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### **1. Plenary and keynote lectures**

[PK26] Recent Developments in the Multiscale Modeling and Numerical Simulation of Entangled Polymers, Int. Workshop on Multiscale Modeling of Complex Fluids, Beijing, China (June 2008)

[PK25] Multiscale Modeling and Simulation of Viscoelastic Flow, Int. Workshop on Complex Flows of Complex Fluids, Liverpool, UK (March 2008)

[PK24] The Challenges of Multiscale Modeling of Complex Fluids, Annual meeting of the UK & Republic of Ireland SIAM Section, Southampton, UK (January 2008)

[PK23] The Weissenberg Awardee Lecture, Opening Plenary Lecture, 2nd Ann. European Rheology Conf. (AERC 2005), Grenoble, France (April 2005)

[PK22] Non-Newtonian Fluid Mechanics Using Molecular Theory, XXI Int. Congr. of Theoretical and Applied Mechanics, Warsaw, Poland (August 2004)

[PK21] Multiscale Modelling of Complex Fluids Using Stochastic Models and Fokker-Planck Equations, 6th Int. Conf. on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing", Juan-les-Pins, France (June 2004)

[PK20] The ARC Tube Model for Blends of Linear Entangled Polymers, Int. Workshop on Industrial Rheology, Chester, UK (April 2004)

[PK19] Multiscale Simulation of Viscoelastic Flow Using Molecular Models, 8th Int. Conf. on Numerical Methods for Fluid Dynamics, Oxford, UK (April 2004)

[PK18] Flow Simulation Using the Tube Theory of Entangled Polymer Dynamics, Opening Plenary Lecture, 1st Ann. European Rheology Conf. (AERC 2003), Guimarães, Portugal (September 2003)

[PK17] Modélisation Multi-Echelle en Mécanique des Fluides Non-Newtoniens, Symp. Simulation Numérique Multi-Echelle Multi-Physique, EDF R&D, Clamart, France (May 2003)

[PK16] Memory Fluids: Modelling, Mathematical, and Numerical Challenges, Plenary Lecture, Applied Mathematics and Applications of Mathematics (AMAM 2003), Eur. Math. Soc., Nice, France (February 2003)

[PK15] Simulation of Complex Flows of Entangled Polymers Using Integral Constitutive Models Arising from Molecular Theory, Int. Symp. on Process Modeling, Lake Vyrnwy, UK (April 2002)

- [PK14] A Survey of Computational Rheology, Plenary Lecture, XIIIth Int. Congress on Rheology, Cambridge, UK (August 2000)
- [PK13] Numerical Simulation of Non-Newtonian Flows, 8th Int. Symp. on Computational Fluid Dynamics, Bremen, Germany (September 1999)
- [PK12] Advances in the Numerical Simulation of Non-Newtonian Flows, Int. Conf. on Applied Mathematics for Industrial Flows, San Feliu de Guixols, Spain (September 1998)
- [PK11] Analyse Parallèle par Eléments Finis: Algorithmes et Applications, 7èmes Rencontres Francophones du Parallélisme, Mons, Belgium (June 1995)
- [PK10] Advanced Computer Algorithms for the Numerical Simulation of Polymer Flows, 11th. Meeting Int. Polymer Processing Society, Seoul, South Korea (could not give talk due to illness in family) (March 1995)
- [PK9] Parallel Finite Element Algorithms Applied to Polymer Flow, CADCOMP '94, Southampton, UK (July 1994)
- [PK8] Scalable Parallel Algorithms for the CONVEX Meta Series : First Results at UCL, Supercomputing '93, Convex Meta Series Seminar, Utrecht, Netherlands (February 1993)
- [PK7] Modélisation Mathématique et Simulation sur Ordinateur : Quelques Réflexions, Conf. SRBII Modélisation et Environnement, Bruxelles, Belgium (January 1993)
- [PK6] Simulation of Chemically-Reacting Processing Flows, Eur. Meeting Polymer Processing Soc., Prague, Czechoslovakia (September 1992)
- [PK5] Supercomputer Simulation of Polymer Flows, CRAY Research Conference Supercomputing : A New Catalyst for Chemistry, Zeist, Holland (March 1992)
- [PK4] L'Etat de l'Art en Modélisation et Simulation d'Ecoulements de Polymères, XXIIème Congrès National d'Analyse Numérique, Bordeaux, France (May 1991)
- [PK3] Numerical Modelling in Polymer Processing, 3rd International Latsis Symposium on Physical and Numerical Modelling in Materials Science and Engineering, Lausanne, Switzerland (October 1990)
- [PK2] Progress and Challenges in Computational Rheology, Golden Jubilee Meeting of the British Society of Rheology and 3rd European Rheology Conference, Edinburgh, UK (September 1990)
- [PK1] Moving Boundary Problems in Non-Newtonian Fluid Mechanics, 2ème Congrès National Belge de Mécanique Théorique et Appliquée, Bruxelles, Belgium (May 1990)

## **2. Invited lectures**

- [I42] Models and Algorithms for the Numerical Simulation of Complex Fluid Flows, European School of Rheology, Leuven, Belgium (September 2007)

- [I41] Computational Rheology, European School of Rheology, Leuven, Belgium (September 2005)
- [I40] Kinetic Theory Models and Simulation Techniques for Predicting the Dynamics of Polymeric Liquids, Int. Symp. on “Rheology and Microstructure of Complex Fluid Systems” in honour of Prof. Jan Mewis, Leuven, Belgium (September 2004)
- [I39] The CRAFT Tube Model: A New Constitutive Equation For Blends of Entangled Linear Polymers World Polymer Congress MACRO 2004, Paris, France (July 2004)
- [I38] Signature of Molecular Architecture in Processing Flows of Polymeric Liquids: Theory and Computer Modelling, Symp. “Microstructure and Property Design by Deformation Processing of Materials”, Leuven, Belgium (October 2003)
- [I37] Computational Rheology, 8<sup>th</sup> European Graduate School of Rheology, Leuven, Belgium (September 2003)
- [I36] Relating Rheology and Structure in Entangled Polymers, Symp. “Simulation Approaches for Investigating the Reaction Mechanisms and Properties of Polymers”, Société Royale de Chimie, Namur, Belgium (June 2003)
- [I35] Numerical Simulation of Polymer Dynamics, TFE Analytical Network "New Developments in Rheology", Paris, France (November 2001)
- [I34] Macroscopic and Micro-Macro Simulation of the Flow of Polymeric Fluids , European School of Rheology, Leuven, Belgium (September 2001)
- [I33] Ecoulements de Fluides Viscoélastiques et Modèles Moléculaires, CERMICS, Paris, France (July 2001)
- [I32] Computational Rheology with Molecular Models, Summer School in Analytical and Numerical Methods in Non-Newtonian Fluid Mechanics, Guimarães, Portugal (June 2001)
- [I31] Recent Trends in Computational Rheology, Symposium on Non-Newtonian Flows, Metz University, France (May 2001)
- [I30] Mesoscopic Numerical Modelling of the Flow of Polymeric Fluids, INRIA Rocquencourt, Paris, France (November 2000)
- [I29] MathEngine Lectures on Computational Rheology, Dept. of Mathematics, University of Wales, Aberystwyth, UK (June 2000)
- [I28] Computer Modelling of the Flow of Boger Fluids, David V. Boger Symposium, Melbourne, Australia (November 1999)
- [I27] Computational Rheology, European School of Rheology, Leuven, Belgium (September 1999)
- [I26] Extensional Effects in Flowing Dilute Polymer Solutions, Int. Symposium dedicated to Prof. M.M. Denn on the occasion of his 60th birthday, Berkeley, CA, USA (June 1999)

