian Chemical Engineering Conference, Edmonton, Alberta, CANADA, October 1997.
- **52**. **Mitsoulis, E.,** Luo, H.Q., Ellwood, K.R.J., "Three-Dimensional Flow Modelling in Plastics Processing", Europe/Africa Region Meeting of the Polymer Processing Society, Gothenburg, SWEDEN, August 1997.

- . **Mitsoulis, E.,** Hatzikiriakos, S.G., "Predictions of the Bagley End Correction in the Capillary Rheometry of Molten Polymers", 2nd Pacific Rim Conference on Rheology, Melbourne, AUSTRALIA, July 1997.
- . **Mitsoulis, E.,** Beaulne, M., "Viscoplastic Effects in Flows around Spheres Falling in Tubes", 2nd Pacific Rim Conference on Rheology, Melbourne, AUSTRALIA, July 1997.
- **49**. **Mitsoulis, E.,** Missirlis, K.A., Assimacopoulos, D. "The Finite Volume Method in the Simulation of Viscoelastic Expansion Flows", 97-9 IUTAM Symposium on Rheology and Computation, Sydney, AUSTRALIA, July 1997.
- . **Mitsoulis, E.,** "Excess Pressure Losses in Flows of Polymer Melts", 2nd International Conference on the Dynamics of Polymeric Liquids, EURORHEO 1, Capri, ITALY, May 1997.
- . **Mitsoulis, E.,** Beaulne, M., "Viscoplastic Effects in Flows around Spheres in Tubes", 68th Annual Meeting of the Society of Rheology, Galveston, Texas, USA, February 1997.
- **46**. **Mitsoulis, E.,** "Implementation of the Adaptive Viscoelastic Stress Splitting (AVSS) Method for Polymer Flows", <u>AIChE Annual Meeting</u>, Chicago, Illinois, USA, November 1996.
- . **Mitsoulis, E.,** Hatzikiriakos, S.G., "The Bagley End Correction in the Capillary Flow of Molten Polymers", 6th European Polymer Federation Symposium EPF'96, Aghia Pelaghia, Crete, GREECE, October 1996.
- . **Mitsoulis, E.,** Blackery, J., "Viscoplastic Flows around Spheres", 46th Canadian Chemical Engineering Conference, Kingston, Ontario, CANADA, October 1996.
- . **Mitsoulis, E.,** Pham, T.V., "Flows in Generalized Ducts", 46th Canadian Chemical Engineering Conference, Kingston, Ontario, CANADA, October 1996.
- . **Mitsoulis, E.,** Pham, V.T., "Viscoelastic Modelling of Blade Coating", 12th Annual Meeting of the Polymer Processing Society, Sorrento, ITALY, May 1996.
- **41. Mitsoulis, E.,** Pham, T.V., "Viscoelastic Effects in Blade Coating", Coatings Symposium, 1996 Spring National AIChE Meeting, New Orleans, LA, USA, February 1996.
- . **Mitsoulis, E.,** "Some Success Stories in Viscoelastic Simulations of Polymer Fluid Flows", 32nd Annual Technical Meeting, SES'95, Society of Engineering Science, New Orleans, LA, USA, October 1995.
- . **Mitsoulis**, **E.**, Pham, T.V., Barakos, G., "Rheological Characterization of Polymer Solutions Used in Blade Coating", 45th Canadian Chemical Engineering Conference, Quebec City, Quebec, CANADA, October 1995.
- **38. Mitsoulis, E.,** Barakos, G., "Viscoelastic Effects in Flows around Cylinders and Spheres", 67th Annual Meeting of the Society of Rheology, Sacramento, California, USA, October 1995.
- **37. Mitsoulis, E.**, Barakos, G., Tzoganakis, C., "Rheological Characterization of Controlled-Rheology Polypropylenes", Polymer Processing Society, European Meeting 1995, Stuttgart, GERMANY, September 1995.

