

## PUBLICATIONS 2015/2016

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### REVUES INTERNATIONALES

A.Y. El-Moghazy, E.A. Soliman, H.Z. Ibrahim, **J.-L. Marty, G. Istamboulié, T. Noguer**. Biosensor Based on Electrospun Blended Chitosan-Poly (vinyl alcohol) Nanofibrous Enzymatically Sensitized Membranes for Pirimiphos-methyl Detection in Olive Oil. [Talanta](#) **155** (2016) 258-266.

A. Vasilescu, C. Purcarea, E. Popa, M. Zamfir, I. Mihai, S. Litescu, S. David, S. Gaspar, M. Gheorghiu, **J.-L. Marty**. Versatile SPR aptasensor for detection of lysozyme dimer in oligomeric and aggregated mixtures. [Biosensors and Bioelectronics](#), **83** (2016) 353-360.

**D. Bueno**, R. Muñoz, **J.-L. Marty**. Fluorescence analyzer based on smartphone camera and wireless for detection of Ochratoxin A. [Sensors and Actuators B: Chemical](#), **232** (2016) 462-468.

**N. Mejri**, A. Miodek, B. Zribi, M. Marrakchi, M. Hamdi, **J.-L. Marty**. H. Korri-Youssoufi. Direct detection of OTA by impedimetric aptasensor based on modified polypyrrole-dendrimers. [Analytica Chimica Acta](#), **920** (2016) 37-46.

**G. Catanante**, R.K. Mishra, A. Hayat, **J.-L. Marty**. Sensitive analytical performance of folding based biosensor using methylene blue tagged aptamers. [Talanta](#), **153** (2016) 138-144.

R. K. Mishra, **G. Catanante**, A. Hayat, **J.-L. Marty**. Development and evaluation of extraction methods for Ochratoxin A detection in cocoa beans. [Food Additives and Contaminants - Part A Chem Anal Control Expo Risk Assess](#), **33** (2016) 500-508.

A. Vasilescu, **J.-L. Marty**. Electrochemical aptasensors for the assessment of food quality and safety. [Trends in Analytical Chemistry](#), **79** (2016) 60-70.

R. K. Mishra, A. Hayat, **G. Catanante, G. Istamboulié, J.-L. Marty**. Sensitive quantitation of Ochratoxin A in cocoa beans using differential pulse voltammetry based aptasensor. [Food Chemistry](#), **192** (2016) 799-804.

A. Sharma, **G. Catanante**, A. Hayat, **G. Istamboulié**, I. Ben Rejeb, S. Bhand, **J.-L. Marty**. Development of structure signaling aptamer assay for detection of aflatoxin M1 in milk sample. [Talanta](#), **158** (2016) 35-41.

**G. Catanante**, A. Rhouati, A. Hayat, **J.-L. Marty**. An overview of recent electrochemical immunosensing strategies for mycotoxins detection. [Electroanalysis](#), acceptée mai 2016.

A. Hayat, A. Rhouati, R. K Mishra, **D. Bueno**, R. Munoz, **J.-L. Marty**. Ligand assisted stabilization of fluorescence nanoparticles; an insight on the fluorescence characteristics, dispersion stability and DNA loading efficiency of nanoparticles. [Journal of fluorescence](#), online: 21 Mai 2016.

K Y. Goud, A. Sharma, A. Hayat, **G. Catanante**, K. Vengatajalabathy Gobi, A.-M. Gurban, **J.-L. Marty**. Tetramethyl-6-carboxyrhodamine Quenching Based Aptasensing Platform for Aflatoxin B1: Analytical performance comparison of two aptamers. [Anal Biochemistry](#), online: 29 May 2016.

**E. Rocaboy-Faquet, L. Barthelmebs, C. Calas-Blanchard, T. Noguer**. A novel amperometric biosensor for  $\beta$ -triketone herbicides based on hydroxyphenylpyruvate dioxygenase inhibition: a case study for sulcotrione. [Talanta](#) **146** (2016) 510-516.

**G. Istamboulié, N. Paniel, L. Zara, L. Reguillo Granados, L. Barthelmebs, T. Noguer**. Development of an impedimetric aptasensor for the determination of aflatoxin M1 in milk. [Talanta](#) **146** (2016) 464-469.