- [I25] Computer Simulation of Complex Polymer Flows with Molecular Models, Gordon Conference on CAE in Polymer Processing, Ventura, CA, USA (March 1999)
- [I24] Micro-Macro Simulation of the Flow of Polymer Solutions, 2nd Meeting of the Hellenic Society of Rheology and International Symposium, Heraklion, Crete, Greece (August 1998)
- [I23] On the Hysteretic Behaviour of Dilute Polymer Solutions in Relaxation Following Extensional Flow, IUTAM Symposium on Viscoelastic Fluid Mechanics: Effects on Molecular Modelling, Stanford, CA, USA (June 1998)
- [I22] Numerical Computation of Viscoelastic Flow, European School of Rheology, Leuven, Belgium (September 1997)
- [I21] Simulation of the Flow of Dilute Polymer Solutions with FENE Dumbbells, 2nd Int. Conf. on the Dynamics of Polymeric Liquids, Capri, Italy (May 1997)
- [I20] Use of Kinetic Theory Models in the Simulation of the Flow of Polymer Solutions, Meeting of the Nederlandse Reologische Vereniging, T.U. Delft, Netherlands (April 1997)
- [I19] Computer Simulation of the Flow of Viscoelastic Fluids, Rheology Symposium, J.M. Burgers Center, T.U. Delft, Netherlands (January 1997)
- [I18] New Developments in the Computer Modeling of Polymer Flows, 6th Eur. Polymer Federation Symp., Aghia Pelaghia, Crete, Greece (October 1996)
- [I17] Macroscopic and Mesoscale Approaches to the Computer Simulation of Viscoelastic Flows, The Royal Society Unilever Indo/UK Forum on the Dynamics of Complex Fluids, Cavendish Laboratory, Cambridge, UK (June 1996)
- [I16] Micro-macro Simulation of Polymeric Solutions, EuroConference on Constitutive Equations and their Application to Complex Flows, Isaac Newton Institute for Mathematical Sciences, Cambridge, UK (April 1996)
- [I15] Simulation of Polymer Flow with Kinetic Theory Models, Int. Workshop on the Dynamics of Complex Fluids, Isaac Newton Institute for Mathematical Sciences, Cambridge, UK (March 1996)
- [I14] Developments in Computational Rheology and Applications to Polymer Processing, Int. Symp. on Modelling of Fluid Dynamics and Heat Transfer for Industrial Applications, Von Karman Institute, Brussels, Belgium (December 1994)
- [I13] Optimization Heuristics for Parallel Finite Element Computations, Int. Symp. on Optimization in Engineering Design, CORE, Louvain-la-Neuve, Belgium (November 1994)
- [I12] Parallel Finite Element Algorithms Applied to Viscoelastic Flows, Polyflow European Users Meeting, Brussels, Belgium (October 1993)
- [I11] Modeling the Flow of Chemically-Reacting Polymeric Foams, Int. Conf. on Dynamics of Polymeric Liquids, Capri, Italy (September 1991)

[I10] Interplay between Mathematical, Numerical, and Physical Issues in Viscoelastic Flow Simulations, Int. Conference on Industrial and Applied Mathematics, Washington D.C., USA (July 1991)

[I9] Simulation of Complex Industrial Flow Processes, Conf. on Supercomputing in the Chemical Industry, VUB, Bruxelles, Belgium (November 1990)

[I8] Numerical Simulation of Viscoelastic Stratified Flow in Complex Geometries, 2nd World Congress on Computational Mechanics, Stuttgart, Germany (August 1990)

[I7] Numerical Simulation of Fiber Suspension Flow in Complex Geometries, 6th Meeting of the Polymer Processing Society, Nice, France (April 1990)

[I6] On the Numerical Integration of Viscoelastic Flow Equations, 7th Int. Conf. on Finite Element Methods in Flow Problems, Huntsville, Alabama, USA (April 1989)

[I5] Numerical Methods for Memory Fluids: a Critical Survey, 5th Int. Conf. on Numerical Methods in Laminar and Turbulent Flow, Montréal, Canada (July 1987)

[I4] A Survey of Recent Developments in the Numerical Simulation of Viscoelastic Flows, 3rd Annual Meet. Polymer Processing Soc., Stuttgart, Germany (April 1987)

[I3] Superparametric Transformations for the Finite Element Analysis of Viscoelastic Flows, First World Congress on Computational Mechanics, Austin, Texas, USA (September 1986)

[I2] Advances in Computational Methods for Rheologically-Complex Flows with Free Surfaces, 2nd Annual Meeting Polymer Processing Soc., Montréal, Canada (April 1986)

[I1] Supercomputers and Non-Newtonian Fluid Mechanics, Conf. on Supercomputers and Their Applications, Ecole Polytechnique de Montréal, Montréal, Canada (November 1985)

### **3. Contributed communications**

**Note:** Name of speaker is listed first

[C161] F. Chinesta, A. Ammar, R. Keunings, Towards a Fokker-Planck Rheometer, XVth Int. Congress on Rheology, Monterey, CA, USA (August 2008)

[C160] H.G. Burhin, C. Bailly, R. Keunings, N. Rossion, A. Leygue, H. Pawlowski, A Study of Polymer Architecture with FT-Rheology and Large Amplitude Oscillatory Shear (LAOS), XVth Int. Congress on Rheology, Monterey, CA, USA (August 2008)

[C159] C. Bailly, R. Keunings, C.-Y. Liu, Probing the Foundations of Tube Theory: Comparisons Between Model and Experimental Scalings for Linear Entangled Polymers, XVth Int. Congress on Rheology, Monterey, CA, USA (August 2008)

[C158] S.D. Dhole, A. Leygue, R. Keunings, C. Bailly, Tube Theory for Entangled Linear Polymers: Influence of Different Molecular Mechanisms in Non-Linear Flows, XVth Int. Congress on Rheology, Monterey, CA, USA (August 2008)

- [C157] C.-Y. Liu, R. Keunings, C. Bailly, Probe Rheology II: Terminal Dynamics and Glass Transition of Probe Chains in a Heterogeneous Entangled Network, Annual Meeting of the Society of Rheology, Salt Lake City, UT, USA (October 2007)
- [C156] C.-Y. Liu, R. Keunings, C. Bailly, Glass Transition Dynamics of Minor Components in Miscible and Immiscible Blends, Third Int. Symp. on Engineering Plastics, Urumqi, China (August 2007)
- [C155] C.-Y. Liu, R. Keunings, C. Bailly, Direct Rheological Observation of Monomer Density Re-equilibration for Entangled Polymer Melts, 4th Annual European Rheology Conference, Naples, Italy (April 2007)
- [C154] A.J. Franck, C.-Y. Liu, R. Keunings, C. Bailly, R. Garritano, Instrument Compliance Problems in Linear Viscoelasticity Measurements, 4th Annual European Rheology Conference, Naples, Italy (April 2007)
- [C153] C.-Y. Liu, R. Keunings, C. Bailly, Direct Rheological Observation of Monomer Density Re-equilibration for Entangled Polymer Melts, 78th Annual Meeting of the American Society of Rheology, Portland, Maine, USA (October 2006)
- [C152] E. van Ruymbeke, C. Bailly, R. Keunings, D. Vlassopoulos, A General Methodology to Predict the Linear Rheology of Branched Polymers, 78th Annual Meeting of the American Society of Rheology, Portland, Maine, USA (October 2006)
- [C151] C.-Y. Liu, R. Keunings, C. Bailly, Probe Rheology: A Simple Method to Separate the Contributions of Constraint Release and Contour Length Fluctuations to Non-Reptation Scalings, 78th Annual Meeting of the American Society of Rheology, Portland, Maine, USA (October 2006)
- [C150] C.-Y. Liu, R. Keunings, C. Bailly, M. L. Yao, A. J. Franck, Instrument Compliance Problems in Linear Viscoelasticity Measurements, 78th Annual Meeting of the American Society of Rheology, Portland, Maine, USA (October 2006)
- [C149] E. van Ruymbeke, R. Keunings, C. Bailly, D. Vlassopoulos, Linear Viscoelastic Properties of Entangled Complex Polymers: Predictions and Comparison with Experimental Results, 3rd Ann. European Rheology Conf. (AERC 2006), Hersonisos, Crete (April 2006)
- [C148] C.-Y. Liu, E. van Ruymbeke, A. Leygue, R. Keunings, C. Bailly, Relaxation of Short Probe Chains in a High Molecular Weight Matrix: A Method to Separate the Respective Contributions of Contour Length Fluctuations and Tube Motions, 3rd Ann. European Rheology Conf. (AERC 2006), Hersonisos, Crete (April 2006)
- [C147] A. Ammar, B. Mokdad, F. Chinesta, R. Keunings, A Fast Solver for Multidimensional Fokker-Planck Equations Encountered in Kinetic Theory Modeling, 3rd Ann. European Rheology Conf. (AERC 2006), Hersonisos, Crete (April 2006)
- [C146] A. Leygue, N. Rassion, C. Bailly, R. Keunings, Study of Reversing Flows of Linear Entangled Polymers Through Constitutive Models, 3rd Ann. European Rheology Conf. (AERC 2006), Hersonisos, Crete (April 2006)

