

Production Scientifique de l'équipe MagenTa (ex-SOMAB)

Période 1/01/2016-30/12/2019

Publications

- P1-** A. Ghodbane, P. Bordat, N. Saffon, S. Blanc, S. Fery-Forgues.
From 2-phenylbenzoxazole to diphenyl-bibenzoxazole derivatives: Comparative advantages of mono- and bis-chromophores for solution and solid-state fluorescence.
Dyes & Pigments, **2016**, *125*, 282-291.
- P2-** A. Ghodbane, W. B. Fellows, J. Bright, D. Ghosh, L. M. Tolbert, S. Fery-Forgues, K. M. Solntsev.
Effects of the benzoxazole group on green fluorescent protein crystal structure and solid state photophysics.
Journal of Materials Chemistry C, **2016**, *14*, 2793-2801 (numéro spécial, sur invitation).
- P3-** N. Abid-Jarraya, K. Khemakhem, H. Turki-Guermazi, S. Abid, N. Saffon, S. Fery-Forgues.
Solid-state fluorescence properties of small iminocoumarin derivatives and their analogues in the coumarin series.
Dyes & Pigments, **2016**, *132*, 177-184.
- P4-** D. Hernández-Valdés, Z. Rodríguez-Riera, A. Díaz-García, E. Benoist, U. Jáuregui-Haza
Influence of the chelator structures on the stability of Re and Tc tricarbonyl complexes with iminodiacetic acid tridentate ligands: A computational study
Journal of Molecular Modeling, **2016**, *22*, 179
- P5-** N. Leygue, A. Boulay, C. Galaup, E. Benoist, S. Laurent, L. Vander Elst, B. Mestre-Voegtli, C. Picard
Optical and relaxometric properties of monometallic (Eu^{III}, Tb^{III}, Gd^{III}) and heterobimetallic (Re^I/Gd^{III}) systems based on a functionalized bipyridine-containing acyclic ligand
Dalton Transaction, **2016**, *45*, 8379–8393.
- P6-** M. Soulié, C. Carayon, N. Saffon, S. Blanc, S. Fery-Forgues.
A comparative study of nine berberine salts in the solid state: optimization of the photoluminescence and self-association properties through the choice of the anion.
Physical Chemistry Chemical Physics, **2016**, *18*, 29999-30008.
- P7-** C. Carayon, A. Ghodbane, L. Gibot, R. Dumur, J. Wang, N. Saffon, M. P. Rols, K. M. Solntsev, S. Fery-Forgues.
Conjugates of benzoxazole and GFP chromophore with aggregation-induced enhanced emission: Influence of the chain length on the formation of particles and on the dye uptake by living cells.
Small, **2016**, *12* (47), 6602-6612.

P8- R. Eychenne, S. Guizani, J.-H. Wang, C. Picard, N. Malek, P.-L. Fabre, M. Wolff, B. Machura, N. Lepareur, E. Benoist

Rhenium complexes based on a N₂O tridentate click scaffold: from synthesis and structural characterization to radiolabelling study

European Journal of Inorganic Chemistry, **2017**, 69-81.

P9- S. Chaabouni, F. Simonet, A. François, S. Abid, C. Galaup, S. Chassaing

3-trifluoromethylated coumarins and carbostyrils by radical trifluoromethylation of ortho-functionalized cinnamic esters

European Journal of Organic Chemistry, **2017**, 271-277.

P10- M. Enel, N. Leygue, S. Balayssac, S. Laurent, C. Galaup, L. Vander Elst, C. Picard

New polyaminocarboxylate macrocycles containing phenolate binding units: synthesis, luminescent and relaxometric properties of their lanthanide complexes

Dalton Transactions, **2017**, 46, 4654–4668.

P11- C. Carayon, S. Fery-Forgues.

2-Phenylbenzoxazole derivatives: a family of robust emitters of solid-state fluorescence. Photochem. Photobiol. Sci., **2017**, 16, 1020–1035.

P12- J.-H. Wang, M. Wolff, R. Eychenne, S. Mallet-Ladeira, E. Benoist

First dirhenium(I) hexacarbonyl complex bridged by 1,2,3-triazole ligand: synthesis, structural and spectroscopic characterization

Inorganica Chimica Acta, **2017**, 466, 551-558

P13- S. Chaabouni, N.M. Pinkerton, S. Abid, C. Galaup, S. Chassaing

Photochemistry of ortho-Azidocinnamoyl Derivatives – Facile and Modular Synthesis of 2-Acylated Indoles and 2-Substituted Quinolines under Solvent Control

SYNLETT, **2017**, 19, 2614-2618

P14- J.-H. Wang, R. Eychenne, S. Mallet-Ladeira, M. Wolff, N. Lepareur, E. Benoist

Design, synthesis and reactivity of semi-rigid multidentate ligands with rhenium(I) and rhenium(V) cores

European Journal of Inorganic Chemistry, **2017**, 3908-3918

P15- G. Dias, M. Prado, R. Ligabue, M. Poirier, C. Le Roux, F. Martin, S. Fery-Forgues, S. Einloft
Synthetic talc as a new platform for producing fluorescent clay polyurethane nanocomposites.

Applied Clay Science, **2018**, 158, 37-45.

