

# Publications du Groupe "Milieux fluides réactifs multiphasiques"

## Publications dans des revues à facteur d'impact

### Année 2014

1. S. A. Bahrani, J. Y. Monteau, S. A. Rezzoug, C. Loisel and Z. Maache-Rezzoug, Physics-based modeling of simultaneous heat and mass transfer intensification during vacuum steaming processes of starchy material, *Chemical Engineering and Processing*, vol.85, 216-226, 2014.
2. S. A. Bahrani and C. Nouar, Intermittency in the Transition to Turbulence for a Shear-Thinning Fluid in Hagen-Poiseuille Flow, *Journal of Applied Fluid Mechanics*, vol.7 (1), 1-6, 2014.
3. E. Blanchard, P. Boulet, P. Fromy, S. Desanghere, P. Carlotti, J. P. Vantelon and J. P. Garo, Experimental and Numerical Study of the Interaction Between Water Mist and Fire in an Intermediate Test Tunnel, *Fire Technology*, vol.50 (3), 565-587, 2014.
4. P. Boulet, J. Gerardin, Z. Acem, G. Parent, A. Collin, Y. Pizzo and B. Porterie, Optical and radiative properties of clear PMMA samples exposed to a radiant heat flux, *International Journal of Thermal Sciences*, vol.82, 1-8, 2014.
5. P. Boulet, G. Parent, Z. Acem, A. Collin, M. Forsth, N. Bal, G. Rein and J. Torero, Radiation emission from a heating coil or a halogen lamp on a semitransparent sample, *International Journal of Thermal Sciences*, vol.77, 223-232, 2014.
6. D. Brissinger, G. Parent and P. Boulet, Experimental study on radiation attenuation by a water film, *Journal of Quantitative Spectroscopy & Radiative Transfer*, vol.145, 160-168, 2014.
7. S. Dufour, G. Vinsard and E. Saadjan, On the Trajectory and Rotation of a Spherical Magnet Falling Inside a Conducting Pipe, *IEEE Transactions on Magnetics*, vol.50 (2), 4, 2014.
8. J. Gerardin, P. Ruyer and P. Boulet, Taking Accurate Account of Radiative Heat Transfer for the Simulation of Core Reflooding, *Nuclear Science and Engineering*, vol.178 (1), 103-118, 2014.
9. R. Guichard, E. Belut, N. Rimbert and A. Tanière, Evaluation of a Moments-based Formulation for the Transport and Deposition of Small Inertia Aerosols, *The Journal of Computational Multiphase Flows*, vol.6 (4), 407-418, 2014.
10. R. Guichard, A. Taniere, E. Belut and N. Rimbert, Simulation of nanoparticle coagulation under Brownian motion and turbulence in a differential-algebraic framework: Developments and applications, *International Journal of Multiphase Flow*, vol.64, 73-84, 2014.
11. C. Hanotin, S. Kiesgen de Richter, L. Michot and P. Marchal, Rheological behavior of vibrated bimodal granular suspensions: a free volume approach, *Rheologica Acta*, vol.54, 1-9, 2014.
12. C. Hanotin, S. Kiesgen de Richter, L. J. Michot and P. Marchal, Viscoelasticity of vibrated granular suspensions, *Journal of Rheology*, vol.59 (1), 253-273, 2014.

13. M. Hebrant, S. Pelleieux, L. Mathieu, S. Skali-Lami, C. Gantzer, I. Bertrand and J. C. Block, Distinct adsorption kinetics of Q beta and GA bacteriophages on drinking water biofilms, *Adsorption-Journal of the International Adsorption Society*, vol.20 (5-6), 823-828, 2014.
14. C. Henry, J. P. Minier, M. Mohaupt, C. Profeta, J. Pozorski and A. Taniere, A stochastic approach for the simulation of collisions between colloidal particles at large time steps, *International Journal of Multiphase Flow*, vol.61, 94-107, 2014.
15. A. Jenft, A. Collin, P. Boulet, G. Pianet, A. Breton and A. Muller, Experimental and numerical study of pool fire suppression using water mist, *Fire safety journal*, vol.67, 1-12, 2014.
16. N. Louvet, D. Bonn and H. Kellay, Nonuniversality in the Pinch-Off of Yield Stress Fluids: Role of Nonlocal Rheology, *Physical Review Letters*, vol.113 (21), 218302, 2014.
17. M. Riahi, S. Aniss, M. T. Ouazzani and S. Skali Lami, Linear stability analysis of Taylor-Couette flow in a viscoelastic fluid under out-of phase modulation, *International Journal of Innovation and Applied Studies*, vol.8 (1), 364-371, 2014.
18. N. Rimbart, L. Claudotte, P. Gardin and J. Lehmann, Modeling the Dynamics of Precipitation and Agglomeration of Oxide Inclusions in Liquid Steel, *Industrial & Engineering Chemistry Research*, vol.53 (20), 8630-8639, 2014.
19. F. Rouyer, B. Haffner, N. Louvet, Y. Khidas and O. Pitois, Foam clogging, *Soft Matter*, vol.10 (36), 6990-6998, 2014.
20. K. Samimi, H. Sharafi, E. Padayodi and S. A. Bahrani, Study of micro particles deposition in ribbed channel: A numerical investigation in turbulent airflow, *Mechanics & Industry*, vol.15 (1), 75-80, 2014.
21. S. S. Sazhin, M. Al Qubeissi, R. Nasiri, V. M. Gun'ko, A. E. Elwardany, E. Lemoine, F. Grisch and M. R. Heikal, A multi-dimensional quasi-discrete model for the analysis of Diesel fuel droplet heating and evaporation, *Fuel*, vol.129, 238-266, 2014.
22. A. Taniere and B. Arcen, Prediction of a particle-laden turbulent channel flow: Examination of two classes of stochastic dispersion models, *International Journal of Multiphase Flow*, vol.60, 1-10, 2014.
23. J. Tissot, P. Boulet, F. Trinet, L. Fournaison, M. Lejeune and F. Liaudet, Improved energy performance of a refrigerating machine using water spray upstream of the condenser, *International Journal of Refrigeration*, vol.38, 93-105, 2014.
24. G. Vinsard, S. Dufour and E. Saadjiian, Mixing of Liquids With a Rotating Current Density, *IEEE Transactions on Magnetics*, vol.50 (2), 4, 2014.
25. Mathieu, L. , Bertrand, I., Abe, Y., Angel, E., Block, J.C., Skali-Lami, S., Francius, G. Drinking water biofilm cohesiveness changes under chlorination or hydrodynamic stress, *Water Research*, Volume 55, 15 May 2014, Pages 175-184
26. Cuervo, N., Murillo, C., Dufaud, O. , Monnier, N.B., Skali-Lami, S., Rémy, J.-F., Auzolle, P., Perrin, L. Combining CFD simulations and PIV measurements to optimize the conditions for dust explosion tests, *Chemical Engineering Transactions* Volume 36, 2014, Pages 259-264

- M. S. Aghighi, A. Ammar, C. Métivier, M. Normandin and F. Chinesta, Non-incremental transient solution of the Rayleigh-Bénard convectin model by using the PGD, *Journal of Non-Newtonian Fluids*, vol.200, 65-78, 2013.
- H. Bal, J. Raynard, G. Rein, J. L. Torero, M. Fasth, P. Boulet, G. Parent, Z. Acem and G. Linteris, Experimental study of radiative heat transfer in a translucent fuel sample exposed to different spectral sources, *International Journal of Heat and Mass Transfer*, vol.61, 742-748, 2013.
- Y. Billaud, P. Boulet, Y. Pizzo, G. Parent, Z. Acem, A. Kaiss, A. Collin and B. Porterie, Determination of woody fuel flame properties by means of emission spectroscopy using a genetic algorithm *Combustion Science and Technology*, vol.185 (4), 579-599, 2013.
- E. Blanchard, P. Boulet, P. Fromy, S. Desanghere, P. Carlotti, J. Vantelon and J. Garo, Experimental and Numerical Study of the Interaction Between Water Mist and Fire in an Intermediate Test Tunnel, *Fire Technology*, vol.50, 565-587, 2013.
- J. Bouchgl, S. Aniss and M. Souhar, Interfacial instability of two superimposed immiscible viscous fluids in a vertical Hele-Shaw cell under horizontal periodic oscillations, *Physical Review E*, vol.88 (2), 8, 2013.
- P. Boulet, D. Lacroix, D. Lemonnier, P. Lybaert, M. P. Menguc and N. Selcuk, Special issue based on the Eurotherm Seminar 95 Computational Thermal Radiation in Participating Media IV, *Journal of Quantitative Spectroscopy and Radiative Transfer*, vol.128, 1, 2013.
- P. Boulet, J. Tissot, F. Trinquet and L. Fournaison, Enhancement of heat exchanges on a condenser using an air flow containing water droplets, *Applied Thermal Engineering*, vol.50 (1), 1164-1173, 2013.
- S. N. L. Carranza, M. Jenny and C. Nouar, Instability of streaks in pipe flow of shear-thinning fluids, *Physical Review E*, vol.88 (2), 15, 2013.
- G. Castanet, P. Dunand, O. Caballina and F. Lemoine, High-speed shadow imagery to characterize the size and velocity of the secondary droplets produced by drop impacts onto a heated surface, *Experiments in Fluids*, vol.54 (3), 17, 2013.
- V. Cesard, E. Belut, C. Prevost, A. Taniere and N. Rimbart, Assessing the containment efficiency of a microbiological safety cabinet during the simultaneous generation of a nanoaerosol and a tracer gas, *Annals of Occupational Hygiene*, vol.57 (3), 345-359, 2013.
- L. Claudotte, N. Rimbart, P. Gardin, M. Simonnet, J. Lehmann and B. Oesterlé, A multi-QMOM framework to describe multi-component agglomerates in liquid steel, *AIChE Journal*, vol.56 (9), 2347-2355, 2013.
- L. Claudotte, N. Rimbart, P. Gardin, M. Simonnet, J. Lehmann and B. Oesterlé, Behaviour of oxide inclusions in liquid steel: multi-QMOM simulation, *steel research international*, vol.81 (8), 630-636, 2013.
- A. Collin and P. Boulet, Evaluation of simple models of flame radiation in the frame of fire propagation, *International Journal of Heat and Mass Transfer*, vol.59, 83-92, 2013.
- L. A. Daoud, N. Rimbart, A. Jardy, B. Oesterlé, S. Hans and J. P. Bellot, 3D Modeling of the Aggregation of Oxide Inclusions in a Liquid Steel Ladle: Two Numerical Approaches, *Advanced Engineering Materials*, vol.13 (7), 543-549, 2013.
- M. Darbouli, C. Métivier, J.-M. Piau, A. Magnin and A. Abdelali, Rayleigh-Bénard convection for viscoplastic fluids, *Physics of Fluids*, vol.25, 2013.
- A. Ducourneau, A. Faiz, A. Khanfir and J. Chatillon, Measuring sound scattering coefficients of uneven surfaces in a reverberant workplace - Principle and validation of the method, *Applied Acoustics*, vol.74 (5), 653-660, 2013.
- S. Dufour, G. Vinsard, J. P. Mota and E. Saadjan, Mixing by chaotic advection in a magneto-hydrodynamic driven flow, *Physics of Fluids*, vol.25 (10), 16, 2013.