- [C145] C. Bailly, E. van Ruymbeke, A. Kaivez, C.-Y. Liu, A. Leygue, R. Keunings, Characterization of Sparsely Long Chain Branched Polycarbonate: Observations vs. Predictions from Tube Models and Monte-Carlo Simulations, 77th Annual Meeting of the American Society of Rheology, Vancouver, Canada (October 2005)
- [C144] A. Leygue, C.-Y. Liu, C. Bailly, R. Keunings, A Study of the LAOS Response of Linear Entangled Polystyrene Melts, 77th Annual Meeting of the American Society of Rheology, Vancouver, Canada (October 2005)
- [C143] C.-Y. Liu, E. van Ruymbeke, A. Leygue, R. Keunings, C. Bailly, What Are the Respective Contributions of Contour Length Fluctuations and Tube Motions to the 3.4-Power Law for Zero-shear Viscosity?, 77th Annual Meeting of the American Society of Rheology, Vancouver, Canada (October 2005)
- [C142] F. Chinesta, D. Ryckelynck, A. Ammar, R. Keunings, Model Reduction for Complex Fluids Simulation, 2nd Ann. European Rheology Conf. (AERC 2005), Grenoble, France (April 2005)
- [C141] E. van Ruymbeke, R. Keunings, C. Bailly, Prediction of Linear Viscoelasticity of Arbitrary Mixtures of (Asymmetric) Star and Linear Entangled Molecules from Knowledge of Their Molecular Structure, 2nd Ann. European Rheology Conf. (AERC 2005), Grenoble, France (April 2005)
- [C140] H. M. Laun, F. Leonardi, C. Carrot, E. van Ruymbeke, R. Keunings, C. Bailly, C. Pattamaprom, A. Likhtman, C. Friedrich, M. Rüllmann, International Polystyrene Benchmark on Direct and Inverse Linear Viscoelasticity Prediction Based on Reptation Models, 2nd Ann. European Rheology Conf. (AERC 2005), Grenoble, France (April 2005)
- [C139] A. Leygue, C.-Y. Liu, N. Coppin, H. Burhin, C. Bailly, R. Keunings, Investigation of LAOS Flow of Polydisperse Polystyrene Melts Using a New Constitutive Equation for Mixtures of Entangled Linear Polymers, 2nd Ann. European Rheology Conf. (AERC 2005), Grenoble, France (April 2005)
- [C138] C.-Y. Liu, E. van Ruymbeke, A. Leygue, R. Keunings, C. Bailly, Evaluation of Different Methods for the Determination of the Plateau Modulus, 2nd Ann. European Rheology Conf. (AERC 2005), Grenoble, France (April 2005)
- [C137] E. van Ruymbeke, R. Keunings, C. Bailly, Prediction of Linear Viscoelasticity for Polydisperse Mixtures of Linear and Star Polymers Based on Tube Models, XIVth Int. Congr. on Rheology, Seoul, Korea (August 2004)
- [C136] A. Leygue, C. Bailly, R. Keunings, Evaluation of a New Constitutive Equation for Blends of Entangled Linear Polymers, XIVth Int. Congr. on Rheology, Seoul, Korea (August 2004)
- [C135] K. Atalik, R. Keunings, Nonlinear Features of Shear Flow Instabilities in Viscoelastic Flows, VIth Int. Conf. on Spectral and High Order Methods (ICOSAHOM), Providence, Rhode Island, USA (June 2004)

- [C134] C. Bailly, E. van Ruymbeke, R. Keunings, Prediction of Linear Viscoelasticity from Knowledge of Molecular Structure for Mixtures of Linear and Star Polymers, Int. Workshop on Industrial Rheology, Chester, UK (April 2004)
- [C133] C. Bailly, V. Stéphenne, D. Daoust, P. Godard, E. van Ruymbeke, R. Keunings, New Method to Detect Very Low Levels of Long Chain Branching in High Density Polyethylene, 226th ACS National Meeting, Symposium "Branching in Polyolefins", New-York, USA (September 2003)
- [C132] A. Leygue, R. Keunings, C. Bailly, A Constitutive Equation for Blends of Entangled Linear Polymers, 1st Ann. European Rheology Conf. (AERC 2003), Guimarães, Portugal (September 2003)
- [C131] E. van Ruymbeke, R. Keunings, C. Bailly, Prediction of Linear Viscoelastic Properties from Molecular Structure for Mixtures of Branched and Linear Polymers, 1st Ann. European Rheology Conf. (AERC 2003), Guimarães, Portugal (September 2003)
- [C130] E. van Ruymbeke, V. Stéphenne, D. Daoust, P. Godard, C. Bailly, R. Keunings, A New Detection Method for Very Low Levels of Long Chain Branching Applied to High Density Polyethylene, 1st Ann. European Rheology Conf. (AERC 2003), Guimarães, Portugal (September 2003)
- [C129] R. Keunings, K. Atalik, On the Occurrence of Even Harmonics in the Shear Stress Response of Viscoelastic Fluids in Large Amplitude Oscillatory Shear, XIIIth Int. Workshop on Numerical Methods for Non-Newtonian Flows, Lausanne, Switzerland (June 2003)
- [C128] P. Wapperom, R. Keunings, Impact of Decoupling Approximation Between Stretch and Orientation in Rheometrical and Complex Flow of Entangled Polymers, XIIIth Int. Workshop on Numerical Methods for Non-Newtonian Flows, Lausanne, Switzerland (June 2003)
- [C127] R. Keunings, P. Wapperom, G. Ianniruberto, Predicting the Response of Entangled Linear Polymers in Transient Complex Flow using the Multi-Mode DCR Model with Chain Stretch, 74th Annual Meeting of the American Society of Rheology, Minneapolis, Minnesota, USA (October 2002)
- [C126] C. Bailly, E. van Ruymbeke, R. Keunings, V. Stephenne, A. Hagenaars, How Far Can We Go In Predicting Molecular Weight Distributions of Linear Polymers from Viscoelastic Data?, 3rd Int. Conf. on the Dynamics of Polymeric Liquids, Capri, Italy (May 2002)
- [C125] R. Keunings, P. Wapperom, Simulation of Transient Complex Flow of Entangled Linear Polymers Using the Multi-Mode DCR Model with Chain Stretch, 3rd Int. Conf. on the Dynamics of Polymeric Liquids, Capri, Italy (May 2002)
- [C124] K. Atalik, R. Keunings, Spectral Analysis of Large Amplitude Oscillatory Shear Flow of Viscoelastic Fluids, 3rd Int. Conf. on the Dynamics of Polymeric Liquids, Capri, Italy (May 2002)
- [C123] C. Bailly, E. van Ruymbeke, V. Stephenne, R. Keunings, Predicting Molecular Structure From Viscoelastic Response and Vice Versa: Recent Breakthroughs and Enduring