A.Y. El-Moghazy, E.A. Soliman, H.Z. Ibrahim, **T. Noguer, J.-L. Marty, G. Istamboulié**. Ultra-sensitive biosensor based on genetically engineered acetylcholinesterase immobilized in poly (vinyl alcohol)/Fe-Ni alloy nanocomposite for

phosmet detection in olive oil. [Food Chemistry 203 \(2016\) 73–78.](#)

A. Hayat, A. Rhouati, R. Mishra, G. Alonso, M. Nasir, **G. Istamboulié, J.-L. Marty.** An electrochemical sensor based on TiO<sub>2</sub>/activated carbon nanocomposite modified screen-printed electrode and its performance for phenolic compounds detection in water samples. [International Journal of Environmental Analytical Chemistry 96 \(2016\) 237–246.](#)

**C. Calas-Blanchard, G. Istamboulié, M. Bontoux, G. Plantard, V. Goetz, T. Noguer.** Biosensor-based real-time monitoring of paracetamol photocatalytic degradation. [Chemosphere 131 \(2015\) 124–129.](#)

**G. Catanante, L. Espin, J.-L. Marty.** Sensitive biosensor based on recombinant PP1 for microcystin detection. [Biosensors and Bioelectronics 67\(2015\) 700–707.](#)

**R.B. Dominguez, G.A. Alonso, R. Muñoz, A. Hayat, J.-L. Marty.** Design of a novel magnetic particles based electrochemical biosensor for organophosphate insecticide detection in flow injection analysis. [Sensors and Actuators B: Chemical, 208, \(2015\) 491-496.](#)

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C. Ocaña, A. Hayat, R. Mishra, A. Vasilescu, M. del Valle, **J.-L. Marty.** Label free aptasensor for lysozyme detection: a comparison of the analytical performance of two aptamers. [Bioelectrochem., 105 \(2015\) 72-77.](#)

F. Charmantray, N. Touisni, L. Hecquet, **T. Noguer, C. Mousty.** Galactose oxidase/Prussian Blue-based biosensors. [Electroanalysis 27 \(2015\) 1341-1344.](#)

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W. Haider, A. Hayat, Y. Raza, A. Anwar, I. Ur Rehman, **J.-L. Marty.** Gold nanoparticle decorated single walled carbon nanotubes nanocomposite with Synergistic peroxidase like activity for D-alanine detection. [RSC Adv. 32 \(2015\) 24853–24858.](#)

**S. Romdhane, M. Devers-Lamrani, F. Martin-Laurent, C. Calvayrac, E. Rocaboy-Faquet, D. Riboul, J.F. Cooper, L. Barthelmebs.** Isolation and characterization of Bradyrhizobium sp. SR1 degrading two -triketone herbicides. [Environmental Science and Pollution Research DOI 10.1007/s11356-015-4544-1.](#)

**G. Catanante, L. Espin, J.-L. Marty.** Sensitive biosensor based on recombinant PP1 for microcystin detection. [Biosens. Bioelectron. 67 \(2015\) 700-707.](#)

R. K. Mishra, A. Hayat, **G. Catanante, C. Ocaña, J.-L. Marty.** A label free aptasensor for Ochratoxin A detection in cocoa beans: An application to chocolate industries. [Anal. Chim. Acta, 889 \(2015\) 106-112.](#)

A. Hayat, W. Haider, Y. Raza, **J.-L. Marty.** Colorimetric cholesterol sensor based on peroxidase like activity of zinc oxide nanoparticles incorporated carbon nanotubes. [Talanta, 143 \(2015\) 157-161.](#)

## CHAPITRES D'OUVRAGES

G. Nunes, M.H. Nawaz, A. Hayat, **J.-L. Marty.** Evaluation and improvement of the sensitivity in electrochemical methods for trace analysis. In « New Trends on Monitoring And Diagnosis For Health Sciences », M. Badea and L. Floroian Eds (ISBN : 978-3-659-77699-1)

## CONGRÈS

**L. Barthelmebs, S. Romdhane, M. Devers-Lamrani, C. Calvayrac, F. Dayan, C. Bertrand, J.-F. Cooper, F. Bonnemoy, I. Batisson, F. Martin-Laurent.** (Conférence) Fate and impact of leptospermone, a natural -triketone herbicide, in soil. SETAC Europe 26th Annual Meeting, Nantes (France), 22-26 Mai 2016.