- S. Dufour, G. Vinsard, J. P. Mota and E. Saadjiian, Chaotic advection in a MHD driven flow, *Physics of Fluids (1994-present)*, vol.25, 2013.
- S. Dufour, G. Vinsard and E. Saadjiian, On the trajectory of a spherical magnet falling inside a conducting pipe, *IEEE Transactions on Magnetics*, 2013.
- P. Dunand, G. Castanet, M. Gradeck, F. Lemoine and D. Maillet, Heat transfer of droplets impinging onto a wall above the Leidenfrost temperature, *Comptes Rendus Mecanique*, vol.341 (1-2), 75-87, 2013.
- P. Dunand, G. Castanet, M. Gradeck, D. Maillet and F. Lemoine, Energy balance of droplets impinging onto a wall heated above the Leidenfrost temperature, *International Journal of Heat and Fluid Flow*, vol.44, 170-180, 2013.
- A. Durst, A. Lamibrac, F. Charlot, J. Dillet, L. F. Castanheira, G. Maranzana, L. Dubau, F. Maillard, M. Chatenet and O. Lottin, Degradation heterogeneities induced by repetitive start/stop events in proton exchange membrane fuel cell: Inlet vs. outlet and channel vs. land, *Applied Catalysis B-Environmental*, vol.138, 416-426, 2013.
- B. F. Z. Fagla, M. Gradeck, C. Baravian and M. Lebouché, Modelling rheology of isothermal flow of carboxymethyl-cellulose-alginate suspension in a horizontal conduit, *Journal of Applied Science & Technology*, vol.18 (1-2), 2013.
- B. F. Z. Fagla, M. Gradeck, C. Baravian and M. Lebouché, Experimental Study of Heating of the Newtonian Suspensions made of Large Hard Spheres Based on the Glucose & Water Solutions Flowing in a Horizontal Duct, *International Journal of Scientific & Engineering Research*, vol.4 (4), 790-802, 2013.
- B. F. Z. Fagla, M. Gradeck and M. Lebouche, Experiments on rheology of non-Newtonian flow of tylose-alginate suspension through a horizontal complex conduit, *Journal of Applied Science & Technology*, vol.18 (1-2), 2013.
- J. Gerardin, N. Seiler, P. Ruyer and P. Boulet, Radiative transfer during the reflooding step of a LOCA, *Journal of Quantitative Spectroscopy and Radiative Transfer*, vol.128, 43-51, 2013.
- M. Gradeck, N. Seiler, P. Ruyer and D. Maillet, Heat transfer for Leidenfrost drops bouncing onto a hot surface, *Experimental Thermal and Fluid Science*, vol.47, 14-25, 2013.
- E. Gravier, E. Plaut, X. Caron and M. Jenny, Transitions between drift waves in a magnetized cylindrical plasma: experiments and fluid model, solved with a spectral method, *European Physical Journal D*, 2013.
- E. Gravier, E. Plaut, X. Caron and M. Jenny, Kinetic water-bag model of global drift waves and ITG instabilities in cylindrical geometry-Spectral method, *Physics of Plasmas*, vol.20, 2013.
- R. Guichard, A. Tanière, E. Belut and N. Rimbart, Modelling of nanoparticule coagulation and transport in pipe flow, *International Journal of Ventilation*, vol.12 (2), 181-186, 2013.
- V. M. Gun'ko, R. Nasiri, S. S. Sazhin, F. Lemoine and F. Grisch, A quantum chemical study of the processes during the evaporation of real-life Diesel fuel droplets, *Fluid Phase Equilibria*, vol.356, 146-156, 2013.
- C. Hanotin, P. Marchal, L. J. Michot, C. Baravian and S. Kiesgen de Richter, Dynamics of vibrated granular suspensions probed by mechanical spectroscopy and diffusing wave spectroscopy measurements, *Soft Matter*, vol.9 (39), 9352-9360, 2013.
- A. Jenft, P. Boulet, A. Collin, G. Pianet, A. Breton and A. Muller, Can we predict fire extinction by water mist with FDS?, *Mechanics & Industry*, vol.14 (5), 389-393, 2013.
- A. Khanfir, A. Faiz and J. Ducourneau, J. Chatillon, S. Skali Lami, Scattered acoustic field above a grating of parallel rectangular cavities, *Journal of Sound and Vibration*, vol.332 (4), 1047-1060, 2013.

A. Labergue, A. Delconte and F. Lemoine, Study of the thermal mixing between two non-isothermal sprays using combined three-color LIF thermometry and phase Doppler analyzer, *Experiments in Fluids*, vol.54 (6), 15, 2013.

F. Lemoine and G. Castanet, Temperature and chemical composition of droplets by optical measurement techniques: a state-of-the-art review, *Experiments in Fluids*, vol.54 (7), 34, 2013.

P. Marchal, C. Hanotin, L. J. Michot and S. Kiesgen de Richter, Two-state model to describe the rheological behavior of vibrated granular matter, *Physical Review E*, vol.88 (1), 10, 2013.

R. Renane, K. Chetehouna, O. Sero-Guillaume, A. Nour and S. Rudz, Numerical simulations of laminar burning velocities of a major volatile organic compound involved in accelerating forest fires, *Applied Thermal Engineering*, vol.51 (1-2), 670-676, 2013.

P. Ruyer, N. Seiler, B. Biton, F. Lelong, F. Secondi, D. Baalbaki and M. Gradeck, Two-phase flow across a partially damaged core during the reflood phase of a loca, *Nuclear Engineering and Design*, vol.264, 187-194, 2013.

E. Saatdjian, F. Lesage and J. P. B. Mota, Transport phenomena projects: natural convection between porous, concentric cylinders. A method to learn and innovate,, *Chemical Engineering Education*, vol.47 (1), 59-64, 2013.

E. Saatdjian, A. J. S. Rodrigo and J. P. B. Mota, A study of mixing by chaotic advection in two three-dimensional open flows (vol 81, pg 179, 2012), *Chemical Engineering Science*, vol.97, 59-59, 2013.

E. Saatdjian, A. J. S. Rodrigo and J. P. B. Mota, Corrigendum to a study of mixing by chaotic advection in two three-dimensional open flows. • [Chem. Eng. Sci. 81 (2012) 179-190], *Chemical Engineering Science*, vol.97, 2013.

K. Szewc, J. Pozorski and J.-P. Minier, Simulations of single bubbles rising through viscous liquids using smoothed particle hydrodynamics, *International Journal of Multiphase Flow*, vol.50, 98-105, 2013.

K. Szewc, J. Pozorski and J. P. Minier, Analysis of the incompressibility constraint in the smoothed particle hydrodynamics method, *International Journal for Numerical Methods in Engineering*, vol.92 (4), 343-369, 2013.

F. Tafnout, E. Belut, B. Oesterle, A. T. Mikolajczak and J. R. Fontaine, Measurements and Numerical Simulation of the Gas-Solid Flow Generated by Machining Operation, *International Journal of Ventilation*, vol.12 (1), 63-80, 2013.

J. Tissot, P. Boulet, F. Trinquet, L. Fournaison, M. Lejeune and F. Liaudet, Improved energy performance of a refrigerating machine using water spray upstream of the condenser, *International Journal of Refrigeration*, 2013.

G. Vinsard, S. Dufour and E. Saatdjian, Chaotic advection generated by Laplace forces in an electrolyte, *European Physical Journal-Applied Physics*, vol.64 (2), 6, 2013.

G. Vinsard, S. Dufour and E. Saatdjian, Chaotic advection generated by Laplace forces in an electrolyte, *European Physical Journal*, 2013.

Winkler and M. Abel, Mixing in thermal convection of very thin free-standing films, *Physica Scripta*, vol.T155, 6, 2013.

Winkler, G. Kofod, R. Krastev, S. Stoeckle and M. Abel, Exponentially Fast Thinning of Nanoscale Films by Turbulent Mixing, *Physical Review Letters*, 2013.

## Année 2012

Y. Abe, S. Skali-Lami, J.C. Block, and G. Francius, 'Cohesiveness and Hydrodynamic Properties of Young Drinking Water Biofilms', *Water Research*, 46 (4) (2012), 1155-66.