Challenges, Symp. "Polymers in the 3d Millennium", Univ. Montpellier II Sciences et Techniques du Languedoc, France (September 2001)

[C122] C. Bailly, E. van Ruymbeke, V. Stephenne, R. Keunings, Direct and Inverse Predictions of Linear Viscoelasticity Based on the des Cloizeaux Time-Dependent Diffusion Model: Comparison with Other reptation Models, Conf. of the European Polymer Federation, Eindhoven, The Netherlands (July 2001)

[C121] A. Leygue, A.N. Beris, R. Keunings, A Constitutive Equation for Entangled Linear Polymers Inspired by Reptation Theory and Consistent with Non-Equilibrium Thermodynamics, XIIth Int. Workshop on Numerical Methods for Non-Newtonian Flows, Monterey, California, USA (July 2001)

[C120] K. Atalik, R. Keunings, A Nonlinear Temporal Stability Analysis of Viscoelastic Plane Channel Flows Using a Fully-Spectral Method, XIIth Int. Workshop on Numerical Methods for Non-Newtonian Flows, Monterey, California, USA (July 2001)

[C119] P. Wapperom, R. Keunings, Simulation of Transient Complex Flows of Entangled Linear and Branched Polymers Using Differential and Integral Models Derived From Reptation Theory, XIIth Int. Workshop on Numerical Methods for Non-Newtonian Flows, Monterey, California, USA (July 2001)

[C118] K. Atalik, R. Keunings, A Temporal Nonlinear Stability Analysis of Viscoelastic Channel Flows, 3rd Int. Meeting of the Hellenic Society of Rheology, Patras, Greece (June 2001)

[C117] D. Jankovic, A.N. Beris, R. Keunings, G.S. Winckelmans, Low Reynolds Number Turbulent Channel Flow, 3rd Int. Meeting of the Hellenic Society of Rheology, Patras, Greece (June 2001)

[C116] E. Van Ruymbeke, V. Stéphenne, C. Bailly, R. Keunings, What is the Best Reptation Model for the Direct and Inverse Link Between Linear Rheology and Molecular Weight Distribution?, 2nd Int. Workshop on Inverse Problems and Emerging Techniques in Materials Characterization, Badenweiler, Germany (May 2001)

[C115] A. Leygue, A.N. Beris, R. Keunings, Constitutive Equations for Linear Polymer Melts Inspired by Reptation Theory and Non-Equilibrium Thermodynamics, 72nd Annual Meeting of the American Society of Rheology, Hilton Head Island, South Carolina, USA (February 2001)

[C114] P. Wapperom, R. Keunings, Numerical Simulation of Branched Polymer Melts in Transient Complex Flow Using Pom-Pom Models, 72nd Annual Meeting of the American Society of Rheology, Hilton Head Island, South Carolina, USA (February 2001)

[C113] C. Bailly, E. Van Ruymbeke, R. Keunings, V. Stéphenne, Direct and Inverse Relationships Between Linear Viscoelasticity and Molecular Weight Distribution in Linear Polymer Melts, AIChE 2000 Annual Meeting, Los Angeles, USA (November 2000)

[C112] A. Leygue, A.N. Beris, R. Keunings, Modelling the Flow of Linear Polymer Melts Using a Modified Version of the MGI Model, 4th EUROMECH Fluid Mechanics Conference, Eindhoven, The Netherlands (November 2000)

[C111] P. Wapperom, R. Keunings, Simulation of Transient Viscoelastic Flow Using Integral and Differential Reptation Models, AMIF 2000, 2nd Int. Conf. On Applied Math. for Industrial Flows, Il Ciocco, Italy (October 2000)

[C110] A.N. Beris, D. Jankovic, R. Keunings, G. Winckelmans, Turbulent Viscoelastic Flow in a Channel, SIAM Meeting on Advances in the Applications of Mathematics and Computation in Chemical Engineering, Washington, USA (September 2000)

[C109] P. Wapperom, R. Keunings, Numerical Simulation of Transient Flow of Linear and Branched Polymer Melts, ICTAM 2000, Chicago, USA (August 2000)

[C108] X. Gallez, A.N. Beris, R. Keunings, V. Legat, Dissipative Effects in Complex Flows of Dilute Polymer Solutions Far From Equilibrium, XIIIth Int. Congress on Rheology, Cambridge, UK (August 2000)

[C107] A. Leygue, A.N. Beris, R. Keunings, Thermodynamical Considerations on Constitutive Equations for Entangled Polymer Melts, XIIIth Int. Congress on Rheology, Cambridge, UK (August 2000)

[C106] A. Leygue, A.N. Beris, R. Keunings, Using Non-Equilibrium Thermodynamics to Improve the Modelling of Linear Polymer Melts, with Convective Constraint Release and Force Balance on Entanglements, Workshop on Nonequilibrium Thermodynamics and Complex Fluids, Oxford, UK (August 2000)

[C105] C. Bailly, B. Delsaute, E. Van Ruymbeke, V. Stephenne, R. Keunings, Evaluation of Mixing Rules and Numerical Approaches for the Direct and Inverse Relation between Linear Viscoelasticity and Molecular Distribution in Linear Polymer Melts, 1rst Int. Workshop on Inverse Problems and Emerging Techniques in Materials Characterization, Lake Vyrnwy, Mid Wales (April 2000)

[C104] P. Wapperom, X. Gallez, P. Halin, R. Keunings, V. Legat, Lagrangian Particle Methods for Computing Transient Viscoelastic Flows, 71st Ann. Meet. Soc. Rheology, Madison, Wisconsin, USA (October 1999)

[C103] M.Grosso, P.Halin, R. Keunings, V. Legat, P.L. Maffettone, N.Grizzuti, Simulation of the Flow of a Nematic Polymer in an Eccentric Cylinder Geometry using the Doi Theory, 71st Ann. Meet. Soc. Rheology, Madison, Wisconsin, USA (October 1999)

[C102] M.Grosso, P.Halin, R. Keunings, V. Legat, P.L. Maffettone, N.Grizzuti, Comparison Between Constitutive Equations of Flowing Nematic Polymers in an Eccentric Cylinder Geometry, Southern European Conference on Rheology, Sangineto, Italy (September 1999)

[C101] R. Keunings, G. Lielens, V. Legat, The FENE-L and FENE-LS Closure Approximations to the Kinetic Theory of Finitely Extensible Dumbbells, 11th Int. Workshop on Numerical methods for Viscoelastic Flows, Vaals, The Netherlands (August 1999)

