

**Jalal DEHMOUNE, Ph.D**

✉ j.dehmoune.free.fr clic on contact

## Education

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- 2004/2007 **Ph.D in physics of soft matter**. Paul Verlaine University of Metz (France).  
2003/2004 **Master 2 degree in Rheology, Mechanics and Physics of Soft Matter**. Grenoble Institute of Technology and University Joseph Fourier of Grenoble (France).  
1998/2003 **Ingenior in hydraulic (position holder)**, University of Oran (Algeria).

## Particular Skills

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- Microfluidic** Conception of micrometric chips. Flow and characterization of complex fluids at micrometric scales.  
**Rheology** Linear and non linear rheometry at imposed shear stress and shear rate.  
**Techniques** Flow birefringence, ultrasound velocimetry, small angle neutron scattering (SANS), dynamic light diffusion, Raman spectroscopy and particle image velocimetry.  
**Materials** Viscoelastic (polymers and surfactants), viscoplastic (Carbopol), natural suspension (dams) and biological systems.  
**Computing** Delphi, MS Project, Origin, Map-Info, L<sup>A</sup>T<sub>E</sub>X, Word, Excel, Powerpoint, Namo Web Editor and Front-page, basics in Matlab and Labview.  
**Language** English : scientific, good skills both written and oral.

## Work Experience (6 years)

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- 2009/2010 **Research engineer** : using our device, we performed phase diagram screening of aqueous solution (ex. polymer and salt). Implementation of spectroscopy Raman, microrheology and DLS. *Supervised by Dr. Jacques Leng.*  
(1 year)  
2008/2010 **Research engineer** : conception of a new microfluidic device for phase diagram screening. Our device is based on pervaporation to increase concentration of studied matter in a nL-chamber. *Supervised by Dr. Jacques Leng.*  
(1 year)  
2004/2007 **Ph.D research** : experimental study of shear thickening of dilute self-assembled systems using rheometry, birefringence, ultrasound velocimetry and small angle neutron scattering. *Supervised by Pr. Jean-Paul Decruppe and Pr. Hong Xu.*  
(3 years)  
2004 **Research Trainee** : first experimental visualization of the static rigid zones in flow of a viscoplastic fluid around obstacles. *Supervised by Pr. Jean-Michel Piau.*  
(4 months)  
2003 **Engineer project** : flow of clay in rheometer and industrial installation. To provide solution for the study of transportation of the dam clay during the procedures of desilting. Validation of the new pressurized flow installation. *Supervised by Dr. Mansour Belhadri*  
(6 months)

## Communications

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- Papers 5 published : 2 Langmuir, Applied Physical Letter, Rheologica Acta and Journal of Rheology.  
Conferences 3 international conferences, colloquiums, workshops and seminars.  
Associations Member of French Group of Rheology, European Society of Rheology and Group Research of Microfluidic (GDR).

## Hobbies and interests

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Photography, poetry, hiking, Karate-do, newspapers and reviews.

## Contacts

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**Jean-Paul Decruppe** - Laboratoire de Physique des Milieux Denses - Metz. ☎ +33 387 203 196.  
**Jean-Michel Piau** - Laboratoire de Rhéologie, UJF - Grenoble. ☎ +33 476 825 170  
**Sébastien Manneville** - Laboratoire de Physique, ENS - Lyon. ☎ +33 472 728 908.