- B. Alibenyahia, C. Lemaitre, C. Nouar, and N. Ait-Messaoudene, 'Revisiting the Stability of Circular Couette Flow of Shear-Thinning Fluids', *Journal of Non-Newtonian Fluid Mechanics*, 183 (2012), 37-51.
- B. Arcen, A. Tanière, and M. Khalij, 'Heat Transfer in a Turbulent Particle-Laden Channel Flow', *International Journal of Heat and Mass Transfer*, 55 (23-24) (2012), 6519-29.
- E. Blanchard, P. Boulet, S. Desanghere, E. Cesmat, R. Meyrand, J.P. Garo, and J.P. Vantelon, "Experimental and numerical study of fire in a midscale test tunnel", *Fire Safety Journal*, 47 (2012), 18-31.
- P. Boulet, G. Parent, Z. Acem, T. Rogaume, T. Fateh, J. Zaida, and F. Richard, "Characterization of the radiative exchanges when using a cone calorimeter for the study of the plywood pyrolysis", *Fire safety journal*, 51 (2012), 53-60.
- R. Devienne, and J.R. Fontaine, 'Experimental Characterisation of a Plume above Rectangular Thermal Sources. Effect of Aspect Ratio', *Building and Environment*, 49 (2012), 17-24.
- S. Dufour, G. Vinsard, and J.P. Brancher, 'Lateral Forces on a Magnet Falling in a Conducting Pipe', *The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, 31 (6) (2012), 1625-36.
- P. Dunand, G. Castanet, and F. Lemoine, 'A Two-Color Planar LIF Technique to Map the Temperature of Droplets Impinging onto a Heated Wall', *Experiments in Fluids*, 52 (4) (2012), 843-56.
- A.E. Elwardany, I.G. Gusev, G. Castanet, F. Lemoine, and S.S. Sazhin, 'Mono-and Multicomponent Droplet Cooling/Heating and Evaporation : Comparative Analysis of Numerical Models', *Atomization and Sprays* (2012), 907-31.
- J. Gerardin, N. Seiler, P. Ruyer, L. Trovalet, and P. Boulet, "P1 approximation, MDA and IDA for the simulation of radiative transfer in a 3D geometry for an absorbing scattering medium", *Journal of Quantitative Spectroscopy and Radiative Transfer*, 113 (2) (2012), 140-49.
- M. Gradeck, J.A. Ouattara, B. Remy, and D. Maillet, 'Solution of an Inverse Problem in the Hankel Space – Infrared Thermography Applied to Estimation of a Transient Cooling Flux', *Experimental Thermal and Fluid Science*, 36 (2012), 56-64.
- C. Hanotin, S. Kiesgen de Richter, P. Marchal, L.J. Michot, and C. Baravian, 'Vibration-Induced Liquefaction of Granular Suspensions', *Physical Review Letters*, 108 (19) (2012), n°198301.
- S. Kiesgen de Richter, G. Le Caer, and R. Delannay, 'Dynamics of Rearrangements During Inclination of Granular Packings : The Avalanche Precursor Regime', *Journal of Statistical Mechanics-Theory and Experiment*, 2012 (2012), p04013.
- A. Labergue, A. Delconte, G. Castanet, and F. Lemoine, 'Study of the Droplet Size Effect Coupled with the Laser Light Scattering in Sprays for Two-Color LIF Thermometry Measurements', *Experiments in Fluids*, 52 (5) (2012), 1121-32.
- A. Lamorlette, and A. Collin, 'Analytical Quantification of Convective Heat Transfer inside Vegetal Structures', *International Journal of Thermal Sciences*, 57 (2012), 78-84.

A. Lamorlette, A. Collin, and O. Sero-Guillaume, 'Characterization of Heat Transfer between Phases inside a Porous Medium as Applied to Vegetal Set Representations', *International Journal of Heat and Mass Transfer*, 55 (4) (2012), 607-17.

S.N. Lopez-Carranza, M. Jenny, and C. Nouar, 'Pipe Flow of Shear-Thinning Fluids', *Comptes Rendus Mécanique*, 340 (8) (2012), 602-18.

S. Madani, O. Caballina, and M. Souhar, 'Some Investigations on the Mean and Fluctuating Velocities of an Oscillating Taylor Bubble', *Nuclear Engineering and Design*, 252 (2012), 135-43.

A. Mehel, B. Sagot, A. Tanière, and B. Oesterlé, 'On the Mutual Effect of the Turbulent Dispersion Model and Thermophoresis on Nanoparticle Deposition', *International Journal of Nonlinear Sciences and Numerical Simulation*, 13 (6) (2012), 417-25.

C. Métivier, Y. Rharbi, A. Magnin, and A. Bou Abboud, 'Stick-Slip Control of the Carbopol Microgels on Polymethyl Methacrylate Transparent Smooth Walls', *Soft Matter*, 8 (28) (2012), 7365-67.

J.P.B. Mota, E. Saadjan, and A.J.S. Rodrigo, 'On Chaotic Advection in a Static Mixer', *Chemical Engineering Journal*, 187 (2012), 289-98.

E. Paineau, I. Dozov, I. Bihannic, C. Baravian, M.E.M. Krapf, A.M. Philippe, S. Rouzière, L.J. Michot, and P. Davidson, 'Tailoring Highly Oriented and Micropatterned Clay/Polymer Nanocomposites by Applying an A.C. Electric Field', *Applied Materials & Interface*, 4 (8) (2012), 4296–301.

S. Pelleieux, I. Bertrand, S. Skali-Lami, L. Mathieu, G. Francius, and C. Gantzer, 'Accumulation of Ms2, Ga, and Q $\beta$  Phages on High Density Polyethylene (Hdpe) and Drinking Water Biofilms under Flow/Non-Flow Conditions', *Water Research*, 46 (19) (2012), 6574-84.

A.M. Philippe, C. Baravian, M. Jenny, F. Meneau, and L.J. Michot, 'Taylor-Couette Instability in Anisotropic Clay Suspensions Measured Using Small-Angle X-Ray Scattering', *Physical Review Letters*, 108 (25) (2012), 4.

E. Saadjan, A.J.S. Rodrigo, and J.P.B. Mota, 'On Chaotic Advection in a Static Mixer', *Chemical Engineering Journal*, 187 (2012), 289-98.

E. Saadjan, 'A Study of Mixing by Chaotic Advection in Two Three-Dimensional Open Flows', *Chemical Engineering Science*, 81 (2012), 179-90.

K. Szewc, J. Pozorski, and J. P. Minier, 'Analysis of the Incompressibility Constraint in the Smoothed Particle Hydrodynamics Method', *International Journal for Numerical Methods in Engineering*, 92 (4) (2012), 343-369.

K. Szewc, A. Tanière, and J. Pozorski, 'A Study on Application of Smoothed Particle Hydrodynamics to Multi-Phase Flows', *International Journal of Nonlinear Sciences and Numerical Simulation*, 13 (6) (2012), 383-95.

J. Tissot, P. Boulet, A. Labergue, G. Castanet, F. Trinquet, and L. Fournaison, 'Experimental Study on Air Cooling by Spray in the Upstream Flow of a Heat Exchanger', *International Journal of Thermal Sciences*, 60 (2012), 23-31.

M.M. Yazdanpanah, A. Forret, T. Gauthier, and A. Delebarre, 'An Experimental Investigation of L-Valve Operation in an Interconnected Circulating Fluidized Bed System', *Powder Technology*, 221 (2012), 236-44.

## Année 2011

Y. Abe, P. Polyakov, S. Skali-Lami, and G. Francius, "Elasticity and physico-chemical properties during drinking water biofilms formation", *Biofouling*, vol. 27, (7), pp. 739-750, 2011.

Y. Abe, S. Skali-Lami, J.C. Block, and G. Francius, "Cohesiveness and hydrodynamic properties of young drinking water biofilms", *Water Research*, vol.465, 4, pp.1155-1166, 2011.

N. Ait-Messaoudène, A. Horimek, C. Nouar, and B. Benaouda-Zouaoui, "Laminar mixed convection in an eccentric annular horizontal duct for a thermodependent non-Newtonian fluid", *International Journal of Heat and Mass Transfer*, vol. 54, Issues 19-20, pp. 4220-4234, 2011.

G. Castanet, B. Frackowiak, C. Tropea, and F. Lemoine, "Heat convection within evaporating droplets in strong aerodynamic interactions", *International Journal of Heat and Mass Transfer*, vol. 54, Issues 15-16, pp. 3267-3276, 2011.

G. Castanet, A. Laberque, and F. Lemoine, "Internal temperature distributions of interacting and vaporizing droplets", *International Journal of Thermal Science*, vol. 50, Issue 7, pp. 1181-1190, 2011.

A. Chekila, C. Nouar, E. Plaut, and A. Nemdili, "Subcritical bifurcation of shear-thinning planePoiseuille flows", *Journal of Fluid Mechanics*, vol. 686, pp. 272-298, 2011.

A. Collin, D. Bernardin, and O. Séro-Guillaume, "A Physical-Based Cellular Automaton Model for Forest-Fire Propagation", *Combustion Science and Technology*, vol. 183, Issue 4, pp. 347-369, 2011.

A. Collin, A. Lamorlette, D. Bernardin, and O. Séro-Guillaume, "Modelling of tree crowns withrealistic morphological features : new reconstruction algorithm based on Iterated Function System tool", *Ecological Modelling*, vol. 222, Issue 3, pp. 503-513, 2011.

I. Daoud, N. Rimbert, A. Jardy, B. Oesterlé, S. Hans, and J.P. Bellot, "3D Modelling of the Aggregation of Oxide Inclusions in a Liquid Steel Ladle : Two Numerical Approaches", *Advanced Engineering Materials*, vol. 13, Issue 7, pp. 543-549, 2011.