- **36**. **Mitsoulis, E.**, "Convergence Studies in Viscoelastic Modelling with Integral Constitutive Equations", 9th International Workshop on Numerical Methods for Non-Newtonian Flow, Rossett, WALES, April 1995.
- **35**. **Mitsoulis, E.,** Barakos, G., Pham, V.T., "Viscoelastic Modelling of Coating Flows", 11th Annual Meeting of the Polymer Processing Society, Seoul, KOREA, March 1995.
- **34. Mitsoulis, E.**, "Evaluation of Integral Constitutive Equations in Viscoelastic Modelling of Polymer Melts", <u>EU Meeting on Rheology</u>, Les 2 Alpes, FRANCE, January 1995.
- **33**. **Mitsoulis, E.,** Barakos, G., "Evaluation of Integral Constitutive Equations in Viscoelastic Modelling of Polymer Melts", 44th Canadian Chemical Engineering Conference, Calgary, Alberta, CANADA, October 1994.
- **32. Mitsoulis, E.,** "Viscoelastic Modelling of Polymer Melts and its Role in Polymer Processing", NATO Institute of Advanced Studies on Rheology and Polymer Processing, Algarve, Portugal, October 1994.
- **31**. **Mitsoulis, E.,** Barakos, G., "Recent Advances in Viscoelastic Modelling of Polymeric Liquids", The Pacific Conference on Rheology and Polymer Processing (PCR '94), Kyoto, Japan, September 1994.
- **30**. Barakos, G., **Mitsoulis, E.,** "Thermal Effects in Viscoelastic Modelling of Polymer Melts", 10th Annual Meeting of the Polymer Processing Society, Akron, Ohio, USA, April 1994.
- **29**. **Mitsoulis, E.,** Barakos, G., "Viscoelastic Effects in Blade Coating", <u>International Symposium on Viscoelastic Fluids</u>, Ed. C.J.S. Petrie, Tobago, West Indies, January 1994.
- 28. Park, H.J., Kim, D., Lee, K.-J., Mitsoulis, E., "Numerical Simulation of Converging Channel Flow of the Fluid M1 Using an Integral Constitutive Equation", 65th Annual Meeting of the Society of Rheology, Boston, Massachussetts, USA, October 1993.
- 27. Barakos, G., Mitsoulis, E., "Non-Isothermal Simulations of Polymer Melts in Flows through Dies", 65th Annual Meeting of the Society of Rheology, Boston, Massachussetts, USA, October 1993.
- **26**. Barakos, G., **Mitsoulis, E.,** "Differences in Behaviour of Various Polyethylene Melts through Numerical Simulation", 43rd Canadian Chemical Engineering Conference, Ottawa, Ontario, CANADA, October 1993.
- 25. Kajiwara, T., Barakos, G., Mitsoulis, E., "Rheological Characterization of Polymer Solutions and Melts with an Integral Constitutive Equation", Proceedings of the 6th International Symposium on Polymer Analysis and Characterization (ISPAC), Aghia Pelaghia, Crete, GREECE, July 1993.
- **24**. Barakos, G., **Mitsoulis, E.,** "Numerical Simulations of Viscoelastic Flows around Spheres", Recent Developments in Structured Continua III, Montreal, Quebec, CANADA, May 1993.
- **23**. **Mitsoulis, E.,** Kiriakidis, D.G., "Extrudate Swell Revisited: The Influence of Slip and Non-Isothermal Conditions", 9th Annual Meeting of the Polymer Processing Society, Manchester, UNITED KINGDOM, April 1993.

- **22**. **Mitsoulis, E.,** Park, H.J., Kiriakidis, D.G., "Birefringence Modelling of HDPE Melts through Dies", Polymer Processing Society European Regional Meeting, Prague, CZECHOSLOVAKIA, September 1992.
- 21. Mitsoulis, E., Abdali, S.S., Markatos, N.C., "Flow of Viscoplastic Materials through Extrusion Dies", 8th Annual Meeting of the Polymer Processing Society, New Delhi, INDIA, March 1992.
- **20**. **Mitsoulis, E.,** Park, H.J., "Recent Progress in the Simulation of Polymer Solutions and Melts Using an Integral Constitutive Equation", 7th International Workshop on Numerical Methods for Non-Newtonian Flow, Stuart, Florida, USA, February 1992.
- 19. Kiriakidis, D.G., Mitsoulis, E., Neale, G.H., "Numerical Simulations of Immiscible Fluid-Fluid Displacement Flow in Porous Media", 41st Canadian Chemical Engineering Conference, Vancouver, British Columbia, CANADA, October 1991.
- **18**. **Mitsoulis, E.**, Hannachi, A., "Multilayer Sheet Coextrusion: Comparison between Simulation and Experiments", 41st Canadian Chemical Engineering Conference, Vancouver, British Columbia, CANADA, October 1991.
- **17**. **Mitsoulis, E.,** Park, H.J., "Numerical Simulation of Boger Fluids through Contractions Using an Integral Constitutive Equation", 14th Discussion Conference on Rheology of Polymer Melts, Prague, CZECHOSLOVAKIA, July 1991.
- 16. Mitsoulis, E., "Simulation of Viscoelastic Phenomena in Polymer Melt Flows Using Integral Constitutive Equations", 43rd Annual Seesion of Indian Institute of Chemical Engineers (IIChE), IIChE-CSChE Joint Symposium, Varanasi, INDIA, December 1990.
- **15**. **Mitsoulis, E.,** Luo, X.-L., Hannachi, A., "Multilayer Coextrusion of Polymer Melts: Some Simulation Considerations", 6th Annual Meeting of the Polymer Processing Society, Nice, FRANCE, April 1990.
- **14**. **Mitsoulis, E.,** Luo, X.-L., "Viscoelastic Effects in Coextrusion Flows of Polymer Melts", AIChE Annual Meeting, San Francisco, California, USA, November 1989.
- **13**. **Mitsoulis, E.,** Luo, X.-L., "Numerical Simulation of Entry and Exit Flows Using the K-BKZ Model", 61st Annual Meeting of the Society of Rheology, Montreal, Quebec, CANADA, October 1989.
- 12. Mitsoulis, E., "Some Experiences Using Software Packages in a Computer-Aided Design Course", 1989 Association of Professional Engineers of Ontario/University of Ottawa Engineering Society Student Conference, Ottawa, Ontario, CANADA, October 1989.
- 11. Mitsoulis, E., "Some Experiences Using Software Packages in a Computer-Aided Design Course", 39th Canadian Chemical Engineering Conference, Hamilton, Ontario, CANADA, October 1989.
- **10**. **Mitsoulis**, **E.**, "Numerical Simulation of Carbon-Black Filled Polymer Flows in Contractions", International Conference Rubber '89, Prague, CZECHOSLOVAKIA, August 1989.

