

Principales publications Thierry AUBRY

R. GHANEM, V. LAURENT, P. ROQUEFORT, T. HAUTE, S. RAMEL, T. LE GALL, **T. AUBRY**, T. MONTIER, "Optimizations of In Vitro Mucus and Cell Culture Models to Better Predict In Vivo Gene Transfer in Pathological Lung Respiratory Airways: Cystic Fibrosis as an Example," *Pharmaceutics* **13**, 47 (2021).

F. FNEICH, J. VILLE, B. SEANTIER, **T. AUBRY**, "Nanocellulose-based foam morphological, mechanical and thermal properties in relation to hydrogel precursor structure and rheology," *Carbohydrate Polymers* **253**, 117233 (2021).

T. AUBRY, "An overview on clay-mediated compatibilization of polyethylene/polyamide blends with droplet morphology," *Applied Clay Science* **175**, 184-189 (2019).

F. FNEICH, J. VILLE, B. SEANTIER, **T. AUBRY**, "Structure and rheology of aqueous suspensions and hydrogels of cellulose nanofibrils: Effect of volume fraction and ionic strength," *Carbohydrate Polymers* **211**, 315-321 (2019).

P. MEDERIC, F. FNEICH, J. VILLE, **T. AUBRY**, " Migration of clay and its role in droplet morphology establishment during melt mixing of clay polyethylene/polyamide nanocomposites," *Applied Clay Science* **165**, 257-263 (2018).

J. HUITRIC, J. VILLE, P. MEDERIC, **T. AUBRY**, "Solid-state mechanical properties of PE/PA blends filled with organoclay or compatibilized by a graft co-polymer: a comparative study," *Polymer Testing* **70**, 208-214 (2018).

Q. BEUGUEL, J. VILLE, J. CREPIN-LEBLOND, P. MEDERIC, **T. AUBRY**, "Influence of formulation on morphology and rheology of polypropylene/polyamide blends filled with nanoclay mineral particles," *Applied Clay Science* **147**, 168-175 (2017).

X. MICHEL, S. FOUQUAY, G. MICHAUD, F. SIMON, J.-M. BRUSSON, P. ROQUEFORT, **T. AUBRY**, J.-F. CARPENTIER,* and S. M. GUILLAUME, "Tuning the Properties of a,w-Bis(trialkoxysilyl) Telechelic Copolyolefins from Ruthenium-Catalyzed Chain-Transfer Ring-Opening Metathesis Polymerization (ROMP) ," *Polymer Chemistry* **8**, 1177-1187 (2017).

Y. ARBAOUI, P. AGACIAK, A. CHEVALIER, V. LAUR, A. MAALOUF, J. VILLE, P. ROQUEFORT, **T. AUBRY**, P. QUEFFELEC, "3D printed ferromagnetic composites for microwave applications," *Journal of Materials Science* **52**(9), 4988-4996 (2017).

J. HUITRIC, J. VILLE, P. MEDERIC, **T. AUBRY**, "Solid-state morphology, structure, and tensile properties of Polyethylene/Polyamide/nanoclay blends : effect of clay fraction," *Polymer Testing* **58**, 96-103 (2017).

Q. BEUGUEL, J. VILLE, J. CREPIN-LEBLOND, P. MEDERIC, **T. AUBRY**, "Influence of clay mineral structure and polyamide polarity on the structural and morphological properties of clay polypropylene/polyamide nanocomposites," *Applied Clay Science* **135**, 253-259 (2017).

F. TISSIER, Y. MALLEM, C. GOANVEC, R. DIDIER, **T. AUBRY**, N. BOURGEOIS, J-C DESFONTIS, M. DUBREUIL, Y. LE GRAND, J. MANSOURATI, K. PICHAVANT-RAFANI, E. PLEE-GAUTIER, P. ROQUEFORT, M. THERON, M. GILARD, "A non-hypocholesterolemic Atorvastatin treatment improves vessel elasticity by acting on elastin composition in WHHL rabbits," *Atherosclerosis* **251**, 70-77 (2016).

C. ABOU NADER, F. PELLEN, P. ROQUEFORT, **T. AUBRY**, B. LE JEUNE, G. LE BRUN, M. ABOUD, "Evaluation of low viscosity variations in fluids using temporal and spatial analysis of the speckle pattern," *Optics Letters* **41**(11), 2521-2524 (2016).