V. Deprédurand, A. Delconte, and F. Lemoine, "Combined PDA and LIF applied to size-temperature correlations measurements in a heated spray", *Experiments in Fluids*, vol. 50 (3), pp. 561-571, 2011.

R. Devienne and J.R. Fontaine, "Experimental characterisation of a plume above rectangular thermal sources", *Building and Environment*, vol. 49 (1), pp. 17-24 2011.

I. Dozov, E. Paineau, P. Davidson, K. Antonova, C. Baravian, I. Bihannic, and L.J. Michot, "Electric-field-induced perfect anti-nematic order in isotropic aqueous suspensions of a natural beidellite clay", *Journal of Physical Chemistry B*, vol. 115 (24), pp. 7751-7765, 2011.

P. Dubs, M. Khalij, R. Benelmir, and A. Tazibt, "Study on the dynamical characteristics of a supersonic high pressure ratio underexpanded impinging ideal gas jet through numerical simulations", *Mechanics Research Communications*, vol. 38, Issue 3, pp. 267-273, 2011.

S. Dufour, G. Vinsard, and J.P. Brancher, "Lateral forces on a magnet falling in a conducting pipe", *International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, vol.31, 6, pp.1625-1636, 2011.



P. Dunand, G. Castanet, and F. Lemoine, "A two-color planar LIF technique to map the temperature of droplets impinging onto a heated wall", *Experiments in Fluids*, vol. 52, 4, pp. 843-856, 2011.

M. Gradeck, A. Kouachi, J.L. Borean, P. Gardin, and M. Lebouché, "Heat transfer from a hot moving cylinder impinged by a planar subcooled water jet", *International Journal of Heat and Mass Transfer*, vol. 54 (25-26), pp. 5527-5539, 2011.

M. Gradeck, A. Ouattara, D. Maillet, P. Gardin, and M. Lebouché, "Heat transfer associated to a hot surface quenched by a jet of oil-in-water emulsion", *Experimental Thermal and Fluid Science*, vol. 35, Issue 5, pp. 841-847, 2011.

M. Gradeck, A. Ouattara, B. Rémy, and D. Maillet, "Solution of an inverse problem in the Hankel space - Infrared thermography applied to estimation of a transient cooling flux", *Experimental Thermal and Fluid Science*, vol. 36, pp. 56-64, 2011.

R. El Khatib, B. Lartiges, C. Mustin, S. Skali-Lami, "Hydrodynamic control of wastewater biofilm organization", *La Houille Blanche*, Issue 5, pp. 29-33, 2011.

A. Labergue, A. Delconte, G. Castanet, and F. Lemoine, "Study of the droplet size effect coupled with the laser light scattering in sprays for two-color LIF Thermometry measurements", *Experiments in Fluids*, vol. 52,4, pp. 1121-1132, 2011.

A. Lamorlette, A. Collin, and O. Séro-Guillaume, "Characterization of heat transfer between phases inside a porous medium as applied to vegetal set representations", *International Journal of Heat and Mass Transfer*, vol. 55, 4, pp. 607-617, 2011.

C. Métivier and C. Nouar, "Stability of a Rayleigh–Bénard Poiseuille flow for yield stress fluids : Comparison between Bingham and regularized models", *International Journal of Non-Linear Mechanics*, vol. 46 (9), pp. 1205-1212, 2011.

M. Mohaupt, J.P. Minier, and A. Tanière, "A new approach for the detection of particle interactions for large-inertia and colloidal particles in a turbulent flow", *International Journal of Multiphase Flow*, vol. 37 (7), pp. 746-755, 2011.

E. Paineau, I. Bihannic, C. Baravian, A.M. Philippe, P. Davidson, P. Levitz, S.S. Funari, C. Rochas, and L.J. Michot, "Aqueous Suspensions of Natural Swelling Clay Minerals, 1. Structure and Electrostatic Interactions", *Langmuir*, vol. 27 (9), pp. 5562–5573, 2011.

E. Paineau, L.J. Michot, I. Bihannic, and C. Baravian, "Aqueous Suspensions of Natural Swelling Clay Minerals, 2. Rheological Characterization", *Langmuir*, vol. 27 (12), pp. 7806–7819, 2011.

A.M. Philippe, C. Baravian, M. Imperor-Clerc, J. De Silva, E. Paineau, I. Bihannic, P. Davidson, F. Meneau, P. Levitz, and L.J. Michot, "Rheo-SAXS investigation of shear-thinning behaviour of very anisometric repulsive disc-like clay suspensions ", *Journal of Physics : Condensed Matter*, vol. 23 (19) n°194112, 2011.

E. Plaut, Y. Lebranchu, M. Jenny, and E. Serre, "Structure and stability of annular sheared channel flows : effects of confinement, curvature and inertial forces-waves", *European Physical Journal B*, vol. 79, pp. 35-46, 2011.

N. Rimbart and G. Castanet, "Crossover between Rayleigh-Taylor Instability and turbulent cascading atomization mechanism in the bag-breakup regime", *Physical Review E*, vol. 84 (1) art n° 016318, 2011.

S. Rudz, K. Chetehouna, and O. Séro-Guillaume, "Metrological Tool for the Characterization of Flame Fronts Based on the Coupling of a Heat Flux Approach with Image Processing Data", *Fire Technology*, vol. 47, n°2, pp. 491-505, 2011.

E. Saadjiian, A.J.S. Rodrigo, and J.P.B. Mota, "Stokes Flow Heat Transfer In An Annular, Rotating Heat Exchanger", *Applied Thermal Engineering*, vol. 31, n° 8-9, pp. 1499-1507, 2011.

S.S. Sazhin, A.E. Elwardany, P.A. Krutiskii, V. Deprédurand, G. Castanet, F. Lemoine, E.M. Sazhina, and M.R. Heikal, "Multi-Component droplet heating and evaporation : numerical simulation versus experimental data", *International Journal of Thermal Sciences*, vol. 50, Issue 7, pp. 1164-1180, 2011.

R. Sharma, M.K. Chandel, A. Delebarre, and B. Alappat, "200MW Chemical Looping Combustion based thermal power plant for clean power generation", *International Journal of Energy Research*, vol. 37, 1, pp. 49-58, 2011.

## **Année 2010**

O.A. Alvarez, L. Choplin, V. Sadtler, P. Marchal, M.-J. Stébé, J. Mougel, and C. Baravian, "Influence of Semibatch Emulsification Process Conditions on The physical Characteristics of Highly Concentrated Water-in-Oil Emulsions", *Industrial & Engineering Chemistry Research*, vol. 49, pp. 6042-6046, 2010.

C. Baravian, L.J. Michot, E. Paineau, P. Davidson, M. Impéror-Clerc, E. Belamie, and P. Levitz, "An effective geometrical approach to the structure of colloidal suspensions of very anisometric particles ", *Europhysics Letters (EPL)*, vol. 90 (3) n° 36005, 2010.

G. Benmouffok-Benbelkacem, F. Caton, C. Baravian, and S. Skali-Lami, "Non-linear viscoelasticity and temporal behavior of typical yield stress fluids : Carbopol, Xanthan and Ketchup", *Rheologica Acta*, vol. 49, n° 3, pp. 305-314, 2010.

I. Bihannic, C. Baravian, J.F.L. Duval, E. Paineau, F. Meneau, P. Levitz, J.P. De Silva, (...), L.J. Michot, "Orientational order of colloidal disk-shaped particles under shear-flow conditions: A rheological-small-angle X-ray scattering study", *Journal of Physical Chemistry B*, vol. 114 (49), pp. 16347-16355, 2010.

Y. Cheny and O. Botella, "The LS-STAG Method : A new Immersed Boundary/Level-Set Method for the Computation of Incompressible Viscous Flows in Complex Moving Geometries with Good Conservation Properties", *Journal of Computational Physics*, vol. 229, pp. 1043-1076, 2010.

L. Claudotte, N. Rimbart, P. Gardin, M. Simonnet, J. Lehmann, and B. Oesterlé, "Behavior of oxide inclusions in liquid steel : Multi-QMOM simulation", *Steel Research International* vol. 81, Issue 8, pp. 630-636, 2010.

L. Claudotte, N. Rimbart, M. Simonnet, P. Gardin, J. Lehmann, and B. Oesterlé, "A multi-QMOM framework to describe multi-component agglomerates in liquid steel", *AIChE Journal*, vol. 56, Issue 9, pp. 2347-2355, 2010.

A. Collin, S. Lechene, P. Boulet, and G. Parent, "Water mist and radiation interactions: application to a water curtain used as a radiative shield", *Numerical Heat Transfer, Part A - Applications*, vol. 57, Issue 8, pp. 537-553, 2010.

V. Deprédurand, G. Castanet, and F. Lemoine, "Heat and mass transfer in evaporating droplets in interaction : Influence of the fuel", *International Journal of Heat and Mass Transfer*, vol. 53, Issues 17-18, pp. 3495-3502 2010.

V. Deprédurand, A. Delconte, and F. Lemoine, "Combined PDA and LIF applied to size-temperature correlations measurements in a heated spray", *Experiments in Fluids*, vol. 50 (3), pp. 561-571, 2010.

J. Ducourneau, L. Bos, V. Planeau, A. Faiz, S. Skali-Lami, and A. Nejade, "Prediction of the acoustic pressure above periodically uneven facings in industrial workplaces", *Journal of Sound and Vibration*, vol. 329, Issue 11, pp. 2276-2290, 2010.

A. Esmael, C. Nouar, A. Lefèvre, and N. Kabouya, "Transitional flow of a non-Newtonian fluid in a pipe : Experimental evidence of weak turbulence induced by shear-thinning behavior", *Physics of Fluids*, vol. 22, Issue 10, 2010.

