MIMIFLOW

MIMIFLOW is an international project that develops a new assisted microwave synthesis of milligel under continuous flow. These polymers are considered as hybrid networks for drug release.

For the successful of this project,

Two French laboratories:

IPREM and LOF

and one Austrian laboratory:

PCCL

join their competencies and participate to MIMIFLOW in terms of Microwave synthesis, Droplet-based fluidics and Milligel synthesis.

Mimiflow has the ambition to support the research made in Europe and particularly in France and Austria through a program in the field of the chemistry and processes under microwave irradiation.

MIMIFLOW develops a new device for the continuous polymer synthesis under microwave irradiation to obtain polymer gel particles with a perfect control and reproducible chemical composition, shape and size. MIMIFLOW focus on poly(2-oxazoline)s having a distinct potential in terms of biocompatibility, degradability, high stability and the lack of toxic by-products produced during degradation. Cytotoxicity tests of the polymer networks as well as the corresponding degradation products will validate the usage of this novel class of copolymers as drug depots.

MIMIFLOW tasks:

1 . Management
2 . Bibliography
3 . Batch synthesis
4 . Continuous flow chemistry
5 . Gel properties
6 . Conclusion perspectives

For the successful of MIMIFLOW, 2PhD and 2 trainees has been recruited.

MIMIFLOW scientific partners are:

IPREM:	S. Reynaud: coordinator and Work package leader (WPL)
	B. Grassl: WPL
	F. Ehrenfeld
	V. Pellerin
	C. Petit (recruited PhD)
PCCL:	F. Wiesbrock: WPL
	K. Luef (recruited PhD)
LOF:	E. Mignard: task leader
	D. Subervie (recruited trainee)
	H. Chen-Jolly (recruited trainee)

Coordinateur : Stéphanie REYNAUD