M. LANDREAU, F. DUTHOIT, M. CLAEYS-BRUNO, O. VANDENABEELE-TRAMBOUZE, **T. AUBRY**, A. GODFROY, G. LE BLAY, "Entrapment of anaerobic thermophilic and hyperthermophilic marine micro-organisms in a gellan/xanthan matrix," *Journal of Applied Microbiology* **120**, 1531-1541 (2016).

K.-J. LE GOFF, C. GAILLARD, C. GARNIER, **T. AUBRY**, "Electrostatically driven modulation of the reinforcement of agarose hydrogels by cellulose nanowhiskers," *Journal of Applied Polymer Science* **133**(8), 43063 (2016).

Q. BEUGUEL, J. VILLE, J. CREPIN-LEBLOND, P. MEDERIC, **T. AUBRY**, "Elaboration and relationships between structure and rheological properties of microtalc or nanotalc/polyamide composites," *Journal of Applied Polymer Science* **132**(31), 42299 (2015).

Q. BEUGUEL, J. VILLE, J. CREPIN-LEBLOND, P. MEDERIC, **T. AUBRY**, "Comparative study of the structural and rheological properties of PA6 and PA12 based synthetic talc composites," *Polymer* **62**, 109-117 (2015).

K.-J. LE GOFF, C. GAILLARD, W. HELBERT, C. GARNIER, **T. AUBRY**, "Rheological study of reinforcement of agarose hydrogels by cellulose nanowhiskers," *Carbohydrate Polymers* **116**, 117-123 (2015).

K.-J. LE GOFF, D. JOUANNEAU, C. GARNIER, **T. AUBRY**, "Gelling of cellulose nanowhiskers in aqueous suspension," *Journal of Applied Polymer Science* **131**(17), 40676 (2014).

E. LAHAYE, Y. QIN, F. JAMME, **T. AUBRY**, O. SIRE, "A multi-scale approach of the mechanisms underlying exopolysaccharides autoorganization in the *Proteus mirabilis* extracellular matrix," *Analyst* **139**, 4879-4886 (2014).

N. DECOURCELLE, C. SABOURIN, **T. AUBRY**, F. GUERARD, "Emulsifying and antioxidant properties of a Shrimp Hydrolysate (*Pandalus borealis*) conjugated with xylose or dextran through the Maillard reaction by dry-heating in mild conditions," *Journal of Food Research* **3**(3), 144-157 (2014).

I.LABAUME, J. HUITRIC, P. MEDERIC, **T. AUBRY**, "Structural and rheological properties of different polyamide/polyethylene blends filled with clay nanoparticles : a comparative study", *Polymer* **54**, 3671-3679 (2013).

N. STAVROULI, Z. IATRIDI, **T. AUBRY**, C. TSITSILIANIS, "Three different types of physical gels arisen from a common triblock copolymer precursor: the case of ionomer gel," *Polymer Chemistry* **4**, 2097-2105 (2013).

I. LABAUME, J. HUITRIC, P. MEDERIC, **T. AUBRY**, "Comparative study of interphase viscoelastic properties of polyethylene/polyamide blends compatibilized with clay nanoparticles or with a graft copolymer", *Journal of Rheology* **57**, 377-392 (2013).

P. MEDERIC, L. LE PLUART, **T. AUBRY**, P.-J. MADEC, "Structure and rheology of polyethylene/imidazolium based montmorillonite nanocomposites", *Journal of Applied Polymer Science* **127**(2), 879-887 (2013).

F. FORDIANI, **T. AUBRY**, I. PILLIN, Y. GROHENS, "Enhancement of polylactide nucleation by montmorillonites intercalated with a green seaweed byproduct", *Journal of Applied Polymer Science* **127**(1), 724-732 (2013).

A.AZRI, M. PRIVAT, Y. GROHENS, **T. AUBRY**, "Linear rheological properties of low molecular weight polyethylene glycol solutions", *Journal of Colloid and Interface Science* **393**, 104-108 (2013).

A.DUPAS, I. HENAUT, J.-F. ARGILLIER, **T. AUBRY**, " Mechanical degradation onset of polyethylene oxide used as a hydrosoluble model polymer for enhanced oil recovery ", *Oil & Gas Science and Technology* **67**, 931-940 (2012).

J. VILLE, P. MEDERIC, J. HUITRIC, **T. AUBRY**, "Structural and rheological investigation of interphase in polyethylene/polyamide/nanoclay ternary blends", *Polymer* **53**, 1733-1740 (2012).