A. Faiz, L. Petit, D. Guyomar, and J. Ducourneau, "A new adaptive resonance frequency of piezoelectric components used for vibration damping ", *Journal of the Acoustical Society of America* vol. 127 (4), pp. EL134-EL139, 2010.

G. Frappier, B.S. Lartiges, and S. Skali-Lami, "Floc Cohesive Force in Reversible Aggregation : A Couette Laminar Flow Investigation", *Langmuir*, vol. 26, n° 13, pp. 10475–10488, 2010.

S. Kiesgen de Richter, V. Yu Zaitsev, P. Richard, R. Delannay, G. Le Caër, and V. Tournat, "Experimental evidence of ageing and slow restoration of the weak-contact configuration in tilted 3D granular packings", *Journal of Statistical Mechanics - Theory and Experiment*, p. 11023, 2010.

T. Kristyadi, V. Deprédurand, G. Castanet, F. Lemoine, S.S. Sazhin, A. Elwardany, E.M.Szahina, and M.R. Heikal, "Monodisperse monocomponent fuel droplet heating and evaporation", *Fuel*, vol. 89, Issue 12, pp. 3995-4001, 2010.

A. Labergue, V. Deprédurand, A. Delconte, G. Castanet, and F. Lemoine, "New insight into two-color LIF thermometry applied to temperature measurements of droplets", *Experiments in Fluids*, vol. 49, Issue 2, pp. 547-556, 2010.

P.F. Lisboa, J. Fernandes, P.C. Simoes, J.P.B. Mota, and E. Saadjiian, "Computational-fluid-dynamics study of a Kenics static mixer as a heat exchanger for supercritical carbon dioxide", *Journal of supercritical fluids*, vol. 55, Issue 1, pp. 107-115, 2010.

A. Mehel, A. Tanière, B. Oesterlé, and J.R. Fontaine, "The influence of an anisotropic Langevin dispersion model on the prediction of micro-and nanoparticle deposition in wall-bounded turbulent flows", *Journal of Aerosol Science*, vol. 41, n°8, pp. 729-744, 2010.

C. Métivier, C. Nouar, and J.P. Brancher, "Weakly nonlinear dynamics of thermoconvective instability involving viscoplastic fluids", *Journal of Fluid Mechanics*, vol. 660, pp. 316-353, 2010.

L.J. Michot, E. Paineau, I. Bihannic, S. Maddi, J.F.L. Duval, C. Baravian, P. Davidson, and P. Levitz, "Phase transitions in aqueous suspensions of size selected Nontronite NAu1. A structural and rheological study", *Clay Minerals*, 2010.

M. Moyers-Gonzalez, I. A. Frigaard, and C. Nouar, "Stable two-layer flows at all Re; viscoplastic lubrication of shear-thinning and viscoelastic fluids", *Journal of Non-Newtonian Fluid Mechanics*, vol. 165, pp. 1578-1587, 2010.

C. Nouar and A. Bottaro, "Stability of the flow of a Bingham fluid in a channel : eigenvalue sensitivity, minimal defects and scaling laws of transition", *Journal of Fluid Mechanics*, vol. 642, pp. 349-372, 2010.

E. Paruta-Tuarez, H. Fersadou, V. Sadtler, P. Marchal, L. Choplin, C. Baravian, and C. Castel, "Highly concentrated emulsions : Average drop size determination by analysis of incoherent polarized steady light transport", *Journal of Colloid and Interface Science*, vol. 346 (1), pp. 136-142, 2010.

N. Rimbart, "Simple model for turbulence intermittencies based on self-avoiding random vortex stretching", *Physical Review E* vol. 81, 056315, 2010.

N. Roland, E. Plaut, and C. Nouar, "Petrov-Galerkin computation of nonlinear waves in pipe flow of shear-thinning fluids : First theoretical evidences for a delayed transition", *Computer & Fluids*, vol. 39, n°9, pp. 1733-1743, 2010.

J.L. Rossi, K. Chetehouna, A. Collin, B. Moretti, and J.H. Balbi, "Simplified flame models and prediction of the thermal radiation emitted by a flame front in an outdoor fire", *Combustion Science and Technology*, vol. 182, n° 10-12, pp. 1457-1477, 2010.

S.S. Sazhin, A. Elwardany, P.A. Krutitskii, G. Castanet, F. Lemoine, E.M. Sazhina, and M.R. Heikal, "A simplified model for bi-component droplet heating and evaporation", *International Journal of Heat and Mass Transfer*, vol. 53, Issue 21-22, pp. 4495-4505, 2010.

A. Tanière, B. Arcen, B. Oesterlé, and J. Pozorski, "Study on Langevin model parameters of velocity in turbulent shear flows", *Physics of Fluids*, vol. 22, 115101, 2010.

## **Année 2009**

Z. Acem, A. Lamorlette, A. Collin, and P. Boulet, "Analytical determination and numerical computation of extinction coefficients for vegetation with given leaf distribution", *International Journal of Thermal Sciences*, vol. 48, issue 8, pp. 1501-1509, 2009.

B. Arcen and A. Tanière, "Simulation of a particle-laden turbulent channel flow using an improved stochastic Lagrangian model", *Physics of Fluids*, vol. 21, 043303, 2009.

E. Belut, F. Bonthoux, B. Oesterlé, J.R. Fontaine, and A. Kheiri, "Investigation of the particle-laden airflow generated by a pseudo-machining operation", *International Journal of Multiphase Flow*, vol. 35, pp. 710-724, 2009.

M.K. Chandel, A. Hoteit, and A. Delebarre, "Experimental investigation of some metal oxides for chemical looping combustion in a fluidized bed reactor", *Fuel*, vol. 88 (5), pp. 898-908, 2009.

Y. Cheny and O. Botella, "An immersed boundary/level-set method for incompressible viscous flows in complex geometries with good conservation properties", *European Journal of Computational Mechanics*, vol. 18, pp. 561-587, 2009.

R. Devienne, J.R. Fontaine, and J. Kicka, "Experimental Characterization of a plume of passive contaminant above a thermal source", *Annals of Occupational Hygiene*, vol. 53, pp. 739-748, 2009.

J. Ducourneau, V. Planeau, J. Chatillon, and A. Nejade, "Measurement of sound absorption coefficients of flat surfaces in a workshop", *Applied Acoustics*, vol. 70, pp. 710-721, 2009.

J. Ducourneau, V. Planeau, and A. Nejade, "Design of a multipolar weighting for acoustic antennae", *Applied Acoustics*, vol. 70, pp. 484-492, 2009.

J. Fernandes, P. Lisboa, J. Simoes, J.P.B. Mota, and E. Saadjiian, "Application of CDF in the study of supercritical fluid extraction with structural packing : wet pressure drop calculations", *Journal of Supercritical Fluids*, vol. 50, pp. 61-68, 2009.

M. Gradeck, A. Kouachi, F. Volle, D. Maillet, M. Lebouché, and J.L. Boréan, "Boiling curves in relation to quenching of a high temperature moving surface with liquid jet impingement", *International Journal of Heat and Mass Transfer*, vol. 52, Issues 5-6, pp. 1094-1104, 2009.

M. Gradeck, D. Maillet, F. Lelong, N. Seiler, and G. Repetto, "Estimation du transfert de chaleur gouttes/paroi en situation d'APRP pour un REP", *La Houille Blanche*, vol. 4, pp. 52-57, 2009.

A. Hoteit, M.K. Chandel, S. Durecu, and A. Delebarre, "Biogas combustion in a chemical looping fluidized bed reactor", *International Journal of Greenhouse Gas Control*, vol. 3 (5), pp. 561-567, 2009.

M. Jenny and M. Souhar, "Numerical simulation of a film coating flow at low capillary numbers", *Computers & Fluids*, vol. 38 (9), pp. 1823-1832, 2009.

A. Lamorlette, A. Collin, P. Boulet, and O. Séro-Guillaume, "Numerical evaluation of radiation extinction coefficient using fractal geometry for vegetation modelling", *Numerical Heat Transfer Part A*, vol. 56, pp. 360-377, 2009.

T. Liénart, G. Castanet, and F. Lemoine, "Heating of droplets impacting onto a heated wall", *International Journal of Heat and Mass Transfer*, vol. 52, pp. 670-679, 2009.

S. Madani, O. Caballina, and M. Souhar, "Unsteady dynamics of Taylor bubble rising in vertical oscillating tubes", *International Journal of Multiphase Flow*, vol. 35, pp. 363-375, 2009.

C. Métivier, I. Frigaard, and C. Nouar, "Nonlinear stability of the Bingham Rayleigh-Benard Poiseuille flow", *Journal of Non-Newtonian Fluid Mechanics*, vol. 158, pp. 127-131, 2009.

C. Métivier and C. Nouar, "Linear stability of the Rayleigh Bénard Poiseuille flow for thermodependent viscoplastic fluids", *Journal of Non Newtonian Fluid Mechanics*, vol. 163, pp. 1-8, 2009.

L.J. Michot, C. Baravian, I. Bihannic, S. Maddi, C. Moyne, J.F.L. Duval, P. Levitz, and P. Davidson, "Sol-Gel and Isotropic/Nematic Transitions in Aqueous Suspensions of Natural Nontronite Clay. Influence of Particle Anisotropy. 2. Gel Structure and Mechanical Properties", *Langmuir*, vol. 25(1), pp. 127-139, 2009.

N. Moumini and C. Baravian, "Incoherent light transport in anisotropic media : Influence of form factor for oriented ellipsoids", *Journal of Quantitative Spectroscopy & Radiative Transfer*, vol. 110, pp. 1545-1565, 2009.

C. Nouar and I. Frigaard, "Stability of plane Couette-Poiseuille flow of shear-thinning fluid", *Physics of Fluids*, vol. 21, pp. 064104.1-064104.13, 2009.