- [C100] P. Wapperom, R. Keunings, V. Legat, The Backward-tracking Lagrangian Particle Method (BLPM) for Computing Transient Viscoelastic Flows, 11th Int. Workshop on Numerical methods for Viscoelastic Flows, Vaals, The Netherlands (August 1999)
- [C99] X. Gallez, R. Keunings, V. Legat, Computation of Transient Flows of Dilute Polymer Solutions in Complex Geometries using the Adaptive Lagrangian Particle Method, 11th Int. Workshop on Numerical methods for Viscoelastic Flows, Vaals, The Netherlands (August 1999)
- [C98] M.Grosso, P.Halin, R. Keunings, V. Legat, P.L. Maffettone, N.Grizzuti, Simulation of the Flow of a Nematic Polymer in an Eccentric Cylinder Geometry, Europhysics Conference - Eurorheo 99-1, Sophia Antipolis, France (May 1999)
- [C97] V. Legat, X. Gallez, P. Halin, G. Lielens, R. Keunings, Micro-Macro Simulation of Viscoelastic Flows, Int. Workshop on the Dynamics of Polymeric Liquids, Bodysgallen Hall, North Wales, UK (November 1998)
- [C96] X. Gallez, P. Halin, G. Lielens, R. Keunings, V. Legat, The Adaptive Lagrangian Particle Method for Transient Viscoelastic Flows, 70th Meeting of the Society of Rheology, Monterey, California, USA (October 1998)
- [C95] G. Lielens, R. Keunings, V. Legat, The FENE-L and FENE-LS Closure Approximations for the Kinetic Theory of Finitely Extensible Dumbbells, 5th European Rheology Conference, Portoroz, Slovenia (September 1998)
- [C94] X. Gallez, P. Halin, G. Lielens, R. Keunings, V. Legat, The Adaptive Lagrangian Particle Method (ALPM) Applied to the Start-Up Flow of Finitely Extensible Dumbbells Between Eccentric Cylinders, 5th European Rheology Conference, Portoroz, Slovenia (September 1998)
- [C93] E. Brasseur, G. Georgiou, R. Keunings, V. Legat, Numerical Simulation of the Extrusion of Polymer Melts in the Presence of Slip at the Walls, 5th European Rheology Conference, Portoroz, Slovenia (September 1998)
- [C92] M. Grosso, N. Grizzuti, P.L. Maffettone, P. Halin, R. Keunings, V. Legat, Numerical Simulations of Liquid-Crystalline Polymer Start-Up Flow in an Eccentric Cylinder Geometry Using the Doi Theory, 5th European Rheology Conference, Portoroz, Slovenia (September 1998) poster
- [C91] R. Keunings, P. Halin, I. Jaumain, G. Lielens, V. Legat, Recent Developments in the Micro-Macro Approach to the Simulation of Polymer Flows, 1st ESAFORM Conf. on Material Forming, Ecole des Mines de Paris, Sophia-Antipolis, France (March 1998)
- [C90] V. Legat, G. Lielens, P. Halin, I. Jaumain, R. Keunings, A New Closure Approximation for the FENE Dumbbell Kinetic Theory of Dilute Polymeric Solutions, 69th Annual Meeting of the Soc. of Rheology, Columbus, Ohio, USA (October 1997)
- [C89] R. Keunings, P. Halin, I. Jaumain, G. Lielens, V. Legat, A Lagrangian Method for Conventional and Micro-Macro Viscoelastic Computations, Xth Int. Workshop on Numerical Methods for Viscoelastic Flows, Ocean City, Maryland, USA (June 1997)

- [C88] I. Jaumain, R. Keunings, V. Legat and R. Sizaire, Numerical Analysis of the Capillary Thinning of a Filament of an Elastic Fluid, 4th National Congress on Theoretical and Applied Mechanics, Leuven, Belgium (May 1997)
- [C87] P. Halin, R. Keunings, V. Legat, Lagrangian Computational Techniques for Complex Polymer Flows, 4th National Congress on Theoretical and Applied Mechanics, Leuven, Belgium (May 1997)
- [C86] G. Lielens, F. Dupret, R. Keunings, Prediction of Thermo-Mechanical Properties for Moulded Composites, 4th National Congress on Theoretical and Applied Mechanics, Leuven, Belgium (May 1997)
- [C85] F. Dupret, A. Couniot, L. Dewez, R. Keunings, G. Lielens, P. Pirotte, J. Bland, A.G. Gibson, G. Kotsikos, R. Gebart, J. Krispinsson, F. Vahlund, S. Toll, C. Servais, J.-A.E. Manson, Prediction of the Flow-Induced Properties of Long-Fibre Compression Moulded Composite Parts, General COST 512 Workshop on Modelling in Materials Science and Processing, Davos, Switzerland (October 1996)
- [C84] G. Lielens, P. Pirotte, A. Couniot, F. Dupret, R. Keunings, Prediction of Thermo-Mechanical Properties for Compression-Molded Composites, Int. Conf. on Flow Processes in Composite Materials, Aberystwyth, Wales, UK (September 1996)
- [C83] P. Halin, R. Keunings, M. Laso, H.-C. Öttinger, M. Picasso, Evaluation of a Micro-Macro Computational Technique in Complex Polymer Flows, XIIth Int. Congress on Rheology, Quebec City, Canada (August 1996)
- [C82] G. Lielens, R. Keunings, Prediction of Flow-Induced Physical Properties of Short Fiber Composites, 7th European Conf. on Composite Materials, London, UK (May 1996)
- [C81] D. Vanderstraeten, R. Keunings, F.-X. Roux, A Hybrid Parallel Solver for Finite Element Computations Applied to CFD Problems, Parallel CFD'96, Capri, Italy (May 1996)
- [C80] G. Lielens, V. Verleye, P. Pirotte, F. Dupret, R. Keunings, Prediction of Flow-Induced Orientation Field and Mechanical Properties of Injection Molded Parts, NUMIFORM'95, Cornell University, USA (June 1995)
- [C79] R. Keunings, V. Verleye, G. Lielens, P. Pirotte, F. Dupret, Prediction of Flow-Induced Mechanical Properties of Composite Materials, Combined Meeting of the Belgian and Dutch Societies of Rheology, Eindhoven, Netherlands (May 1995)
- [C78] F. Dubois, R. Keunings, Non-Linear Micro-Macro Numerical Analysis of DCB Testing of Thermoplastic Composites, 4th Int. Conf. on Computational Plasticity, Barcelona, Spain (April 1995)
- [C77] T. Lacroix, R. Keunings, Finite Element Modeling of the Mechanical Load Transfer at the Fibre/Matrix Interface Including Interfacial Friction and Non-Linear Behaviour of the Matrix, 4th Int. Conf. on Computational Plasticity, Barcelona, Spain (April 1995)
- [C76] R. Keunings, A Parallel Computing Methodology Applied to Viscoelastic Flows, 9th Int. Workshop on Non-Newtonian Flow, Rossett, Wales, UK (April 1995)

- [C75] T. Lacroix, R. Keunings, Micromechanical Modeling of Stress Transfer at the Fibre-Matrix Interface in Fragmentation Testing of Polymer Composites, First Int. Conf. on Composites Engineering, New Orleans, USA (August 1994)
- [C74] F. Dubois, R. Keunings, Non-Linear Micro-Mechanical Analysis of Fracture in Thermoplastic Composites, First Int. Conf. on Composites Engineering, New Orleans, USA (August 1994)
- [C73] D. Vanderstraeten, O. Zone, R. Keunings, Un Solveur Direct Parallèle Basé sur une Décomposition de Domaine Appliqué aux problèmes d'Eléments Finis, RenPAR'6 Sixièmes Rencontres Francophones du Parallélisme, Lyon, France (June 1994)
- [C72] R. Keunings, O. Zone, D. Vanderstraeten, P. Henriksen, A Parallel Direct Solver for Implicit Finite Element Problems Based on Automatic Domain Decomposition, Int. Conf. Massively Parallel Processing, T.U. Delft, Netherlands (June 1994)
- [C71] R. Keunings, R. Aggarwal, F.X. Roux, A Domain Decomposition Method for Solving Stokes Flow Problems Applied to Integral Viscoelastic Fluids, Int. Conf. Massively Parallel Processing, T.U. Delft, Netherlands (June 1994)
- [C70] F. Dubois, R. Keunings, Analyse Micromécanique de la Ténacité dans les Composites Thermoplastiques, Conf. sur la Fissuration et l'Endommagement des Métaux et des Composites, Liège, Belgium (May 1994)
- [C69] D. Vanderstraeten, O. Zone, R. Keunings, A Parallel Finite Element Solver Based on Automatic Domain Decomposition Applied to Viscoelastic Flows, Parallel CFD'94, Kyoto, Japan (May 1994)
- [C68] F. Dubois, R. Keunings, I. Verpoest, Three-Dimensional Finite Element Analysis of Toughness in Thermoplastic Composites, 3ème Congrès national Belge de Mécanique Théorique et Appliquée, Liège, Belgium (May 1994)
- [C67] T. Lacroix, R. Keunings, Finite Element and One- Dimensional Modeling of Stress Transfer at the Fiber-Matrix Interface in the Fragmentation Test, 3ème Congrès national Belge de Mécanique Théorique et Appliquée, Liège, Belgium (May 1994)
- [C66] R. Keunings, R. Aggarwal, P. Henriksen, D. Vanderstraeten, O. Zone, Parallel Finite Element Algorithms Applied to Polymer Flow, Int. Conf. on High Performance Computing and Networking, Munich, Germany (April 1994)
- [C65] P. Henriksen, R. Keunings, R. Aggarwal, D. Vanderstraeten, O. Zone, Developments in the Parallel Computation of Viscoelastic Flows, Int. Symp. on Viscoelastic Fluids, Tobago (January 1994)
- [C64] D. Vanderstraeten, R. Keunings, C. Farhat, Optimization of Mesh Partitions and Impact on Parallel CFD, Parallel CFD'93, Paris, France (May 1993)
- [C63] R. Aggarwal, R. Keunings, F.X. Roux, Iterative Methods for the Solution of Integral Viscoelastic Equations on Parallel Computers, Parallel CFD'93, Paris, France (May 1993)