- **9. Mitsoulis, E.,** Luo, X.-L., "Numerical Simulation of Entry and Exit Flows Using the K-BKZ Model", 6th International Workshop on Numerical Methods for Non-Newtonian Flow, Hindsgavl, DENMARK, June 1989.
- 8. Mitsoulis, E., "Streamline-Upwind/Petrov-Galerkin Finite Element Methods in Polymer Processing", 2nd Canadian-German Workshop on Chemical Engineering Mathematics, Bad Honnef, WEST GERMANY, May 1988.
- 7. Mitsoulis, E., Heng, F.L, "Die Design for Dual Wire Insulation", 4th Annual Meeting of the Polymer Processing Society, Orlando, Florida, USA, May 1988.
- **6. Mitsoulis, E.,** "Recent Advances in Wire-Coating Simulation", 3rd Annual Meeting of the Polymer Processing Society, Stuttgart, WEST GERMANY, April 1987.
- 5. **Mitsoulis, E.,** "Fluid Flow and Heat Transfer in Wire Coating", 2nd Annual Meeting of the Polymer Processing Society, Montreal, Quebec, CANADA, April 1986.
- **4. Mitsoulis, E.,** Wagner, R., "Polymer Melt Flow inside Wire-Coating Dies: A Simulation Approach", 57th Annual Meeting of the Society of Rheology, Ann Arbor, Michigan, USA, October 1985.
- 3. Mitsoulis, E., "Extrudate Swell in Double-Layer Flows", 4th International Workshop on Numerical Methods for Non-Newtonian Flow, Spa, BELGIUM, June 1985.
- 2. Steward, F.R., **Mitsoulis, E.,** "Some Characteristics of Liquid Pool Fires", <u>Annual Meeting of the Canadian Section of the Combustion Institute</u>, Kingston, Ontario, CANADA, May 1983.
- 1. **Mitsoulis, E.,** Vlachopoulos, J., Mirza, F.A., "Finite Element Analysis of Isothermal and Non-Isothermal Polymer Melt Flow", <u>IMRI/NRCC Mini-Symposium "Modeling '83"</u>, Montreal, Quebec, CANADA, January 1983.

D. Chapters in Books

- **13.** Friesenbichler, W., Stieger, S., Kerschbaumer, R., Berger-Weber, G., Neunhaeuserer, A., **Mitsoulis, E.**, "Viscoelastic Modelling of Polymer Melts and Rubber Compounds", in Advances in Polymer Processing 2020, Proceedings of the International Symposium on Plastics Technology, Eds. C. Hopmann, R. Dahlmann, Springer Vieweg, Berlin, 2020, pp. 270-282.
- **12.** Jabbari, M., McDonaugh, J., **Mitsoulis, E.**, Hattel, J.H., "Application of a Projection Method for Simulating Flow of a Shear-Thinning Fluid", in Recent Advances in Mechanics of Non-Newtonian Fluids, Eds. Wei-Tao Wu, Mehrdad Massoudi, MDPI, Basel, Switzerland, Reprinted from: Fluids 2019, 4, 124, doi:10.3390/fluids4030124, 69-84.
- **11. Mitsoulis, E.**, "50 Years of the K-BKZ Constitutive Relation for Polymers", in <u>ISRN</u> Polymer Science, Hindawi Publ. Corp., New York, 2013, Article ID 952379, 22 pages.