B. Oesterlé, "On heavy particle dispersion in turbulent shear flows : 3-D analysis of the effects of crossing trajectories", *Boundary-Layer Meteorology*, vol. 130, pp. 71-95, 2009.

E. Paineau, K. Antonova, C. Baravian, I. Bihannic, P. Davidson, I. Dozov, M. Impéror-Clerc, P. Levitz, A. Madsen, F. Meneau, and L.J. Michot, "Liquid-Crystalline Nematic Phase in Aqueous Suspensions of a Disk-Shaped Natural Beidellite Clay", *Journal of Physical Chemistry B*, vol. 113, pp. 15858-15869, 2009.

T. Paris, S. Skali-Lami, and J.C. Block, "Probing young drinking water biofilms with hard and soft particles", *Water Research* vol. 43, Issue 1, pp. 117-126, 2009.

S. Rudz, K. Chetehouna, O. Séro-Guillaume, E. Pastor, and E. Planas, "Comparison of two methods for estimating fire positions and the rate of spread of linear flame fronts, Measurement Science and Technology ", *Measurement Science & Technology* vol. 20, n° 11, p. 115501, 2009.

G. Vinsard, S. Dufour, and J.P. Brancher, "Rotating Motion in salt water with Laplace forces", *IEEE Transactions on Magnetics*, vol. 45 N° 3, pp. 1562-1565, 2009.

F. Volle, D. Maillet, M. Gradeck, A. Kouachi, and M. Lebouché, "Practical application of inverse heat conduction for wall condition estimation on a rotating cylinder", *International Journal of Heat and Mass Transfer*, vol. 52, Issues 1-2, pp. 210-221, 2009.

## Année 2008

B. Arcen and A. Tanière, "On the use of Csanady's formulae in a turbulent gas-solid channel flow", *International Journal of Multiphase Flow*, vol. 34, pp. 547-558, 2008.

B. Arcen, A. Tanière, and L.I. Zaichik, "Assessment of a statistical model for the transport of discrete particles in a turbulent channel flow", *International Journal of Multiphase Flow*, vol. 34, pp. 419-426, 2008.

F. Caton and C. Baravian, "Plastic behavior of some yield stress fluids : from creep to long time yield", *Rheologica Acta*, vol. 47 (5-6), pp. 601-607, 2008.

K. Chetehouna, O. Séro-Guillaume, I. Sochet, and A. Degiovanni, "On the experimental determination of flame front positions and of propagation parameters for a fire", *International Journal of Thermal Sciences*, vol. 47, pp. 1148-1157, 2008.

A. Collin, P. Boulet, G. Parent, R.M. Vetrano, and J.M. Buchlin, "Exploration of a single spray : experimental and numerical study", *International Journal of Thermal Sciences*, vol. 47, Issue 4, pp. 399-407, 2008.

G. Delaplace, R.K. Thakur, L. Bouvier, C. Leprêtre, C. Ilnyckyj, C. André and C. Nouar, "Influence of Rheological Behavior of Purely Viscous Fluids on Analytical Residence Time Distribution in Straight Tubes", *Chemical Engineering Technology*, vol. 31, Issue 2, pp. 1-7, 2008.

V. Deprédurand, P. Miron, A. Labergue, M. Wolff, and F. Lemoine, "A temperature sensitive tracer suitable for two colour laser induced fluorescence applied to evaporating droplet temperature measurement", *Measurement Science & Technology*, vol. 19, 2008.

J. Fernandes, J. Simoes, J.P.B. Mota, and E. Saadjan, "Application of CDF in the study of supercritical fluid extraction with structural packing : dry pressure drop calculations", *Journal of Supercritical Fluids*, vol. 47, pp. 17-24, 2008.

M. Guingo and J.P. Minier, "A stochastic model of coherent structures for particle deposition in turbulent flows", *Physics of Fluids*, vol. 20, 053303, 2008.

M. Guingo and J.P. Minier, "A new model for the simulation of particle resuspension by turbulent flows based on a stochastic description of wall roughness and adhesion forces", *Journal of Aerosol Science*, vol. 39, pp. 957-973, 2008.

M. Mahfoud, S. Benhadid, and M. Lebouché, "Study of the behaviour of non-Newtonian fluid in a duct with abrupt contraction", *Comptes Rendus de l'Académie des Sciences - Mécanique* vol. 336, pp. 616-621, 2008.

C. Maqua, G. Castanet, F. Grisch, F. Lemoine, T. Kristyadi, and S. Sazhin, "Monodisperse droplets heating and evaporation : experimental study and modelling", *International Journal of Heat and Mass Transfer*, vol. 51, pp. 3932-3945, 2008.

C. Maqua, G. Castanet, and F. Lemoine, "Bicomponent droplets evaporation : Temperature measurements and modelling", *Fuel*, vol. 87, pp. 2932-2942, 2008.

C. Marchioli, A. Soldati, J.G.M. Kuerten, B. Arcen, A. Tanière, G. Goldensohn, K.D. Squires, and L.M. Portela, "Statistics of particle dispersion in Direct Numerical Simulations of wall-bounded turbulence : results of an international collaborative benchmark test", *International Journal of Multiphase Flow*, vol. 34, pp. 879-893, 2008.

C. Métivier and C. Nouar, "On linear stability of Rayleigh-Benard Poiseuille flow of viscoplastic fluids", *Physics of Fluids*, vol. 20, 2008.

L.J. Michot, I. Bihannic, S. Maddi, C. Baravian, P. Levitz, and P. Davidson, "Sol-Gel and Isotropic/nematic transitions in aqueous suspensions of natural nontronite clay. Influence of particle anisotropy", *Langmuir*, vol. 24 (7), pp. 3127-3139, 2008.

J.P.B. Mota, A.J.S. Rodrigo, and E. Saadjan, "Heat-transfer enhancement by chaotic advection in the eccentric helical annular flow", *Journal Of Heat Transfer - Transactions Of The ASME*, vol. 130, Article 024501, 2008.

C. Nouar and A. Esmael, "Transitional flow of a yield-stress fluid in a pipe : Evidence of a robust coherent structure", *Physical Review E*, vol. 77, 057302, 2008.

C. Nouar and P. Riha, "Probability model of solid to liquid-like transition of a fluid suspension after a shear flow onset", *International Journal of Multiphase Flow*, vol. 34, pp. 477-483, 2008.

J. Peixinho, C. Desaubry, and M. Lebouché, "Heat Transfer of a non-Newtonian fluid (carbopol aqueous solution) in transitional pipe flow", *International Journal of Heat and Mass Transfer*, vol. 51, pp. 198-209, 2008.

E. Plaut, Y. Lebranchu, R. Simitev, and F.H. Busse, "Reynolds stresses and mean fields generated by pure waves : applications to shear flows and convection in a rotating shell", *Journal of Fluid Mechanics*, vol. 602, pp. 303-326, 2008.

O. Séro-Guillaume, M. Bergmann, and S. Ramezani, "Note on the determination of the ignition point in forest fires propagation using a control algorithm", *Communications in Numerical Methods in Engineering*, vol. 24, pp. 879-896, 2008.

O. Séro-Guillaume, S. Ramezani, J. Margerit, and D. Calogine, "On large Scale Forest Fires Propagation Models", *International Journal of Thermal Sciences*, vol. 47, pp. 680-694, 2008.

F. Volle, M. Gradeck, D. Maillet, A. Kouachi, and M. Lebouché, "Inverse heat conduction applied to the measurement of heat fluxes on a rotating cylinder : Comparison between an analytical and a numerical technique", *Journal of Heat Transfer-Transactions of the ASME*, vol. 130 (8), pp. 081302.1-081302.8, 2008.

F. Volle, D. Maillet, M. Gradeck, and M. Lebouché, "Semi-analytical inverse heat conduction on a rotating cylinder with Laplace and Fourier transforms", *Inverse Problem in Science and Engineering*, vol. 16 (5), pp. 655-674, 2008.

## Année 2007

A. Abidate, A. Aniss, O. Caballina, and M. Souhar, "Effects of circular rigid boundaries and Coriolis forces on the interfacial instability in a rotating annular Hele-Shaw cell", *Physical Review E*, vol. 75, 046307, 2007.

J.R. Angilella, "Asymptotic analysis of chaotic particle sedimentation and trapping in the vicinity of a vertical upward streamline", *Physics of Fluids*, vol. 19 (7), 073302, 2007.

C. Baravian, F. Caton, J. Dillet, G. Toussaint, and P. Flaud, "Incoherent light transport in an anisotropic random medium : a probe of human erythrocyte aggregation and deformation", *Physical Review E*, vol. 76, 011409, 2007.

C. Baravian, J. Dillet, and J.P. Decruppe, "Birefringence determination in opaque media", *Physical Review E*, vol. 75, 032501, 2007.

C. Baravian, J. Mougel, A. Durand, and F. Caton, "Characterization of dynamical emulsification process in concentrated conditions", *AIChE*, vol. 3, pp. 1994-2000, 2007.

L. Benkheira, B. Baudouy, and M. Souhar, "Heat transfer characteristics of two-phases He I (4,2 K) thermosiphon flow", *International Journal of Heat and Mass Transfer*, vol. 50, pp. 3534-3544, 2007.

A. Bouzinaoui, R. Devienne, and J.R. Fontaine, "An experimental study of the thermal plume developed above a finite cylindrical heat source to validate the point source model", *Experimental Thermal and Fluid Science*, vol. 31, pp. 649-659, 2007.

D. Calogine, N. Rimbert, and O. Sero-Guillaume, "Modelling of the deposition of retardant in a tree crown during fire fighting", *Environmental Modelling and Software*, vol. 22, pp. 1654-1666, 2007.

F. Candelier and M. Souhar, "Time-dependent lift force acting on a particle moving arbitrarily in a pure shear flow, at small Reynolds number", *Physical Review E*, vol. 76, Article 067301, 2007.