- [C62] R. Aggarwal, R. Keunings, F.X. Roux, Numerical Simulation of Polymer Flows : A Parallel Computing Approach, 6th SIAM Conf. on Parallel Processing for Scientific Computing, Norfolk, Virginia, USA (March 1993)
- [C61] D. Vanderstraeten, O. Zone, R. Keunings, L. Wolsey, Non-Deterministic Heuristics for Automatic Domain Decomposition in Direct Parallel Finite Element Calculations, 6th SIAM Conf. on Parallel Processing for Scientific Computing, Norfolk, Virginia, USA (March 1993)
- [C60] R. Keunings, R. Aggarwal, P. Henriksen, D. Vanderstraeten, O. Zone, Simulation of Viscoelastic Flow on Parallel Computers, 64th Annual Meeting of US Soc. of Rheology, Santa Barbara, California, USA (February 1993)
- [C59] R. Keunings, P. Henriksen, Early Experiments with the Convex Meta Series at UCL, 2nd Meeting of the Scalable Computing Working Group, Paris, France (January 1993)
- [C58] P. Henriksen, R. Aggarwal, R. Keunings, Simulation of Memory Fluids on Massively-Parallel Computers, 1st Int. Workshop on Parallel and Distributed Computing in Materials Science, Nancy, France (December 1992)
- [C57] D. Vanderstraeten, O. Zone, R. Keunings, Non-Deterministic Heuristics for Automatic Load Balancing in Direct Parallel Finite Element Computations, 1st Int. Workshop on Parallel and Distributed Computing in Materials Science, Nancy, France (December 1992)
- [C56] R. Keunings, Parallel Algorithms in Computational Rheology, 1st Meeting of the Scalable Computing Working Group, Dallas, USA (September 1992)
- [C55] R. Keunings, L. Lefebvre, Numerical Simulation of Chemically-Reacting Polymer Flows, 1st Eur. Conf. on Computational Fluid Dynamics, Brussels, Belgium (September 1992)
- [C54] R. Aggarwal, R. Keunings, Numerical Simulation of Polymer Flows on Message Passing Parallel Computers, 1st Eur. Conf. on Computational Fluid Dynamics, Brussels, Belgium (September 1992)
- [C53] O. Zone, D. Vandersraeten, R. Keunings, L. Wolsey, Parallel Finite Element Techniques using Automatic Domain Decomposition, 1st Eur. Conf. on Computational Fluid Dynamics, Brussels, Belgium (September 1992)
- [C52] L. Lefebvre, R. Keunings, Numerical Prediction of the Flow of Chemically-Reactive Polymeric Fluids, XIth Int. Congress on Rheology, Brussels, Belgium (August 1992)
- [C51] R. Keunings, O. Zone, R. Aggarwal, Parallel Algorithms in Computational Rheology, XIth Int. Congress on Rheology, Brussels, Belgium (August 1992)
- [C50] T. Lacroix, R. Keunings, M. Desaegeer, I. Verpoest, Micromechanics of the Fragmentation Test, CADCOMP '92, Newark, Delaware, USA (May 1992)
- [C49] R. Aggarwal, R. Keunings, Finite Element Simulation of Memory Fluids on Message Passing Parallel Computers, Parallel CFD '92, New Brunswick, New Jersey, USA (May 1992)

- [C48] O. Zone, D. Vanderstraeten, R. Keunings, L. Wolsey, Parallel Algorithm and Automatic Domain Decomposition for Finite Element Flow Simulations, Parallel CFD '92, New Brunswick, New Jersey, USA (May 1992)
- [C47] T. Lacroix, R. Keunings, M. Desaegeer, I. Verpoest, Micromechanics of the Fibre/Matrix Interface, 5th European Conf. on Composite Materials, Bordeaux, France (April 1992)
- [C46] R. Keunings, O. Zone, A Direct Finite Element Equations Solver for Distributed Memory Parallel Computers, Int. Conf. on Structural Computational Mechanics (STRUCOME'91), Paris, France (November 1991)
- [C45] O. Zone, R. Keunings, Finite Element Solution of Heat Transfer and Fluid Mechanics Problems on Distributed Memory Parallel Computers, FNRS Contact Group Parallel Computing, Mons, Belgium (October 1991)
- [C44] L. Lefebvre, R. Keunings, Models and Numerical Techniques for the Simulation of Chemically-Reacting Non-Isothermal Polymer Flow, EURO THERM Conf. on Thermal Problems in Plastic Material Processing, Nantes, France (October 1991)
- [C43] O. Zone, R. Keunings, Direct Solution of Two-Dimensional Finite Element Equations on Distributed Memory Parallel Computers, 2nd Int. Symp. on High Performance Computing, Montpellier, France (October 1991)
- [C42] L. Lefebvre, R. Keunings, Mathematical Modeling and Computer Simulation of the Flow of Chemically-Reacting Polymeric Foams, Int. IMA Conf. on Mathematical Modeling of Materials Processing, Bristol, United Kingdom (September 1991)
- [C41] T. Lacroix, R. Keunings, M. Desaegeer, I. Verpoest, Micromechanical Modeling of the Fragmentation Test, Int. Conf. on Interfacial Phenomena in Composite Materials, Leuven, Belgium (September 1991)
- [C40] R. Keunings, O. Zone, Parallel Finite Element Algorithms: Performance Model and Implementation Results, FNRS Contact Group Fundamental Computer Science, Bruxelles, Belgium (April 1991)
- [C39] O. Zone, R. Keunings, D. Roose, Numerical Algorithms for the Direct Solution of Finite Element Equations on a Distributed Memory Parallel Computer, 2nd European Conf. on Distributed Memory Computing, München, Germany (April 1991)
- [C38] R. Keunings, B. Debbaut, M.J. Crochet, POLYFLOW: A Finite Element Package for Simulating Viscous and Viscoelastic Flows, European Conference on New Advances in Computational Structural Mechanics, Giens, France (April 1991)
- [C37] R. Keunings, O. Zone, Parallel Computing in Computational Rheology, FNRS Contact Group Parallel Computing, Leuven, Belgium (October 1990)
- [C36] R. Keunings, Supercomputing in Non-Newtonian Fluid Mechanics, Int. Symposium on Supercomputers in Climatology-Meteorology and Fluid Dynamics, Louvain-la-Neuve, Belgium (May 1990)