- **10.** Mitsoulis, E., "Computational Polymer Processing", in Modeling and Simulation in Polymers, Eds. P.D. Gujrati, A.I. Leonov, Wiley-VCH Verlag, Weinheim, Germany, 2010, Ch. 4, pp. 127-195.
- **9. Mitsoulis, E.**, "Calendering of Polymers", in <u>Advances in Polymer Processing</u>, Eds. S. Thomas, Y. Weimin, Woodhead Publ., Cambridge, UK, 2009, pp. 312-351.
- **8. Mitsoulis, E.**, "Flows of Viscoplastic Materials: Models and Computations", invited review in Rheology Reviews 2007, Eds. D.M. Binding, N.E. Hudson, and R. Keunings, Brit. Soc. Rheol., London, UK, 2007, pp. 135-178.
- **7. Mitsoulis, E.**, Kotsos, P., "Numerical Simulation of Wire Coating Pseudoplastic and Viscoplastic Fluids", in <u>Advanced Methods in Material Forming</u>, Ed. D. Banabic, Springer Verlag, Berlin, GERMANY, 2007, pp. 279-295.
- **6. Mitsoulis, E.,** "Secondary Flow Instabilities", invited review in <u>Polymer Processing Instabilities</u>, Eds. S.G. Hatzikiriakos, K.B. Migler, M. Dekker Inc., New York, New York, USA, 2005, pp. 43-71.
- 5. Hannachi, A., Mitsoulis, E., "Multilayer Calendering of Coextruded Sheets", Plastic Film Technology, Vol. 2, Extrusion of Plastic Film & Sheeting, Ed. K.M. Finlayson, Technomic Publ. Co., Lancaster, Pennsylvania, USA, 1993, pp. 11-36.
- **4. Mitsoulis, E.,** "Computer-Aided Analysis and Design for Multilayer Flows Using the Lubrication Approximation Theory (LAT)", invited review in Computer Modeling for Extrusion and Other Continuous Polymer Processes Applications, Ed. K.T. O'Brien, Hanser Publishers, New York, New York, USA, 1992, pp. 51-84.
- **3. Mitsoulis, E.,** "Numerical Simulation of Viscoelastic Fluids", invited review in Encyclopedia of Fluid Mechanics, Vol. 9, Polymer Flow Engineering, Ed. N.P. Cheremisinoff, Gulf Publ. Co., Dallas, Texas, USA, 1990, pp. 649-704.
- **2.** Tiu, C., Podolsak, A.K., **Mitsoulis, E.,** "Process and Simulation of Wire Coating", invited review in <u>Handbook of Polymer Science and Technology</u>, Vol. 3, Applications and Processing Operations, Ed. N.P. Cheremisinoff, M. Dekker Inc., New York, New York, USA, 1989, pp. 609-647.
- **1.** Vlachopoulos, J., **Mitsoulis, E.**, "Fluid Flow and Heat Transfer in Calendering", invited review in <u>Advances in Transport Processes</u>, Eds. A.S. Mujumdar and R.A. Mashelkar, Wiley Eastern Ltd., New Delhi, INDIA, 1988, pp. 78-104.

E. Publications in Greek Refereed Journals

- **4. Mitsoulis, E.**, "Film Casting of Polymers", special volume in honour of Emer. Prof. A. Fragkiskos of the Dept. Min. Eng. & Metallurgy, NTUA, Athens, GREECE, November 2005, pp .143-156.
- **3. Mitsoulis, E.**, "The Beginnings of Rheology: A Short History", special volume in honour of Prof. A. Kontopoulos of the Dept. Min. Eng. & Metallurgy, NTUA, Athens, GREECE, September 2004, pp. 197-220.
- **2. Mitsoulis, E.**, "Computational Rheology and its Applications in Polymer and Composite Processing", Metalleiologika Metallurgica Chronika, Vol. 9, Jan-Dec. 1999, pp.163-202.

1. Mitsoulis, E., "The Contribution of Rheology to the Education of the Metallurgical Engineer", Oryktos Ploutos, Vol. 111, April-June 1999, pp. 55-66.

F. Publications in Non-Refereed Journals

- **2.** Beaulne, M., **Mitsoulis, E.,** "The Behaviour of Viscoplastic Materials around Spherical Particles", invited paper in the official publication of the Chemical Institute of Canada, <u>Canadian Chemical News</u>, <u>Vol. 49</u>, Ottawa, Ontario, CANADA, March 1997, pp. 22-24.
- **1. Mitsoulis, E.,** "Computational Rheology: A New Science", (in Greek) invited paper in the official publication of the National Technical University of Athens, Pyrforos, NTUA, Athens, GREECE, May-August 1994, Vol. 13-14, pp. 60-64.

G. Books (as Course Notes)

- **6. Mitsoulis, E.**, "Computational Methods in Processing of non-Newtonian Fluids", (in Greek), Department of Mining Engineering and Metallurgy, National Technical University of Athens, Athens, GREECE, February 1999 (310 pages).
- **5. Mitsoulis, E.**, "Fundamentals of Polymer Processing", (in Greek), Department of Mining Engineering and Metallurgy, National Technical University of Athens, Athens, GREECE, November 1998 (360 pages).
- **4. Mitsoulis, E.,** "Polymers and Composites", (in Greek), Department of Mining Engineering and Metallurgy, National Technical University of Athens, Athens, GREECE, November 1998 (200 pages).
- **3. Mitsoulis, E.**, "*Introduction to Rheology*", (in Greek), Department of Mining Engineering and Metallurgy, National Technical University of Athens, Athens, GREECE, August 1998 (116 pages).
- **2. Mitsoulis, E.**, "Introduction to Polymer Processing", Department of Chemical Engineering, University of Ottawa, Ottawa, Ontario, CANADA, September 1996 (200 pages).
- 1. Mitsoulis, E., "Introduction to Polymer Processing", (in Greek), Department of Chemical Engineering, National Technical University of Athens, Athens, GREECE, May 1995 (200 pages).