P16- M. Enel, N. Leygue, N. Saffon, C. Galaup, C. Picard

Facile access to 12-membered macrocyclic ligand PCTA and novel derivatives including carboxylate, amide and phosphinate ligating functionalities.

Eur. J. Org. Chem. **2018**, 1765-1773 (note VIP: Very important Paper par l'éditeur)

P17- J.-H. Wang, B. Delavaux-Nicot, M. Wolff, S. Mallet-Ladeira, R. Métivier, E. Benoist, S. Fery-Forgues

The unsuspected influence of the pyridyl-triazole ligand isomerism upon the electronic properties of tricarbonyl rhenium complexes: an experimental and theoretical insight
Dalton Transactions, **2018**, 47, 8087-8099.

P18- N. Leygue, A. Perez e Iñiguez De Heredia, C. Galaup, E. Benoist, L. Lamarque, C. Picard
New advances in the synthesis of tripyridinophane macrocycles suitable to enhance the luminescence of Ln(III) ions in aqueous solution
Tetrahedron, **2018**, 74, 4272-4287 plus couverture

P19- Y. Aimene, R. Eychenne, S. Mallet-Ladeira, N. Saffon, J.-Y. Winum, A. Nocentini, C.T. Supuran, E. Benoist, A. Seridi
Novel Re(I) tricarbonyl coordination compounds based on 2-pyridyl-1,2,3-triazole derivatives bearing a 4-amino-substituted benzenesulfonamide arm: Synthesis, crystal structure, computational studies and inhibitory activity against carbonic anhydrase I, II and IX isoforms.
Journal Enzyme Inhibition Medicinal chemistry, **2019**, 34, 773-782

P20- N. Leygue, M. Enel, A. Diallo, B. Mestre-Voegtlé, C. Galaup, C. Picard
Efficient synthesis of a family of bifunctional chelators based on PCTA[12] macrocycle Suitable for bioconjugation
European Journal of Organic Chemistry, **2019**, 2899-2913

P21- C. Carayon, A. Ghodbane, N. Leygue, J. Wang, N. Saffon, R. Brown, S. Fery-Forgues
Mechanofluorochromic properties of an AIEE-active 2-phenylbenzoxazole derivative: more than meets the eye?
ChemPhotoChem, **2019**, 3, 545-553

P22- C. Galaup, L. Auriel, J. Dubs, C. Dehoux, V. Gilard, R. Poteau, E. Retailleau, G. Biasini, F. Collin, Blue wine, a color obtained with synthetic blue dye addition: two case studies.
European Food Research and Technology, **2019**, 245, 1777-1782.

P23- J. Wang, A. Poirot, B. Delavaux-Nicot, M. Wolff, S. Mallet-Ladeira, J. P. Calupitan, C. Allain, E. Benoist, S. Fery-Forgues
Optimization of aggregation-induced phosphorescence enhancement in mononuclear tricarbonyl Rhenium(I) complexes: The influence of steric hindrance and isomerism
Dalton Transactions, **2019**, 48, 15906-15916.

Brevets

B1- L. Lamarque, C. Picard, C. Galaup, N. Leygue, J. Zwier, E. Bourrier
Water-soluble sequestering agents containing triazapyridinophane and corresponding fluorescent complexes of lanthanide
PCT Int. Appl. (**2017**), WO 2017098180 A1 20170615

B2- L. Lamarque, C. Picard, C. Galaup, N. Leygue, J. Zwier, E. Bourrier
Water-soluble sequestering agents containing triazapyridinophane and corresponding fluorescent complexes of lanthanide

Fr. Demande (**2017**), FR 3045053 A1 20170616

B3- C. Aymonier, S. Fery-Forgues, C. Le Roux, F. Martin, P. Micoud, M. Poirier.
Matériaux hybrides organique/inorganique photoluminescents et procédé pour leur préparation.
French patent n° FR 1750612, 01/25/**2017**.

B4- C. Aymonier, S. Fery-Forgues, C. Le Roux, F. Martin, P. Micoud, M. Poirier.
Matériaux hybrides organique/inorganique colorés et procédé pour leur préparation.
French patent n° FR 1750613, 01/25/**2017**.

B5- C. Aymonier, S. Fery-Forgues, C. Le Roux, F. Martin, P. Micoud, M. Poirier
Coloured organic/inorganic hybrid materials and method for preparing same.
PCT/EP2018/051728 (**2018**), WO 2018/138148 A2

B6- C. Aymonier, S. Fery-Forgues, C. Le Roux, F. Martin, P. Micoud, M. Poirier (2018)
Photoluminescent hybrid organic/inorganic materials and method for preparing same.
PCT/EP2018/051736 (**2018**), WO 2018/138153 A2

B7- C. Aymonier, C. Carême, M. Claverie, S. Féry-Forgues, C. Le Roux, F. Martin, P. Micoud, M. Poirier.
Co-synthesis of phyllominerals with metallic particles and products obtained therefrom.
Patent n° WO **2019**/122339 A1

Chapitre de livre

CL1- A. Erriguible, C. Aymonier, S. Fery-Forgues, S. Marre, S. Glockner, A. Lemoine.
Une élaboration durable de nanocristaux organiques fluorescents par le procédé antisolvant supercritique.
Ouvrage de l'INSIS "Ingénierie verte", CNRS Editions, juin **2019**.