N. AJELLAL, C. THOMAS, **T. AUBRY**, Y. GROHENS, J.-F. CARPENTIER, "Encapsulation and controlled release of L-Leuprolide from Poly(β -hydroxyalkanoate)s: impact of microstructure and chemical functionalities", *New Journal of Chemistry* **35**, 876-880 (2011).

P. MEDERIC, J. VILLE, J. HUITRIC, M. MOAN, **T. AUBRY**, "Effect of processing procedures and conditions on structural, morphological and rheological properties of PE/PA/nanoclay blends", *Polymer Engineering and Science* **51**(5), 969-978 (2011).

C. TSITSILIANIS, **T. AUBRY**, I. ILIOPOULOS, S. NORVEZ "Effect of DMF on the rheological properties of telechelic polyelectrolyte hydrogels", *Macromolecules* **43**, 7779-7784 (2010).

B. ALEXANDRE, L. COLASSE, D. LANGEVIN, P. MEDERIC, **T. AUBRY**, C. CHAPPEY, S. MARAIS, "Transport mechanisms of small molecules through polyamide 12/montmorillonite nanocomposites", *The Journal of Physical Chemistry B* **114**, 8827-8837 (2010).

F. FORDIANI, **T. AUBRY**, Y. GROHENS, "Structural changes evidenced by rheology in PP-g-MA nanocomposites during oxidative ageing", *Journal of Applied Polymer Science* **114**, 4011-4019 (2009).

J. HUITRIC, J. VILLE, P. MEDERIC, M. MOAN, **T. AUBRY**, "Rheological, morphological and structural properties of PE/PA/nanoclay ternary blends : Effects of clay fraction", *Journal of Rheology* **53**(5), 1101-1119 (2009).

A.KYRIAZIS, **T. AUBRY**, W. BURCHARD, C. TSITSILIANIS, "Colloidal Gels From Amphiphilic Heteroarm Polyelectrolyte Stars in Aqueous Media", *Polymer* **50**, 3204-3210 (2009).

P. MEDERIC, **T. AUBRY**, T. RAZAFINIMARO, "Structural and rheological properties as a function of mixing energy for polymer/layered silicate nanocomposites", *International Polymer Processing* **3**, 261-266 (2009).

B. ALEXANDRE, D. LANGEVIN, P. MEDERIC, **T. AUBRY**, H. COUDERC, Q.T. NGUYEN, A. SAITER, S. MARAIS, "Water barrier properties of polyamide 12/montmorillonite nanocomposite membranes : structure and volume fraction effects. ", *Journal of Membrane Science* **328**, 186-204 (2009).

F. BOSSARD, I. PILLIN, **T. AUBRY**, Y. GROHENS, "Rheological characterization of starch derivatives/polycaprolactone blends processed by reactive extrusion ", *Polymer Engineering and Science* **48**(9),1862-1870 (2008).

N. AIT HOCINE, P. MEDERIC, **T. AUBRY**, "Mechanical properties of polyamide-12 layered silicate nanocomposites and their relations with structure," *Polymer Testing* **27**, 330-339 (2008).

N. STAVROULI, **T. AUBRY**, C. TSITSILIANIS, "Rheological Properties of ABA Telechelic Polyelectrolyte and ABA Polyampholyte Reversible Hydrogels : a Comparative Study," *Polymer* **49**, 1249-1256 (2008).

E. LAHAYE, **T. AUBRY**, V. FLEURY, O. SIRE, "Does Water Activity Rule *P. mirabilis* Periodic Swarming? II. Biofilm Functional Properties and Water Balance During Swarming," *Biomacromolecules* **8**, 1228-1235 (2007).

E. LAHAYE, **T. AUBRY**, N. KERVAREC, O. SIRE, "Does Water Activity Rule *P. mirabilis* Periodic Swarming? I. Biochemical and Functional Properties of the Extra Cellular Matrix," *Biomacromolecules* **8**, 1218-1227 (2007).

F. BOSSARD, M. MOAN, **T. AUBRY**, "Linear and non-linear viscoelastic behavior of very concentrated plate-like kaolin suspensions," *Journal of Rheology* **51**(6) 1253-1270 (2007).

Y. PEYSSON, **T. AUBRY**, M. MOAN, "Phenomenological approach of the effective viscosity of hard sphere suspensions in shear-thinning media", *Applied Rheology* **16:3** 145-151 (2006).