H. Other Publications and Presentations

- **7. Mitsoulis, E.**, "Influence of Compressibility in Polymer Fluid Flows", (in Greek), FLOW 2006, 5th Meeting of Research Activities in Fluid Flow Phenomena in Greece, University of Patras, Patras, GREECE, November 2006, pp. 8.1-8.8.
- **6. Mitsoulis, E.**, "Activities of CAMP R&D", (in Greek), FLOW 2006, 5th Meeting of Research Activities in Fluid Flow Phenomena in Greece, University of Patras, Patras, GREECE, November 2006, pp. P.3.1-P.3.8.

- **5.** Sofou, S., **Mitsoulis, E.**, "Flow of non-Newtonian Fluids in the Roll-over-Web Coating Process", (in Greek), FLOW 2004, 4th Meeting of Research Activities in Fluid Flow Phenomena in Greece, National Technical University of Athens, Athens, GREECE, November 2004, pp. 268-275.
- **4. Mitsoulis, E.**, "Activities of CAMP R&D", (in Greek), FLOW 2002, 3rd Meeting of Research Activities in Fluid Flow Phenomena in Greece, University of Patras, Patras, GREECE, October 2002, pp. 91-96.
- **3. Mitsoulis, E.**, "Flow Modeling of Viscoplastic Materials", FLOW 2002, 3rd Meeting of Research Activities in Fluid Flow Phenomena in Greece, University of Patras, Patras, GREECE, October 2002, pp. 175-182.
- **2. Mitsoulis, E.,** "Computational Rheology and its Applications in Polymer Processing of Non-Newtonian Fluids with the Finite Element Method", (in Greek), 2nd Meeting of Research Activities in Fluid Flow Phenomena in Greece, University of Thessaly, Volos, GREECE, May 2000, pp. 69-72.
- **1. Mitsoulis, E.**, "Computational Rheology and its Applications in Polymer Processing", (in Greek), Research and Technology 2000, Open House of Research Activities at NTUA, National Technical University of Athens, Athens, GREECE, May 2000 (poster presentation).

CONTRIBUTIONS TO ENGINEERING TECHNOLOGY AND PRACTICE:

A. Consulting Reports

- **3. Mitsoulis, E.**, "Finite Element Simulations of 3-Layer Polypropylene Tubular Coextrusion", confidential report submitted to Hercules, Inc., Montreal, Quebec, CANADA, February 1990 (50 manuscript pages).
- **2. Mitsoulis, E.**, Hannachi, A., "Simulation of Polypropylene Tubular Coextrusion", confidential report submitted to Hercules, Inc., Wilmington, Delaware, USA, January 1989 (54 manuscript pages).
- 1. Vlachopoulos, J., **Mitsoulis, E.,** "Simulation of Plexiglass V(045) Calendering", confidential report submitted to Rohm & Haas Co., Bristol, Pennsylvania, USA, April 1983 (45 manuscript pages).

B. Software Development

- **20. Mitsoulis, E.**, "UVPTHTIME A Finite Element Code for Time-Dependent Multilayer Flows of Non-Newtonian Fluids" (2006).
- **19. Mitsoulis, E.,** "UVPTHSLIP A Finite Element Code for Steady Multilayer Flows of Non-Newtonian Fluids" (2006).
- **18. Mitsoulis, E.**, Beaulne, M., "AX-FLOW A Software Package for Fully Developed 3-Dimensional Flows" (1998).
- **17. Mitsoulis, E.**, Beaulne, M., "VISCOFIT A Nonlinear Regression Analysis Package for Viscous Rheological Characterization of Polymeric Liquids" (1997).