**T. Noguer, G. Istamboulié, N. Paniel, C. Calas-Blanchard, L. Barthelmebs.** (Conférence) Biocapteurs aptamériques pour la détection des aflatoxines. 3ème Journées mycotoxines, Toulouse, (France) 15-16 Mars 2016

**J.-L. Marty.** (Conférence invitée) Biosensors and food analysis. 4th Conference on « Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences "IC-ANMBES 2016", Brasov (Romania), June 29th – July 1st, 2016.

**Y. Gould.** (Conférence) A label free electrochemical impedimetric aptasensor for aflatoxin B1 detection. 9eme Congrès de la Societat Catalane de Quimica, Perpignan 3-5 février 2016

**S. Romdhane**, M. Devers-Lamrani, F. Martin-Laurent , **C. Calvayrac**, E. Rocaboy-Faquet, J.-F. Cooper, **L. Barthelmebs.**(Conférence) Isolement et caractérisation de Bradyrhizobium sp. SR1 dégradant deux herbicides -tricotones. 45ème Congrès du Groupe Français des Pesticides, Versailles (France), 27-29 Mai 2015.

R.K. Mishra, A. Hayat, **G. Catanante**, **J.-L. Marty** (Conférence) Innovative approaches for OTA biosensing in real samples using different electrochemical aptasensors. 15th ISEAC (the International Symposium on Electroanalytical Chemistry ), Changchun (Chine), 13-16 août 2015.

**J.-L. Marty.** (Conférence invitée) Are BIOSENSORS suitable tools for monitoring pollutants in aquatic environments? New Trends in Sensing- Monitoring- Telediagnosis for Life Sciences, Brasov (Romania), 3-5 Septembre 2015.

A. Sharma, A. Hayat, R. K. Mishra, **G. Catanante**, S. Bhand, **J.-L. Marty.** (Conférence) Aptamer assay: A novel sensing strategy for detection of target analyte using nanomaterial. BBMEC-11, Regensburg, Germany, 26-30 Septembre 2015.

E. Rocaboy-Faquet, **L. Barthelebs**, **C. Calas-Blanchard**, **T. Noguer.** (Conférence) Development of electrochemical biosensors for  $\beta$ -triketone herbicides detection based on HPPD inhibition. 20th Cross-border Meeting on Sensors and Biosensors, Perpignan (France), 1-2 Octobre 2015.

A. Sharma, A. Hayat, R. K. Mishra, **G. Catanante**, S. Bhand and **J.-L. Marty.** (Conférence) Aptamer assay: A nanomaterial based sensing platform for detection of target molecules. 20th Cross-border Meeting on Sensors and Biosensors, Perpignan (France), 1-2 Octobre 2015.

**S. Romdhane**, M. Devers-Lamrani, F. Martin-Laurent, C. Bertrand C., J.-F. Cooper, **C. Calvayrac**, **L. Barthelmebs.** (Conférence) Soil microbial ecotoxicology of synthetic and natural -triketone herbicides. BioMicroWorld 2015, VI international conference on Environmental, Industrial, and applied Microbiology, Barcelone (Espagne), 28-30 Octobre 2015.

**E. Da Silva**, **N. Paniel**, J. Baudart, **L. Barthelmebs.** (Conférence) Looking for alternative methods for bacteria monitoring in marine environment. BioMicroWorld 2015, VI international conference on Environmental, Industrial, and applied Microbiology, Barcelone (Espagne), 28-30 Octobre 2015.

I. Zergioti, M. Massaouti, C. Kouloumentas, H. Avramopoulos, H. Leeuwis, E. Schreuder, S. Graf, H. Knapp, **L. Barthelmebs**, **T. Noguer**, G. Tsekenis, L. Scheres, A. Triling, M. Smulders, H. Zuilhof, G. Hessink, A. Romero, L. Granados, J. Risque. (Conférence) Biofos: micro-ring resonator based biophotonic system for food analysis. 7th International symposium on Recent Advances in Food Analysis (RAFA 2015), Prague (Czech Republic), 3-6 Novembre 2015.

**S. Romdhane**, M. Devers-Lamrani, F. Martin-Laurent, J.-F. Cooper, **C. Calvayrac**, **L. Barthelmebs.** (Poster) Biodegradation of synthetic -triketone herbicides. SETAC Europe 26th Annual Meeting, May 2016, Nantes, France.