G. Castanet and F. Lemoine, "Heat transfer within combusting droplets", *Proceedings of the Combustion Institute*, vol. 31, pp. 2141-2148, 2007.

G. Castanet, C. Magua, M. Orain, F. Grisch, and F. Lemoine, "Investigation of heat and mass transfer between the two phases of an evaporating droplet stream using laser-induced fluorescence techniques : comparison with modeling", *International Journal of Heat and Mass Transfer*, vol. 50, pp. 3670-3680, 2007.

F. Caton, C. Baravian and G. Benbelkacem, "Unsteady rheometry : can we characterize weak gels with a controlled stress rheometer ?", *Rheologica Acta*, vol. 46, pp. 577-581, 2007.

F. Caton, C. Baravian and J. Mougel, "The influence of the microscopic characteristics of a random medium on incoherent light transport", *Optics Express* vol. 15, pp. 2847-2872, 2007.

S. Dufour and G. Vinsard, "Search algorithm for free boundary of thin conducting domains", *IEEE Transactions on Magnetics*, vol. 43, pp. 1417-1420, 2007.

S. Dufour and G. Vinsard, "Iterative computation of induced currents in a three-dimensional conducting domain", *European Physical Journal-Applied Physics*, vol. 39, pp. 175-178, 2007.



C. Maqua, V. Deprédurand, G. Castanet, M. Wolff and F. Lemoine, "Composition measurement of bicomponent droplets using laser-induced fluorescence of acetone", *Experiments in Fluids*, vol. 43, pp. 979-992, 2007.

J.P.B. Mota, A.J.S. Rodrigo, and E. Saadjan, "Optimization of heat-transfer rate into time-periodic two-dimensional Stokes flows", *International Journal For Numerical Methods in Fluids*, vol. 53, pp. 915-931, 2007.

V.T. Nguyen and M. Lebouché, "Pressure drop of thermodependant non Newtonian fluids flow between two parallel plates", *Comptes Rendus de l'Académie des Sciences - Mécanique*, vol. 335, pp. 20-24, 2007.

C. Nouar, A. Bottaro, and J.P. Brancher, "Delaying transition to turbulence : revisiting the stability of shear thinning fluids", *Journal of Fluid Mechanics*, vol. 592, pp. 177-194, 2007.

C. Nouar, N. Kabouya, J. Dusek, and M. Mamou, "Modal and non-modal linear stability of the plane-Bingham-Poiseuille flow", *Journal of Fluid Mechanics*, vol. 577, pp. 211-239, 2007.

T. Paris, S. Skali-Lami, and J.C. Block, "Effect of wall shear rate on biofilm deposition and grazing in drinking water flow chambers", *Biotechnology and Bioengineering*, vol. 97, Issue 6, pp. 1550-1561, 2007.

A. Parker, C. Baravian, F. Caton, J. Dillet, and J. Mougel, "Fast optical sizing without dilution", *Food Hydrocolloids*, vol. 21, pp. 831-837, 2007.

G. Vinsard and S. Dufour, "A dynamical model of a deformable circuit", *European Physical Journal Applied Physics*, vol. 39, pp. 185-189, 2007.

M. Wolff, A. Delconte, F. Schmidt, P. Gucher, and F. Lemoine, "High pressure Diesel spray temperature measurements using two-colour laser-induced fluorescence", *Measurement Science & Technology*, vol. 18, pp. 697-706, 2007.

## Autres revues

### Année 2014

B. F. Z. Fagla, M. Gradeck, G. Degan, A. Vianou and M. Lebouché, Etude thermique expérimentale des suspensions non newtoniennes en écoulement dans une conduite horizontale à géométrie variable, *Afrique SCIENCE*, vol.10 (4), 1-22, 2014.

### Année 2013

S. Devynck, S. Denis, J.-P. Bellot, G. Maigrat, M. Varlez, T. Benard and M. Gradeck, Influence of the Impact Angle and the Gravity Direction on Heat Transfer during the Cooling of a Cylinder by a Free Planar Subcooled Impinging Jet, *Key Engineering Materials*, vol.554-557, 2013.

Faiz, J. Ducourneau, A. Khanfir and J. Chatillon, Mesure du coefficient de diffusion d'objets encombrants présents dans les locaux industriels, *Acoustique et Technique*, vol.69, 2013.

### Année 2012

B. Arcen, A. Taniere, and M. Khalij, 'Temperature and Velocity Statistics in a Particle Laden Turbulent Channel Flow', *ICHMT Digital Library Online*, 2012.

Y. Billaud, N. Zekri, A. Kaiss, M. Drissi, Y. Pizzo, Z. Acem, A. Collin, P-A. Santoni, F. Bosseur, P. Boulet, and B. Porterie, 'A Hybrid Small-World network/semi-physical model for predicting wildfire spread in heterogeneous landscapes', *Journal of Physics : Conference Series*, 395 (2012), 012008.

S. Devynck, M. Gradeck, S. Denis, J.P. Bellot, M. Varlez, and T. Bernard, "Cooling of a Rotating Cylinder by a Subcooled Planar Jet – Influence of the Surface Velocity on Boiling Regime", *Key Engineering Materials*, 504-506 (2012), 1049-54.

S. Lechêne, Z. Acem, G. Parent, A. Collin, and P. Boulet, "Radiative shielding by water mist: comparisons between downward, upward and impacting injection of droplets", *Journal of Physics : Conference Series*, 369 (2012), 012027.

M. Lemus Perez, M. Rodriguez Susa, M. Pellerano, and A. Delebarre, 'Technico-Economical Evaluation of Co2 Transport in an Adsorbed Phase', *Low Carbon Economy*, 3 (2012), 21-33.

P. Mindykowski, Y. Pizzo, L. Rigollet, C. Lallemand, A. Kaiss, P. Boulet, and B. Porterie, 'Heat Transfer Components at the Surface of Burning Thick PMMA Slabs', *Journal of Physics : Conference Series*, 395 (2012), 012009.

G. Parent, Z. Acem, A. Collin, P. Boulet, Y. Pizzo, P. Mindykowski, A. Kaiss, and B. Porterie, 'Radiative Flux Emitted BY a Burning Pmma Slab', *Journal of Physics : Conference Series*, 395 (2012), 012153.

R. Sharma, A. Delebarre, and B. Alappat, 'Solid Waste Management for Carbon Credits', *Journal of the Institution of Public Health Engineers*, 13 (2) (2012), 9-17.

## **Année 2011**

S. Benattalah, F. Aloui, and M. Souhar, "Experimental Analysis on the Counter-Current Dumitrescu-Taylor Bubble Flow in a Smooth Vertical Conduct of Small Diameter", *Journal of Applied Fluid Mechanics*, vol. 4 (4), pp. 1-14, 2011.

P. Boulet, G. Parent, Z. Acem, A. Kaiss, Y. Billaud, B. Porterie, Y. Pizzo, and C. Picard, "Experimental Investigation of Radiation Emitted by Optically Thin to Optically Thick Wildland Flames", *Journal of Combustion*, vol. 2011, Article ID 137437, p. 8, 2011.

J. Ducourneau, A. Faiz, and J. Chatillon, "Nouvelle méthode de mesure du coefficient de diffusion acoustique des parois à relief dans les locaux industriels", *Acoustique & Techniques*, vol. 65, pp. 13-18, 2011.

## **Année 2010**

J.P. De Sylva, D. Petermann, B. Kasmil, M. Impéror-Clerc, P. Davidson, B. Pansu, F. Meneau, J. Perez, E. Paineau, I. Bihannic, L. J. Michot, and C. Baravian, "RheoSAXS studies of anisotropic complex fluids under shear", *Journal of Physics : conferences series*, vol. 247, n°012052, 2010.

A. Tanière, B. Arcen, and B. Oesterlé, "Investigation of the Langevin model parameters in non-homogeneous turbulent shear flows", *ERCOFTAC Bulletin*, vol. 82, pp. 35-39, 2010.

## **Année 2009**

M. Pellerano, P. Pre, M. Kacem and A. Delebarre, "CO2 capture by adsorption on activated carbons using modulation", *Energy Procedia*, vol. 1, pp. 647-653, 2009.

## **Année 2007**

M. Bergmann and L. Cordier, "Optimal control of the circular cylinder wake in the laminar regime by POD reduced-order models and trust-region method", *Mécanique & Industries*, vol. 8, pp. 111-118, 2007.

## Livres ou chapitres d'ouvrages

A. Aider, S. Skali-Lami, J. P. Brancher and A. Chahine, Pattern Formation in the Taylor-Dean Flow *in Particle and Continuum Aspects of Mesomechanics*, ISTE, 749-759, 2013

A. Bottaro and J.P. Brancher, Editors of the special issue "Biomimetic Flow control", *Comptes rendus Mécanique*, 2011.

L. Choplin, C. Baravian, P. Marchal, and D. Langevin, "Rhéologie et produits formulés complexes", *Techniques de l'Ingénieur*, 2010.

K. Chetehouna, O. Séro-Guillaume, and D. Bernardin, "Detection of the positions and computing the rate of spread of fire fronts using a radiative model and inverse method", *Forest Fires: Detection, Suppression and Prevention*. NOVA publisher, Ed. Eduards Gomez and Kristina Alvarez, 2009.

E. Saadjan, "Les bases de la mécanique des fluides et des transferts de chaleur et de masse pour l'ingénieur", *Editions Sapientia*, 2009.

O. Séro-Guillaume, D. Calogine, A. Collin, and A. Lamorlette, "On Vegetation Modelling For Forest Fires Combustion Models", *Forest Fires: Detection, Suppression and Prevention* NOVA Publisher, Ed. Eduards Gomez and Kristina Alvarez, 2009.