- [C35] I. Verpoest, M. Desaeger, R. Keunings, Critical Review of Direct Micromechanical Test Methods for Interfacial Strength Measurements in Composites, 3rd Int. Conf. on Composite Interfaces, Cleveland, Ohio, USA (May 1990)
- [C34] L. Lefebvre, R. Keunings, Preliminary Results on the Numerical Modeling of the Flow of a Polymerizing Polyurethane Foam, 6th Meeting of the Polymer Processing Society, Nice, France (April 1990) and Annual Symposium of the Belgian Group of Rheology, Louvain-la-Neuve, Belgium (December 1989)
- [C33] J.R. Rosenberg, R. Keunings, On the Numerical Integration of Viscoelastic Differential Models, 6th Int. Workshop on Numerical Methods in Non-Newtonian Flow, Hindsø, Denmark (June 1989)
- [C32] J.R. Rosenberg, R. Keunings, Analysis of Fiber Suspension Flow Including Coupling Between Kinematics and Fiber Orientation, 6th Int. Workshop on Numerical Methods in Non-Newtonian Flow, Hindsø, Denmark (June 1989)
- [C31] R. Keunings, Viscoelastic Effects in Time-Dependent Free Surface Flows, Belgian Group of Rheology Meeting, Leuven, Belgium (December 1988)
- [C30] R. Keunings, Recent Developments in the Numerical Simulation of Polymer and Fiber Suspension Flow, FNRS Contact Group Composites, Bruxelles, Belgium (November 1988)
- [C29] R. Keunings, Breakup of Viscoelastic Jets, European Working Party in Engineering Rheology, Groningen, Holland (April 1988)
- [C28] R. Keunings, J. Rosenberg, Petrov-Galerkin Finite Element Techniques for Computing Viscoelastic Flows, Soc. of Rheology Meeting, Atlanta, Georgia, USA (October 1987)
- [C27] M.M. Denn, R. van de Griend, S. Musarra, R. Keunings, Co-Flow Through an Expansion, European Research Meeting on Rheology, Univ. of Kent, Canterbury, UK (September 1987)
- [C26] R. Keunings, J. Rosenberg, Further Results on the Flow of Viscoelastic Fluids Through an Abrupt Contraction, 5th Int. Workshop on Numerical Methods in Non-Newtonian Flow, Lake Arrowhead, California, USA (June 1987)
- [C25] R. Keunings, D.W. Bousfield, M.M. Denn, Viscoelastic Effects in Moving Boundary Problems, 5th Int. Workshop on Numerical Methods in Non-Newtonian Flow, Lake Arrowhead, California, USA (June 1987)
- [C24] M.M. Denn, G. Lipscomb, R. Keunings, Boundary Singularities in Viscoelastic Flows, 5th Int. Workshop on Numerical Methods in Non-Newtonian Flow, Lake Arrowhead, California, USA (June 1987)
- [C23] T. Sullivan, S. Middleman, R. Keunings, Use of the Finite Element Method to Interpret Viscous and Viscoelastic Effects in Blade Coating, 3rd Annual Meet. Polymer Processing Soc., Stuttgart, Germany (April 1987)

- [C22] M.M. Denn, D.W. Bousfield, R. Keunings, Deformation of an Inclusion in Extensional Flow of a Viscoelastic Fluid, A.I.Ch.E. Meeting, Miami, Florida, USA (November 1986)
- [C21] M.M. Denn, G.G. Lipscomb, R. Keunings, Implications of Boundary Singularities in Complex Geometries, Soc. of Rheology Meeting, Tulsa, Oklahoma, USA (October 1986)
- [C20] R. Keunings, R. Shipman, Finite Element Methods for Transient Viscoelastic Free Surface Flows, 2nd. Int. Conf. on Numerical Methods in Industrial Forming Processes, Göteborg, Sweden (August 1986)
- [C19] S. Middleman, T. Sullivan, R. Keunings, A Comparison between Finite Element Predictions and Experimental Data for the Blade Coating Process, A.I.Ch.E. Meeting, New Orleans, Louisiana, USA (April 1986)
- [C18] R. Keunings, A Critical Examination of the High Weissenberg Number Problem in Viscoelastic Computations, Soc. of Rheology Meeting, Ann Arbor, Michigan, USA (October 1985)
- [C17] R. Keunings, D.W. Bousfield, Supercomputer Simulation of Non-Linear Surface Leveling of Thin Viscoelastic Films, Soc. of Rheology Meeting, Ann Arbor, Michigan, USA (October 1985)
- [C16] R. Keunings, Mesh Refinement Analysis of the Flow of a Maxwell Fluid Through an Abrupt Contraction, 4th Int. Conf. on Numerical Methods in Laminar and Turbulent Flow, Swansea, UK (July 1985)
- [C15] R. Keunings, Numerical Simulation of Moving Boundary Problems Involving Highly Elastic Fluids, 4th Int. Conf. on Numerical Methods in Laminar and Turbulent Flow, Swansea, UK (July 1985)
- [C14] R. Keunings, On the High Weissenberg Number Problem in Complex Flows, 4th Int. Workshop on Numerical Methods in Non-Newtonian Flow, Dorint, Belgium (June 1985)
- [C13] M.M. Denn, B.D. Freeman, R. Keunings, G.E. Molau, J. Ramos, Profile Development in Drawn Hollow Tubes, Polymer Processing Soc. Meeting, Akron, Ohio, USA (March 1985)
- [C12] R. Keunings, Modeling Transient Viscoelastic Flows with Free Surfaces, Soc. of Rheology Meeting, Blacksburg, Virginia, USA (February 1985)
- [C11] M.M. Denn, D.W. Bousfield, R. Keunings, G. Marrucci, Dynamics of Filament Breakup, A.I.Ch.E. Meeting, San Francisco, California, USA (November 1984)
- [C10] R. Keunings, A Finite Element Method for a Class of Viscoelastic Flows in Deforming Domains Applied to Jet Breakup, 9th Int. Congress on Rheology, Acapulco, Mexico (October 1984)
- [C9] G.G. Lipscomb, R. Keunings, G. Marrucci, M.M. Denn, A Continuum Theory for Fiber Suspensions, 9th Int. Congress on Rheology, Acapulco, Mexico (October 1984)

- [C8] R. Keunings, Numerical Simulation of Transient Viscoelastic Flows in Deforming Domains, Int. Symp. Composites: Materials and Engineering, Newark, Delaware, USA (September 1984)
- [C7] M.J. Crochet, J.M. Marchal, R. Keunings, Adaptive Refinement for Calculating Viscoelastic Flows, 5th Int. Symp. on Finite Element Methods in Flow Problems, Austin, Texas, USA (January 1984)
- [C6] R. Keunings, The Flow of a Phan-Thien-Tanner Liquid Through an Abrupt Contraction, 3rd Int. Workshop on Numerical Methods in Non-Newtonian Flow, Lake Morrey, Vermont, USA (June 1983)
- [C5] R. Keunings, Numerical Prediction of Stress and Velocity Development in Melt Spinning, Int. Workshop on Extensional Flows, La Bresse, France (January 1983)
- [C4] R. Keunings, Numerical Analysis of Melt Spinning, Meeting of the Belgian Group of Rheology, Louvain-la-Neuve, Belgium (September 1982)
- [C3] R. Keunings, A Finite Element Analysis of Melt Spinning, Int. Conf. on Numerical Methods in Industrial Forming Processes, Swansea, UK (July 1982)
- [C2] M.J. Crochet, R. Keunings, Numerical Simulation of Die Swell: Geometrical Effects, 2nd World Congress of Chemical Engineering, Montréal, Canada (October 1981)
- [C1] R. Keunings, Mixed Finite Element Methods for Solving Viscoelastic Flows: Transient Analysis, 2nd Int. Workshop on Numerical Methods in Non-Newtonian Flow, Ross Priory, Scotland, UK (May 1981)