- **16. Mitsoulis, E.**, Beaulne, M., "TIMEFIT A Nonlinear Regression Analysis Package for Rheological Characterization of Polymeric Liquids in Time-Dependent Tests" (1997).
- **15. Mitsoulis, E.**, Beaulne, M., "F-SPIN A Software Package for Fiber Spinning of Plastics" (1997).
- **14. Mitsoulis, E.**, Beaulne, M., "F-CAST A Software Package for Film Casting of Plastics" (1997).
- **13. Mitsoulis, E.**, Beaulne, M., "F-BLOW A Software Package for Film Blowing of Plastics" (1997).
- **12. Mitsoulis, E.**, Ellwood, K.J.R., Luo, H.Q., "EXTRU-3D A 3-Dimensional Finite Element Code for Extrusion of Materials" (1996).
- **11. Mitsoulis, E.**, "UVPTH A Finite Element Code for Multilayer Coextrusion of Plastics" (1996).
- **10. Mitsoulis, E.**, Barakos, G., "BESTFIT A Nonlinear Regression Analysis Package for Rheological Characterization of Polymeric Liquids" (1994).
- **9. Mitsoulis, E.**, Barakos, G., "CAVES A Finite Element Code for Viscoelastic Flows of Polymeric Liquids" (1993).
- **8. Mitsoulis, E.**, "FLOWCAD An Educational Software Package for Computer-Aided Design of Fluid Flow and Heat Transfer Problems" (1987, 1989, 1990).
- 7. Mitsoulis, E., "POISSON An Educational Software Package for Computer-Aided Design of General Field Problems" (1987, 1989, 1990).
- **6. Mitsoulis, E.**, Hannachi, A., "LATROLL A Software Package for Multilayer Calendering and Roll Coating of Plastics" (1989).
- **5. Mitsoulis, E.**, Hannachi, A., "LATMULTI A Software Package for Multilayer Coextrusion of Plastics" (1988, 1990).
- **4. Mitsoulis, E.**, Heng, F.L., "LATDUAL A Software Package for Dual Coextrusion of Plastics" (1987).
- **3. Mitsoulis, E.**, Heng, F.L., "LATWIRE A Software Package for Wire-Coating of Plastics" (1986).
- **2. Mitsoulis, E.**, "LATCAL A Software Package for Calendering of Plastics" (1985).
- **1. Mitsoulis, E.**, Vlachopoulos, J., Mirza, F.A., "MACVIP A Finite Element Program for Creeping Viscoelastic Flows" (1983).

C. Consulting

- 7. Davis Standard, USA, Expert Witness on Wire Coating, June 2006.
- **6.** Mitsubishi Plastics, JAPAN, Consultant on Multilayer Coextrusion, November 1996.
- 5. Mitsubishi Plastics, JAPAN, Consultant on Multilayer Coextrusion, February 1996.
- **4.** Mitsubishi Plastics, JAPAN, Consultant on Multilayer Coextrusion, October 1989.
- 3. Hercules Inc., USA, Consultant on Multilayer Coextrusion, November 1988.
- 2. Northern Telecom Ltd., CANADA, Consultant on Wire Coating, March 1988.
- 1. Rohm & Haas Co., USA, Consultant on Calendering, March 1983.

SEMINARS AND LECTURES:

66. Yildiz Technical University, Department of Naval Engineering, Istanbul, TURKEY, September 2019.

"Viscoelastic Flows in Polymer Processing".

65. Montanuniversity Leoben, Kunststoff Technik, Leoben, AUSTRIA, May 2019.

"Viscoelastic Simulation of Polymer Flow. The K-BKZ Model: History, Theory, and Applications".

"Rubber Flow through Dies".

"PP-Filled Flow through Dies".

64. Yildiz Technical University, Department of Naval Engineering, Istanbul, TURKEY, September 2018.

"Viscoelastic Simulation of Polymer Flows with the K-BKZ Model".

63. Montanuniversity Leoben, Kunststoff Technik, Leoben, AUSTRIA, April 2018. "Viscoelastic Simulation of Polymer Flow with the K-BKZ Model".

62. Yildiz Technical University, Department of Naval Engineering, Istanbul, TURKEY, September 2017.

"The Effect of Damping Function on Extrudate Swell".

61. Yildiz Technical University, Department of Naval Engineering, Istanbul, TURKEY, August 2016.

"Viscoelastic Simulations with Integral Models at Extremely High Shear Rates".

60. University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, September 2015.

"Advances in Polymer Processing: A Modeling and Simulation Point of View (or Where We Stand in the Year 2015)".

59. Istanbul Technical University, Department of Astronautical Engineering, Istanbul, TURKEY, May 2015.

"Viscoelastic Simulation of Polymer Flow. The K-BKZ Model: History, Theory, and Applications".

58. Johannes Kepler University Linz, Institute of Polymer Extrusion and Compounding, Linz, AUSTRIA, December 2014.

"Viscoelastic Simulation of Polymer Flow. The K-BKZ Model: History, Theory, and Applications".

- **57.** Montanuniversity Leoben, Kunststoff Technik, Leoben, AUSTRIA, December 2014. "Viscoelastic Simulation of Polymer Flow. The K-BKZ Model: History, Theory, and Applications".
- **56.** University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, September 2014.

"Extrudate Swell of Polymer Melts".