F. BOSSARD, **T. AUBRY**, G. GOTZAMANIS, C. TSITSILIANIS, "*pH*-tunable rheological properties of a telechelic cationic polyelectrolyte reversible hydrogel", *Soft Matter* **2**, 510-516 (2006).

- P. MEDERIC, T. RAZAFINIMARO, **T. AUBRY**, "Influence of melt-blending conditions on structural, rheological and interfacial properties of a polyamide-12 layered silicate nanocomposite" *Polymer Engineering and Science* **46**(8) 986-994 (2006).
- B. ALEXANDRE, S. MARAIS, D. LANGEVIN, P. MEDERIC, **T. AUBRY**, "Nanocomposite-based polyamide 12/montmorillonite : relationships between structures and transport properties", *Desalination* **199**, N°1-3, p.164-166 (2006).
- T. AUBRY**, T. RAZAFINIMARO, P. MEDERIC, " Rheological investigation of the melt state elastic and yield properties of a polyamide-12 layered silicate nanocomposite ", *Journal of Rheology* **49**, 425-440 (2005).
- P. MEDERIC, T. RAZAFINIMARO, **T. AUBRY**, M. MOAN, M.-H KLOPFER, "Rheological and Structural Investigation of Layered Silicate Nanocomposites Based on Polyamide or Polyethylene : Influence of Processing Conditions and Volume Fraction Effects, *Macromolecular Symposia* **221**, 75-84 (2005).
- A. BEIGBEDER, S. BRUZAUD, P. MEDERIC, **T. AUBRY**, Y. GROHENS, "Rheological characterization of polydimethylsiloxane/HtINbO₅ nanocomposites prepared by different routes", *Polymer* **46**, 12279-12286 (2005).
- M. MOAN, **T. AUBRY**, F. BOSSARD, " Nonlinear behavior of very concentrated suspensions of plate-like kaolin particles in shear flow ", *Journal of Rheology* **47**(6), 1493-1504 (2003).
- T. AUBRY**, F. BOSSARD, G. STAIKOS, G. BOKIAS, " Rheological study of semi-dilute aqueous solutions of a thermoassociative copolymer ", *Journal of Rheology* **47**(2), 577-587 (2003).
- T. AUBRY**, T. RAZAFINIMARO, R. SILVA JACINTO, P. BASSOULET, " Rheological properties of a natural estuarine mud ", *Applied Rheology* **13**(3), 142-149 (2003).
- T. AUBRY**, F. BOSSARD, M. MOAN, " Laponite dispersions in the presence of an associative polymer ", *Langmuir* **18**(1), 155-159 (2002).
- T. AUBRY**, F. BOSSARD, M. MOAN, " Rheological study of compositional heterogeneity in an associative commercial polymer solution ", *Polymer* **43**(11), 3375-3380 (2002).
- T. AUBRY**, L. BLONCE and M. MOAN, " Gap effects in a rheometrical flow of a hydrophobically associating polymer solution: apparent slip or material instability ? ", *Applied Rheology* **10**(1), 31-36 (2000).
- T. AUBRY**, B. LARGENTON and M. MOAN, " Rheological study of fumed silica suspensions in chitosan solutions ", *Langmuir* **15**(7), 2380-2383 (1999).
- T. AUBRY**, M. MOAN, J.F. ARGILLIER and A. AUDIBERT, " Influence of a nonionic surfactant on the dilute hydrodynamical properties of a hydrophobically associating water soluble polymer ", *Macromolecules* **31**, 9072-9074 (1998).

T. AUBRY, B. LARGENTON and M. MOAN, " Study of aggregate density in fumed silica suspensions ", *Journal of Colloid and Interface Science* **202**, 551-553 (1998).

T. AUBRY and M. MOAN, " The rheology of swelling clay dispersions ", *Oil & Gas Science and Technology* **52**(2), 246-247 (1997).

T. AUBRY and M. MOAN, " Hydrophobically associating polymers as rheology modifiers ", *Oil & Gas Science and Technology* **52**(2),129-132 (1997).

T. AUBRY and M. MOAN, " Influence of a nonionic surfactant on the rheology of a hydrophobically associating water soluble polymer ", *Journal of Rheology* **40**(3), 441-448 (1996).

T. AUBRY and M. MOAN, " Rheological behavior of a hydrophobically associating water soluble polymer ", *Journal of Rheology* **38**(6), 1681-1692 (1994).

T. AUBRY and M. MOAN, " The work-hardening behavior of aggregated TiO₂ suspensions ", *Journal of Rheology* **38**(6), 1937-1940 (1994).