

Dr Catherine BRANGER

Associate Professor (Docent)

French nationality

MAPIEM Laboratory (Polymer MAterials – Interfaces – Marine Environment)

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Qualifications

June 1993	Diploma of Engineer from ESPCI (Ecole Supérieure de Physique et de Chimie Industrielles de la Ville de Paris) – Option Chemistry
June 1993	Master degree of Inorganic Chemistry, Paris VI University
May 1996	PhD in Inorganic Chemistry, Paris VI University Laboratory of Chemistry and Electrochemistry of Molecular Materials CNRS URA 429, ESPCI Mention very honourable with the jury's congratulations Jury: D.Vivien, J.Delaire, D.Fichou, M.Barzoukas, M.Lequan, J.Simon
December 2013	HDR in Polymer Chemistry (accreditation diploma to supervise research), Toulon University Jury: J.J.Robin, H.Deleuze, V.Langlois, V.Pichon, H.Brisset, A.Margaillan

Career development

1993-96:	PhD thesis in the Laboratory of Chemistry and Electrochemistry of Molecular Materials (CNRS URA 429, ESPCI) under the direction of Dr Minh Lequan (research director for the CNRS) « Elaboration of new boron and stannic derivatives for non-linear optics »
1996-97:	Assistant Professor (ATER) in the Laboratory of Supramolecular and Macromolecular Photophysics and Photochemistry (CNRS URA 1906, ENS Cachan) under the guidance of Bernard Valeur (Professor - CNAM)
1998-2012:	Associate Professor in 32 nd section (Organic Chemistry) with an affectation in: <ul style="list-style-type: none">• the University of Nice Sophia-Antipolis (department = IUFM, University Teacher Training Faculty) for the teaching• the MAPIEM Laboratory (Polymer MAterials – Interfaces – Marine Environment – EA 4323) of University of Toulon for the research
Sept. 2012-...:	Associate Professor in 33 rd section (Materials Chemistry) with an affectation in: <ul style="list-style-type: none">• the Engineer School of the University of Toulon for the teaching• the MAPIEM Laboratory (Polymer MAterials – Interfaces – Marine Environment – EA 4323) of University of Toulon for the research

Research interests

- Synthesis of new functional monomers
- Synthesis and characterization of porous polymer resins
- Imprinted polymers: MIPs (molecularly imprinted polymers) and IIPs (Ion Imprinted Polymers)
- Applications in the environmental field = design of sensors for environmental diagnostics
- Applications to the extraction of specific ionic pollutants

Scientific publications

31 refereed articles in scientific international journals (h-index = 15)

1 international patent

5 invited conferences (4 international/2 national)

21 oral communications and 12 poster presentations in international meetings

19 oral communications and 9 poster presentations in national meetings

Publications in the period 2012-2016:

1. A.M.Florea, T.V.Iordache, C.Branger, M.Ghiurea, S.Avramescu, G.Hubca, A.Sarbu* « An innovative approach to prepare hypericin molecularly imprinted pearls using a “phyto-template” » *Talanta*, 148 (2016) 37-45
2. V.Lenoble*, W.Meouche, K.Laatikainen, C.Garnier, H.Brisset, A.Margaillan, C.Branger*, « Assessment and modelling of Ni(II) retention by an ion-imprinted polymer : application in natural samples », *Journal of Colloid and Interface Science* 448 (2015) 473-481
3. K.Laatikainen*, D.Udomsap, H.Siren, H.Brisset, T.Sainio, C.Branger*, « Effect of template ion–ligand complex stoichiometry on selectivity of ion-imprinted polymers », *Talanta* 134 (2015) 538-545
4. M. Laatikainen*, K. Laatikainen, S.-P. Reinikainen, H. Hyvönen, C. Branger, H. Siren, T. Sainio, « Complexation of Nickel with 2-(Aminomethyl)pyridine at High Zinc Concentrations or in a Nonaqueous Solvent Mixture », *Journal of Chemical and Engineering Data* 59 (2014) 2207-2214
5. D. Udomsap, C. Branger*, G. Culioli, P. Dollet, H. Brisset*, « A versatile electrochemical sensing receptor based on a molecularly imprinted polymer », *Chemical Communications* 50 (2014) 7488–7491
6. C.Branger*, W.Meouche, A.Margaillan, « Recent advances on ion-imprinted polymers », *Reactive and Functional Polymers*, 73 (2013) 859-875
7. T.Nicolescu, W.Meouche, C.Branger, A.Margaillan, A.Sarbu*, V.Fruth, D.Donescu, « A new microemulsion approach for producing molecularly imprinted polymers with selective recognition cavities for gallic acid », *Polymer International*, 62 (2013) 949-956
8. T.Nicolescu, W.Meouche, C.Branger, A.Margaillan, A.Sarbu*, D.Donescu, « Tailor-made polymer beads for gallic acid recognition and separation », *Journal of Polymer Research*, 19 (2012) 1-12
9. K.Laatikainen*, M.Laatikainen, C.Branger, E.Paatero, H.Siren, « Role of Ligand Acidity in Chelating Adsorption and Desorption of Metal Salts », *Industrial and Engineering Chemistry Research*, 51 (2012) 12310–12320
10. W.Meouche, C.Branger*, I.Beurroies, R.Denoyel, A.Margaillan, « Inverse suspension polymerization as a new tool for the synthesis of ion-imprinted polymers », *Macromolecular Rapid Communications*, 33 (2012) 928–932
11. J.Bernard, C.Branger*, I.Beurroies, R.Denoyel, A.Margaillan, « Catechol immobilized on crosslinked polystyrene resins by grafting or copolymerization: incidence on metal ions adsorption» *Reactive and Functional Polymers*, 72 (2012) 98-106