- **55.** University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, September 2013.
 - "Advances in Polymer Processing: A Modeling and Simulation Point of View (or Where We Stand in the Year 2013)".
- **54.** University of Crete, Department of Materials Science and Technology FORTH, Herakleion, Crete, March 2013.
 - "Advances in Polymer Processing: A Modeling and Simulation Point of View (or Where We Stand in the Year 2013)".
- **53.** University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, September 2012.
 - "Advances in Polymer Processing: A Modeling and Simulation Point of View (or Where We Stand in the Year 2012)".
- **52.** University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, September 2011.
 - "New Developments in Fluid Dynamics for Non-Newtonian Flows".
- **51.** University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, September 2010.
 - "New Developments in Fluid Dynamics for Non-Newtonian Flows".
- **50.** University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, September 2009.
 - "Fluid Dynamics for Non-Newtonian Flows".
- **49.** The Petroleum Institute, Department of Chemical Engineering, Abu-Dhabi, UNITED ARAB EMIRATES, March 2009.
 - "Some Success Stories in the Numerical Simulation of PolymerFlows with Integral Models".
- **48.** University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, September 2008.
 - "Fluid Dynamics for Non-Newtonian Flows".
- **47.** McMaster University, Faculty of Engineering, Hamilton, CANADA, November 2007.
 - "John Vlachopoulos: Mason Award Winner".
- **46.** University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, September 2007.
 - "Recent Advances in the Simulation of Non-Newtonian Flows".
- **45.** University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, September 2006.
 - "Recent Advances in the Simulation of Non-Newtonian Flows".
- **44.** PLAMEDIA, Software Company, Tokyo, JAPAN, July 2006.

- "Recent Advances in the Numerical Simulation of Viscoelastic Flows with Integral Constitutive Equations".
- **43.** Japan Steel Works, JSW, Hiroshima, JAPAN, June 2006. "Multilayer Film Coextrusion of Polymer Melts".
- **42.** University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, July 2005.

"Recent Advances in the Simulation of Non-Newtonian Flows".

41. University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, September 2004.

"Non-Newtonian Flows".

40. University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, July 2003.

"Polymer and Composite Processing".

- **39.** Chalmers University of Technology, Department of Materials Science and Engineering, Rheology Course, Gothenburg, SWEDEN, June 2002. "Modelling of Polymer Processes".
- **38.** University of Ljubljana, Department of Chemical Engineering, Ljubljana, SLOVENIA, October 2001.

"Recent Advances in Modelling Viscoelasticity with Integral Constitutive Equations".

- **37.** BASF Co., Polymer Rheology Research Center, Ludwigshaven, GERMANY, April 2001.
 - "Flow of Polyethylene Melts through Contractions: Comparison of Simulations with Experiments".
- **36.** University of Erlangen-Nuremberg, Department of Polymer Materials, Erlangen, GERMANY, April 2001.

"Numerical Simulation of the Entry Flow of Polyethylene Melts – Implementation of Integral Type Constitutive Equations with FEM".

- **35.** University of Cyprus, Department of Mathematics and Statistics, Nicosia, CYPRUS, April 2000.
 - "Numerical Methods for the Solution of Nonlinear Rheological Constitutive Equations for Polymers".
- **34.** University of Erlangen-Nuremberg, Department of Polymer Materials, Erlangen, GERMANY, April 2000.
 - "Flow of LDPE through Contractions: Comparison of Simulations with Experiments".
- **33.** Kyushu Institute of Technology, Department of Applied Chemistry, Kitakyushu, Kyushu, JAPAN, June 1998.

- "Recent Advances in the Viscoelastic Simulations of Polymer Flows".
- **32.** Democritos Research Institute of Greece, Department of Physical Chemistry, Athens, GREECE, May 1998 (in Greek).
 - "Computational Rheology and its Application to Polymer & Composite Processing".
- **31.** National Technical University of Athens, Department of Mining Engineering & Metallurgy, Athens, GREECE, March 1998 (in Greek).
 - "Computational Rheology and its Application to Polymer & Composite Processing".
- **30.** University of British Columbia, Department of Chemical Engineering, Vancouver, British Columbia, CANADA, October 1997.
 - "Numerical Simulation in Polymer Processing".
- **29.** Foundation for Research and Technology Institute of Electronic Structure and Laser, Herakleion, Crete, GREECE, June 1997.
 - "Prediction of Viscoelastic Effects in Flows of Polymer Fluids".
- **28.** DuPont Co., Research and Development Center, Wilmington, Delaware, USA, February 1997.
 - "Numerical Simulation in Polymer Processing".
- **27.** University of Waterloo, Department of Chemical Engineering, Waterloo, Ontario, CANADA, January 1997.
 - "Recent Advances in the Numerical Simulation of Viscoelastic Flows with Integral Constitutive Equations".
- **26.** University of Wisconsin, Department of Chemical/Mechanical Engineering, Rheology Research Center, Madison, Wisconsin, USA, April 1996.
 - "Recent Advances in the Numerical Simulation of Viscoelastic Flows with Integral Constitutive Equations".
- **25.** University of Minnesota, Supercomputer Institute, Minneapolis, Minnesota, USA, April 1996 (**Distinguished Lecturer Series**).
 - "Recent Advances in the Numerical Simulation of Viscoelastic Flows with Integral Constitutive Equations".
- 24. Sunkyong Industries, Suwon, KOREA, March 1995.
 - "Recent Advances in Viscoelastic Modelling of Polymeric Liquids and in Coating Flows".
- **23.** Unité de Mécanique Appliquée, Université Catholique de Louvain-la-Neuve, Louvain-la-Neuve, BELGIUM, February 1995.
 - "Evaluation of Integral Constitutive Equations in Viscoelastic Modelling of Polymer Melts".
- **22.** Laboratoire de Rhéologie, Institut de Mécanique de Grenoble, Grenoble, FRANCE, February 1995.
 - "La simulation numérique des procédés de mise en forme des polymères".
- **21.** Laboratoire de Rhéologie, Institut de Mécanique de Grenoble, Grenoble, FRANCE, February 1995.
 - "Simulation numérique des écoulements viscoplastiques".