#### **4. Invited seminars**

- [S45] Micro-Macro Methods for the Multiscale Simulation of Viscoelastic Flow Using Molecular Models of Kinetic Theory, Beijing Int. Center for Mathematical Research, China (May 2008)
- [S44] New Developments in Tube-Based Constitutive Models for Entangled Polymers, Institutet for Kemiteknik, Danmarks Tekniske Hojskole, Lyngby, Denmark (July 2004)
- [S43] Advances in the Micro-Macro Computer Modeling of Viscoelastic Flows, Dow Chem. Technical Advisory Board, Houston, Texas, USA (January 2001)
- [S42] Computer Modelling of the Flow Dynamics of Polymeric Liquids: Advances and Opportunities, BASF Polymer Research Laboratory, Ludwigshafen, Germany (December 2000)
- [S41] Modélisation Numérique Micro-Macro de l'Écoulement de Polymères, CERMICS, Ecole Nationale des Ponts et Chaussées, Paris, France (December 1999)
- [S40] Modélisation de l'Écoulement de Fluides à Mémoire, INRIA, Paris, France (October 1999)

- [S39] Developments in the Micro-Macro Computer Modeling of Polymer Flows, Dept. of Chemical Engineering, McGill Univ., Montreal, Canada (June 1999)
- [S38] Stochastic Simulation of the Flow of Dilute Polymer Solutions, Dept. of Chemical Engineering, Univ. Federico II, Naples, Italy (January 1999)
- [S37] Computation of Viscoelastic Flow with Kinetic Theory Models, Institute of Non-Newtonian Fluid Mechanics, University of Wales, Aberystwyth, UK (May 1998)
- [S36] Rheology of Polymers: Phenomenology, Modeling and Numerical Simulation, FINA Research, Feluy, Belgium (January 1998)
- [S35] Approaches to the Modeling and Numerical Simulation of Viscoelastic Fluids, Orsay, Paris (November 1997)
- [S34] Computer Modeling of Polymer Flows: New Challenges for Scientific Computing, NEC Europe C&C Research Laboratories, Sankt Augustin, Germany (November 1996)
- [S33] Stochastic Simulation of the Flow of Polymeric Solutions, Dept. Applied Math. and Theor. Phys., Cambridge University, UK (May 1996)
- [S32] Developments in Computational Rheology, Dept. Appl. Math., Univ. of Leeds, UK (December 1995)
- [S31] Micro-Macro Modeling of Viscoelastic Flows : Preliminary Results, Dept. Applied Math. and Theor. Phys., Cambridge University, UK (October 1995)
- [S30] Recent Developments in the Mathematical Modelling and Computer Simulation of Polymeric Materials, Dept. of Chemical Engineering, Univ. of California, Berkeley, USA (February 1995)
- [S29] Modélisation Mathématique et Simulation Numérique en Ingénierie des Matériaux, Centre de Recherche en Matériaux Avancés, UCL, Louvain-la-Neuve, Belgium (November 1994)
- [S28] Parallel Computing Methods Applied to Polymer Flow, Exxon Research Laboratory, Brussels, Belgium (April 1994)
- [S27] Developments in Macroscopic Modeling for Polymers and Polymer Composites, Dept. Materials Science, EPFL, Lausanne, Switzerland (October 1993)
- [S26] Numerical Modelling of Chemically-Reactive Polymer Flows, Div. of Engineering, Brown University, Providence, Rhode Island, USA (February 1993)
- [S25] Parallel Algorithms in Computational Rheology, IBM Centro Europeo per il Calcolo Scientifico e Tecnico (ECSEC), Rome, Italy (June 1992)
- [S24] Algorithmes Parallèles pour la Résolution Directe d'Equations d'Eléments Finis, Dept. de Mathématiques Appliquées, Université de Bordeaux, France (December 1991)

- [S23] Modélisation et Simulation Numérique d'Écoulements de Polymères avec Réactions Chimiques, Dept. de Mathématiques Appliquées, Université de Bordeaux, France (December 1991)
- [S22] New Developments in Viscoelastic Flow Simulation, Dept. Applied Math. and Theor. Phys., Cambridge University, UK (May 1991)
- [S21] Numerical Modeling of Memory Fluids : New Challenges in Scientific Computing, Dept. d'Informatique et de Mathématiques Appliquées, KUL, Leuven, Belgium (March 1990)
- [S20] A Review of the State-of-the-art in the Numerical Modeling of Polymer Flows, Center for Composite Materials and Structures, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA (September 1988)
- [S19] L'Etat de la Question en Simulation Numérique d'Écoulements de Fluides à Mémoire, Laboratoire d'Analyse Numérique, Université de Paris-Sud et Centre National de la Recherche Scientifique, Orsay, France (May 1988)
- [S18] L'Etat de la Question en Simulation Numérique d'Écoulements de Fluides à Mémoire, Centre de Mise en Forme des Matériaux, Ecole Nationale Supérieure des Mines de Paris, Valbonne, France (April 1988)
- [S17] Recent Developments in the Numerical Prediction of the Flow of Memory Fluids, AT&T Bell Laboratories, Murray Hill, New-Jersey, USA (July 1987)
- [S16] Analyse Asymptotique et Simulation sur Superordinateur de Deux Problèmes de Mécanique des Fluides à Mémoire, Unité de Mécanique Appliquée, Université Catholique de Louvain, Belgium (September 1986)
- [S15] Implications of Boundary Singularities on the Computation of Viscoelastic Flows, Dept. of Chemical Engineering, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA (April 1986)
- [S14] Analyse Non-Linéaire de Quelques Problèmes de Mécanique des Fluides Viscoélastiques, Dept. of Chemical Engineering, Université Laval, Québec, Canada (October 1985)
- [S13] New Developments in the Numerical Prediction of Viscoelastic Flows, Exxon Corporate Research Science Lab., Clinton Township, New Jersey, USA (August 1985)
- [S12] Supercomputer Simulation of Some Complex Fluid Mechanics Problems, Institutet for Kemiteknik, Danmarks Tekniske Hojskole, Lyngby, Denmark (June 1985)
- [S11] Computer Modeling of the Flow of Rheologically-Complex Materials, IBM Research Labs, San Jose, California, USA (March 1985)
- [S10] Computational Rheology: New Developments and Controversial Issues, Dept. of Chemical Engineering, M.I.T., Boston, Massachusetts, USA (February 1985)

- [S9] Non-Linear Analysis of Transient Viscoelastic Flows with Free Surfaces, Div. of Engineering, Brown University, Providence, Rhode Island, USA (February 1985)
- [S8] Numerical Simulation of Viscoelastic Flows, Dept. of Chemical Engineering, University of Southern California, Los Angeles, California, USA (January 1985)
- [S7] New Developments in the Numerical Simulation of Viscoelastic Flows, Dept. of Chemical Engineering, University of California, San Diego, California, USA (January 1985)
- [S6] Finite Element Methods in Non-Newtonian Fluid Mechanics, Fluid Mechanics Seminar, Stanford University, Palo Alto, California, USA (January 1985)
- [S5] Non-Newtonian Fluid Mechanics, Miller Institute for Basic Research in Science, University of California, Berkeley, California, USA (November 1984)
- [S4] Finite Element Techniques for Viscoelastic Flows in Complex Geometries, Dept. of Mechanical Engineering, University of California, Berkeley, California, USA (February 1984)
- [S3] Recent Developments in Computational Rheology, Center for Composite Materials, University of Delaware, Newark, USA (January 1984)
- [S2] Recent Developments in Computational Rheology, Dept. of Chemical Engineering, Princeton University, Princeton, New Jersey, USA (January 1984)
- [S1] New Developments in the Numerical Simulation of Non-Newtonian Flows, Dept. of Applied Mathematics, University College of Wales, Aberystwyth, UK (January 1983)