## Brevet

C. Baravian, F. Caton, J. Dillet, "Procédé de caractérisation de l'anisotropie d'un milieu diffusant et dispositif pour la mise en œuvre d'un tel procédé, Extension Europe, Etats-Unis, Japon", *N° de dépôt de l'extension FR2007000893*, Année de dépôt de l'extension : 2007.

## COMMUNICATIONS

### Internationales avec actes

1. O. Botella, F. Nikfarjam, M. Stoica and Y. Cheny, Entry flow computations of shear-thinning and viscoelastic liquids with the LS-STAG immersed boundary method, *Proceedings of the ICCFD8 conference*, Chengdu, 14 au 18 juillet 2014.
2. G. Castanet, O. Caballina, A. Labergue, M. Gradeck and F. Lemoine, Effect of the Vapor Flow on the Drop Spreading in the Leidenfrost Regime, *15th International Heat Transfer Conference*, Kyoto, 10-15 août 2014.
3. G. Castanet, O. Caballina and F. Lemoine, Effect of the vapor flow on the drop spreading in the Leidenfrost regime, *26th Annual Conference on Liquid Atomization and Spray Systems*, Bremen, septembre 2014.
4. S. Castrillon Escobar, R. Meignen, N. Rimbart and M. Gradeck, A Kelvin-Helmholtz model to describe primary fragmentation of liquid metal jets during fuel

- coolant interaction, *26th Annual Conference on Liquid Atomization and Spray Systems*, Bremen, septembre 2014.
5. F. Chata, A. Tanière, E. Belut and F.-X. Kellera, Numerical and experimental characterization of dust emission profiles for hand held wood working machines *3rd Workplace and Indoor Aerosols Conference*, Wroclaw, 14 au 15 mai 2014.
  6. F. Chata, A. Tanière, E. Belut and F.-X. Keller, Emission profiles interattraction for hand-held wood working machines, *The 8th international symposium on Modern Principles of air Monitoring and Biomonitoring*, Marseille, 15 au 19 juin 2014.
  7. Y. Cheny, F. Nikfarjam and O. Botella, Modelling of gas transport with binary adsorption in fractured coal seams, *Eighth International Conference on Computational Fluid Dynamics (ICCFD8)*, Chengdu, 14 au 18 juillet 2014.
  8. A.Hajjar, N. Rimbert, S. Castrillon Escobar, R. Meignen and M. Gradeck, Producing large molten metal droplets using a pneumatic drop-on-demand generator, *26th Annual Conference on Liquid Atomization and Spray Systems*, Bremen, septembre 2014.
  9. M. Jenny, S. N. Lopez Carranza and C. Nouar, Weakly nonlinear stability of streaks in pipe flow of sheara-thinning fluids, *EUROMECH EC565*, Cargèse, 6 au 9 mai 2014.
  10. A. Labergue, M. Gradeck and F. Lemoine, Comparative study of the cooling of a hot temperature surface using sprays and liquid jets, *International Heat Transfer Conference*, Kyoto, 10-15 août 2014.
  11. A. Labergue, T. Aiguier, O. Caballina, F. Lemoine and M. Gradeck, Comparative study of the cooling of a hot temperature surface using sprays or liquid jet, *15th International Heat Transfer Conference*, Kyoto, 10-15 août 2014.
  12. A. Labergue, M. Gradeck and F. Lemoine, Phase Doppler and infrared thermography measurements for the characterization of the cooling of high-temperatures surfaces using sprays, *17th International Symposium on Applications of Laser Techniques to Fluid Mechanics*, isbon, 07-10 juillet 2014.
  13. F. Lemoine, Challenges in measuring temperature and chemical composition in droplets and sprays, *17th International Symposium on Applications of Laser Techniques to Fluid Mechanics*, Lisbon, 07--10 juillet 2014.
  14. A. Marchand, N. Trévisan, A. Collin and P. Boulet, Experimental and numerical study of fire behaviour: effects of the width on the rate of spread, *ICFFR*, Coimbra, 14-21 novembre 2014.
  15. R. Ouchene, A. Chadil, P. Fede, M. Khalij, A. Tanière, S. Vincent, J.-L. Estivalezes and B. Arcen, Numerical simulation and modelling of the forces acting on single and multiple non-spherical particles, *ASME 2014 4th Joint US-European Fluids Engineering Division Summer Meeting and 11th International Conference on Nanochannels, Microchannels, and Minichannels*, Chicago, 3 au 7 août 2014.
  16. L. Perrin, G. Castanet and F. Lemoine, Characterization of the evaporation of interacting droplets using combined optical techniques, *17th International Symposium on Applications of Laser Techniques to Fluid Mechanics*, Lisbon, 07-10 juillet 2014.
  17. E. Plaut, N. Roland and C. Nouar, Influence of a shear-thinning rheology on nonlinear waves in pipe flow, *EUROMECH EC565*, Cargèse, 6 au 9 mai 2014.

18. N. Rimbart, A. Hajjar, S. Castrillon Escobar, R. Meignen and M. Gradeck, A New Look at the Droplet Deformation and Breakup Model, *26th Annual Conference on Liquid Atomization and Spray Systems*, Bremen, septembre 2014.
19. A. Tanière and B. Arcen, Stochastic models for solid particle dispersion in inhomogeneous turbulence, *10th International ERCOFTAC Symposium on Engineering Turbulence Modelling and Measurements*, Marbella, 17 au 19 septembre 2014.

### Nationales avec actes

1. A. Collin, A. Marchand, P. Boulet and Z. Acem, Méthode de suivi et d'analyse de fronts de flammes de végétation par caméras visibles : détermination de la vitesse de propagation et de la puissance dégagée par le front de flamme, *Congrès SFT 2014*, Lyon, 3-6 juin 2014.
2. A. Faiz, J. Ducourneau, A. Khanfir and Y. Chatillon, Nouveau dispositif de mesure du coefficient de diffusion acoustique de parois à relief verticales présentes dans les locaux industriels, *Congrès Français d'Acoustique*, Poitiers, 22-25 avril 2014.
3. A. Khanfir, J. Ducourneau, A. Faiz and Y. Chatillon, Détermination du champ de pression acoustique réfléchi au-dessus d'une paroi à relief aperiodique contenant des cavités non parallèles,, *Congrès Français d'Acoustique*, Poitiers, 22-25 avril 2014.
4. A. Kuljabekov, A. Pereira and M. Panfilov, Modèle de lessivage souterrain avec précipitation de substances chimiques, *12èmes journées d'études des milieux poreux*, Toulouse, 9 au 10 octobre 2014.
5. A. Labergue, M. Gradeck and F. Lemoine, Comparaison du refroidissement de surfaces à hautes températures en utilisant des sprays polydispersés ou jet liquide dans des conditions semi-industrielles, *Congrès SFT 2014*, Lyon, 3-6 juin 2014.
6. A. Labergue, M. Gradeck and F. Lemoine, Mesures couplées d'analyse phase Doppler et de thermographies infra-rouge pour l'étude du refroidissement de surfaces chaudes par sprays, *14ème Congrès Francophone sur les Techniques Laser pour la Mécanique des Fluides*, Marseille, 15-19 septembre 2014.
7. I. Panfilova, F. Khamitov, M. Rasoulzadeh, Y. Domain and M. Panfilov, Modelling of gas transport with binary adsorption in fractured coal seams, *JEMP 2014 (12èmes Journées d'Etudes des Milieux Poreux)* Toulouse, 9 au 10 octobre 2014.
8. L. Perrin, G. Castanet and F. Lemoine, Etude expérimentale de l'évaporation de gouttelettes de combustible à haute température par utilisation de techniques optiques combinées. Influence de la volatilité du combustible, *14ème Congrès Francophone sur les Techniques Laser pour la Mécanique des Fluides*, Marseille, 15-19 septembre 2014.

### Sans actes

1. Z. Acem, A. Collin, A. Kadi, A. Marchand and P. Boulet, Radiative behaviour of firefighters protective clothing, *11th International Symposium on Fire Safety Science*, Univ. of Canterbury, New Zealand, février 2014.
2. J. Bouchgl, S. Aniss, M. Souhar and A. Hifdi, Interfacial instability in a time-periodic rotating Hele-Shaw Cell, *MATEC Web of Conferences*,
3. S. Chaudemanche, M. Ponçot, S. André, P. Bourson and A. Dahoun, Caractérisation de l'endommagement volumique in situ par spectroscopie Raman, *25<sup>ème</sup> Colloque DEPOS (Déformation Plastique des Polymères Solides)*, Giens, 26-28 mars 2014.
4. A. Jenft, A. Muller, G. Pianet, A. Breton and P. Boulet, Predicting fire suppression by water spray with numerical codes: model development and validation, *Fire Sprinkler International*, London, 20-21 mai 2014.
5. S. Lechêne, R. Morlon, E. Blanchard, C. Rebuffat, G. Parent, Z. Acem, A. Collin and P. Boulet, On real radiative shielding effect when applying water mist in case of fire, *11th International Symposium on Fire Safety Science*, Univ. of Canterbury, New Zealand, février 2014.
6. I. Panfilova and M. Rasoulzadeh, Pore-scale modelling of water-gas flow in underground hydrogen storage, *RST 2014 (24e Réunion des Sciences de la Terre)*, Pau, 27 au 31 octobre 2014.
7. G. Parent, R. Morlon and P. Boulet, Visibility through a mixing of water mist and smoke, *Visibility through a mixing of water mist and smoke*, Univ. of Canterbury, New Zealand,
8. J. Ye, S. André and L. Farge, Estimation non linéaire des paramètres d'une loi de comportement, *25<sup>ème</sup> Colloque DEPOS (Déformation Plastique des Polymères Solides)*, Giens, 26-28 mars 2014.