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 -Co-Chairman of Polymer Structure and Rheology Center: process and simulation in IMP lab: http://www.imp.cnrs.fr
-Director of the "Mechanical Process Engineering of Plastics" engineers training section at INSA de Lyon: http://www.insa-lyon.fr/fr/formation/ingenieur-parapprentissage/ingenieur-par-apprentissage
- Resident Member of Hassan II Academy of Science and Technology, Rabat, Morocco http://www.academie.hassan2.sciences.ma/

Brief Descriptions:

Prof. Maazouz is presently in charge of the Multidisciplinary Plastics Research group at INSA Lyon. He is supervisor of Rheology, Processing of polymers Group. He conducts his research activities in the field of structure /processing /property relationships. He was recently honored by French government by the "**Palm academic medal**": Palmes académiques. He is a conveyor of academic research to numerous high-technological industrial applications, which make him being recognized by both academia and industry.

He has supervised approximately more than forty (40) PhD and post-doctoral students with financing from the Ministry of Research and industry. All these doctors now have high-level positions in either industry or academia, in France as well as abroad. He established numerous international collaborations (Canada, USA, Australia, Vietnam, Morocco and Tunisia). He is a member of the Polymer Processing Society (PPS), Society of Plastics Engineers (SPE), Society of Rheology (SoR), American Chemical Society (ACS) and European Society of Rheology (ESR). He has more than 100 scientific publications and more than 70 communications at international conferences where he has on numerous occasions been an invited speaker and a chair-man of conferences.

Research domains and interests:

- Structure/processing/property relationships of polymers
- Rheology and process engineering of polymer materials, biopolymers and their composites
- o Interfacial phenomena in the polymer and composites processing
- Monitoring and optimization of polymer processes (extrusion, co-extrusion, roto-molding, resin transfer molding, etc.)

Major Publications in the latest 5 years:

--Books--

Lamnawar, K.; Zhang, H.; Maazouz, A. one chapter" State of the art in co-extrusion of multilayer polymers: experimental and fundamental approaches" in *Encyclopedia of Polymer Science and Technology (wiley library)* (invited)

--Journal publications--

- Zhang, H.; Lamnawar, K.; Maazouz, A. Rheological modeling of the mutual diffusion and the interphase development for an asymmetrical bilayer based on PMMA and PVDF model compatible polymers. <u>Macromolecules</u> 2012 (Accepted) <u>http://dx.doi.org/10.1021/ma301620a</u>
- Al-Itry, R.; Lamnawar, K.; Maazouz, A. Improvement of thermal stability, rheological and mechanical properties of PLA, PBAT and their blends by reactive extrusion with functionalized epoxy, *Polymer Degradation and Stability*, 2012, 97(10), 1898–1914
- Zhang, H.; Lamnawar, K.; Maazouz, A. Rheological investigation of diffusion process and the interphase of symmetrical bilayers based on PVDF and PMMA with varying molecular weight. *Rheologica Acta* 2012, 51, 691-711.
- Lamnawar, K.; Bousmina, M., Maazouz, A. 2D Encapsulation in Multiphase Polymers: Role of Viscoelastic, Geometrical and Interfacial Properties. <u>Macromolecules</u> 2012, 45, 441–454
- Muller, J. D.; Lamnawar, K.; Maazouz, A. Relationship between rheological and surface properties for the sintering process of polymers. *Journal of Materials Science* 2012, 47, 121-131

- Corre, Y-M.; Duchet, J.; Reignier, J. ; Maazouz, A. Melt strengthening of poly (lactic acid) through reactive extrusion with epoxy-functionalized chains. *Rheologica acta* 2011, 50, 613-629.
- Corre, Y-M.; Maazouz, A.; Duchet, J.; Reignier, J. Batch foaming of chain extended PLA with supercritical CO2: Influence of the rheological properties and the process parameters on the cellular structure. <u>The Journal of Supercritical</u> <u>Fluids</u> 2011, 58, 177-188
- Sbiai, A.; Kaddami, H.; Sautereau, H.; Maazouz, A.; Fleury, E. TEMPO-mediated oxidation of lignocellulosic fibers from date palm leaves. *Carbohydrate Polymers*, 2011, 86, 4, 1445-1450
- Mallet, B.; Lamnawar,K.; Maazouz,A. Compounding and processing of biodegradable materials based on PLA for packaging applications: In greening the 21st century material's world, <u>Frontiers in Science and Engineering</u>, 2011,1-2, 1-44
- Lamnawar, K.; Baudoin, A.; Maazouz, A. Interfacial reaction at the polymer/polymer interface in multilayer systems probed by linear viscoelasticity coupled to FTIR and NMR measurements. <u>European Polymer Journal</u>, 2010, 46(7), 1604-1622.
- Lamnawar K., Vion-Loisel F., Maazouz A., Rheological, morphological and heat seal properties of linear low density polyethylene and cyclo-olefine copolymer (LLDPE/COC) blends, *Journal of Applied Polymer Science* 2010, 116, 2015– 2022
- Lamnawar, K.; Maazouz, A. Role of the interphase in the flow stability of reactive coextruded multilayer polymers, *Polymer Engineering & Science* 2009, 49 (4), 727 739
- Naebe,M.; Hurren, C.; Maazouz, A.; Lamnawar, K.; Wang, X. Improvement in Mechanical Properties of Aluminium Polypropylene Composite Fiber, *<u>Fibres and Polymers</u>* 2009. 10(5), 662-666
- Maazouz A., Lamnawar K., Mallet B., Polymer composition based on poly lactic acid, useful in piece/object, comprises poly lactic acid and additive mixture, for promoting crystallization of poly lactic acid, comprising mineral filler, glycol polyether, and aliphatic amide, Patent : FR2941702 (B1)
- Muller, J-D.; Bousmina, M.; Maazouz, A. 2D-Sintering Kinetics of Two Model Fluids as Drops. <u>Macromolecules</u>, 2008, 41 (6), 2096–2103.
- Lamnawar, K.; Maazouz, A. Rheology and morphology of multilayer reactive polymers: Effect of interfacial area in Interdiffusion/reaction phenomena, <u>*Rheologica Acta*</u>, 2008, 47,383–397
- Lamnawar, K.; Laure, P.; Maazouz, A. Reactive functionalized multilayer polymers in a coextrusion process: Experimental and theoretical investigations of interfacial instabilities. *International Journal of Material Forming*, 2008, suppl. 1, 763-766