**C. Calvayrac**, E. Rocaboy-Faquet, **S. Romdhane**, M. Devers-Lamrani, F. Martin-Laurent , L. Carles, M. Joly, I. Batisson, C. Mallet, C. Bertrand, J.-F. Cooper, P. Besse-Hoggan, F.E Dayan, **C. Blanchard**, **T. Noguer**, **L. Barthelmebs.** (Poster) Impact environnemental des herbicides -tricotones synthétiques et naturels. 45ème Congrès du Groupe Français des Pesticides, Versailles, 27-29 Mai 2015.

**D. Bueno**, R. K. Mishra, R. Muñoz, **J.-L. Marty.** (Poster) Detection methods for Ochratoxin A in wine samples . Journées d'électrochimie, Rome (Italie), 6-10 juillet 2015.

**N. Mejri**, M. Marrakchi, **J.-L. Marty**, H. Korri Youssoufi. (Poster) Electrochemical Aptasensors of Ochratoxin A Based On Modified Polypyrrole Journées d'électrochimie, Rome (Italie), 6-10 juillet 2015.

R. K Mishra, A. Sharma, A. Hayat, S. Bhand, **J.-L. Marty**(Poster) . OTA biosensing in real matrix using folding based electrochemical aptasensor. 15th ISEAC (the International Symposium on Electroanalytical Chemistry ), Changchun (Chine) 13-16 August 2015.

**N. Aftim**, **G. Istamboulié**, **C. Calas-Blanchard**, **T. Noguer.** (Poster) Synthesis of molecularly-imprinted polymers by precipitation polymerization for the selective extraction of Phosmet from olive oil. 20th Cross-border Meeting on Sensors and Biosensors, Perpignan (France), 1-2 Octobre 2015.

**N. Paniel, G. Istamboulié, L. Barthelmebs, T. Noguier.** (Poster) Aptamers for real time in situ food analysis. 20th Cross-border Meeting on Sensors and Biosensors, Perpignan (France), 1-2 Octobre 2015.

**E. Da-Silva, J. Baudart and L. Barthelmebs.** (Poster) Development of molecular-based sensors for marine environment analysis. 20th Cross-border Meeting on Sensors and Biosensors, Perpignan (France), 1-2 Octobre 2015.

A. Sharma, A. Hayat, R. K. Mishra, **G. Catanante**, S. Bhand and **J-L. Marty.** (Poster) Quenching based aptamer assay: A sensing platform for detection of target analyte. 20th Cross-border Meeting on Sensors and Biosensors, Perpignan (France), 1-2 Octobre 2015.

**S. Romdhane**, M. Devers-Lamrani, C. Bertrand, **C. Calvayrac**, J.-F. Cooper, **L. Barthelmebs**, F. Martin-Lauren. (Poster) La leptospermonone, un herbicide -tricétone naturel : son impact sur la communauté bactérienne du sol ? Congrès des doctorants de l'UPVD, Perpignan, France, 6-7 Novembre 2015.

**N. Aftim, G. Istamboulié, C. Calas-Blanchard, T. Noguier.** (Poster) Polymères à empreintes moléculaires pour la détection du phosmet. Congrès des doctorants de l'UPVD, Perpignan, France, 6-7 Novembre 2015.

**G. Istamboulié, N. Paniel, L. Reguillo Granados, L. Barthelmebs, T. Noguier.** (Poster) An impedimetric aptasensor for the determination of aflatoxin M1 in milk. 7th International symposium on Recent Advances in Food Analysis (RAFA 2015), Prague, Czech Republic, 3-6 Novembre 2015.

**N. Aftim, G. Istamboulié, C. Calas-Blanchard, T. Noguier.** (Poster) Computational and biosensor investigation of molecular imprinted polymers for selective extraction of phosmet from olive oil. 7th International symposium on Recent Advances in Food Analysis (RAFA 2015), Prague, Czech Republic, 3-6 Novembre 2015.

**S. Romdhane**, M. Devers-Lamrani, C. Bertrand, **C. Calvayrac**, J.-F. Cooper, **L. Barthelmebs**, F. Martin-Laurent. (Poster) Impact écotoxicologique de la leptospermonone, un herbicide -tricétone naturel, sur l'abondance et la diversité de la communauté bactérienne du sol. 7ème colloque de l'Association Francophone d'Ecologie Microbienne, Anglet, France, 4-6 Novembre 2015.

A. Sharma, A. Hayat, R. K. Mishra, **G. Catanante**, S. Bhand and **J-L. Marty.** (Poster) Aptamer assay: A novel sensing platform for detection of target molecule using nanomaterial. BBMEC-11, Regensburg (Germany), 26-30 Septembre 2015.

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