- **20.** Laboratoire de Rhéologie, Institut de Mécanique de Grenoble, Grenoble, FRANCE, January 1995.
 - "Simulation numérique des écoulements viscoélastiques".
- **19.** Foundation for Research and Technology Institute of Electronic Structure and Laser, Herakleion, Crete, GREECE, November 1994.
 - "Recent Developments in Viscoelastic Modelling of Polymeric Liquids with Integral Constitutive Equations".
- **18.** National Technical University of Athens, Department of Chemical Engineering, Athens, GREECE, November 1994.
 - "Computational Rheology and its Application in Materials Processing".
- **17.** Mitsubishi Kasei Corp., Yokohama, JAPAN, September 1994. "Recent Advances in Viscoelastic Modelling of Polymeric Liquids".
- **16.** Aristotle University of Thessaloniki, Department of Chemical Engineering, Thessaloniki, GREECE, December 1993.
 - "Recent Advances in Viscoelastic Flow Simulations with Integral Constitutive Equations".
- **15.** Technical University of Endhoven, Deaprtment of Mechanical Engineering, Eindhoven, THE NETHERLANDS, December 1992. "Recent Advances in Viscoelastic Flow Simulations".
- **14.** University of Patras, Department of Chemical Engineering, Patras, GREECE, June 1991.
 - "Simulation of Polymer Processing Flows with Non-Newtonian Equations".
- **13.** National Technical University of Athens, Department of Chemical Engineering, Athens, GREECE, April 1991.
 - "Simulation of Polymer Processing Flows with Non-Newtonian Equations".
- **12.** Institut Français du Pétrole, Rueil, FRANCE, March 1991.

 "Simulation par lois constitutives intégrales des phénomènes viscoélastiques dans les écoulements de polymères fondus".
- **11.** Institut für Polymere, ETH-Zentrum, Zurich, SWITZERLAND, January 1991. "Recent Advances in Viscoelastic Simulations with the K-BKZ Constitutive Equation".
- **10.** Institut de Mécanique de Grenoble, Grenoble, FRANCE, January 1991. "Simulation des phénomènes viscoélastiques des écoulements de polymères fondus en utilisant des équations constitutives intégrales".
- **9.** Institut Universitaire de Technologie, Brest, FRANCE, January 1991. "Simulation des phénomènes viscoélastiques des écoulements de polymères fondus en utilisant des équations constitutives intégrales".
- **8.** Ecole des Mines de Paris, Centre de Mise en Forme des Matériaux, Sophia-Antipolis, FRANCE, December 1990.

"Simulation numérique des écoulements visqueux et viscoélastiques pour les procédés de mise en forme de polymères fondus".

7. Ecole des Mines de Paris, Centre de Mise en Forme des Matériaux, Sophia-Antipolis, FRANCE, March 1989.

"La simulation numérique des écoulements de polymères fondus en coextrusion".

- **6.** Hercules, Inc., Wilmington, Delaware, USA, October 1988. "Numerical Simulation of Coextrusion Flows".
- 5. Ecole Polytechnique, Departément de génie chimique, Montréal, Québec, CANADA, January 1988.

"Simulation numérique de mise en forme des matières plastiques par la méthode des éléments finis".

- **4.** McGill University, Department of Chemical Engineering, Montreal, Quebec, CANADA, October 1987.
 - "Numerical Analysis and Design of Wire-Coating Dies".
- **3.** University of Patras, Department of Chemical Engineering, Patras, GREECE, April 1987.

"Finite Element Analysis of Polymer Processing".

2. Aristotle University of Thessaloniki, Department of Chemical Engineering, Thessaloniki, GREECE, December 1986.

"Numerical Analysis of Polymer Flows Using Finite Element Methods".

1. Northern Telecom Ltd., Montreal, Quebec, CANADA, October 1984. "Numerical Simulation of the Wire-Coating Process".

CITATIONS:

4227 (*Source*: Science Citation Index, Institute for Scientific Information, ISI - http://apps.webofknowledge.com/).

H-Factor: 37

