



COST TD1004 Action

**Theranostics Imaging and Therapy: An Action to Develop Novel
Nanosized Systems for Imaging-Guided Drug Delivery**

Annual Meeting

September 1st- September 3rd, 2013

POSTER PRESENTATIONS

WG1

1. Quantum Dots bioconjugates for imaging and diagnostic, Akram Yahia-Ammar, Aline Nonat, Loïc Charbonnière
2. Development of a quantum-dot-labelled magnetic immunoassay method for circulating colorectal cancer cell detection, Gazouli M, Lyberopoulou A, Pericleous P, Nikiteas N, Anagnou NP, Efstathopoulos EP
3. Study on active targeting of Y-90 and Lu-177 radiolabelled ultra-small AGuIX nano particles functionalized by octreotate, M. Maurin, U. Karczmarczyk, P. Garnuszek, R Mikołajczak, Ch. Truillet, F. Lux, O. Tillement
4. Lanthanide(III) complexes of a bis(pyridine-N-oxide) analogue of DOTA as potential MRI/NIR bimodal imaging probes, André F. Martins, Henrique F. Carvalho, João M.C. Teixeira, Carlos T.B. Paula, Petr Hermann, Svetlana Eliseeva, Stephane Petoud, Carlos Platas-Iglesias, Éva Tóth and Carlos F.G.C. Geraldes
5. Poly(ethylene glycol)-block-poly(4-vinyl pyridine): a versatile block copolymer for the preparation of hybrid nanoaggregates based on hydrophilic or hydrophobic superparamagnetic iron oxide nanoparticles useful as MRI contrast agents, Nuno Rocha, Joana Mendes, Luisa Durães, Hajar Maleki, Arménio Serra, Jorge Coelho and Carlos F.G.C. Geraldes
6. Structural studies and binding of LnDO3A-PiB derivatives to Abeta amyloid peptide, André F. Martins, Jean-François Morfin, Carlos F.G.C. Geraldes and Éva Tóth
7. Studies of Zirconium Coordination Chemistry in Aqueous Solution, Miroslav Pniok
8. Complexes of bis(benzyl)amino-phosphinate DOTA analog as albumin-binding MRI contrast agent, Peter Urbanovsky
9. Tuning of the thermodynamic and kinetic properties of Mn²⁺ complexes formed with cyclododecane derivatives: the effect of the nature of donor atoms, Z. Garda, E. Molnár, R. Botár, T. Fodor, F. K. Kálmán, Z. Kovács, I. Tóth, G. Tircsó

10. Equilibrium and kinetic investigation of lanthanide(III) and some M(II) complexes of H4OCTAPA, F. Kálmán, A. Végh, C. Platas-Iglesias, G. Tircsó
11. Zinc responsive contrast agents for MRI, Célia Bonnet, Fabien Caillé, Agnès Pallier, Franck Suzenet, Eva Toth
12. Paramagnetic Solid Lipid Nanoparticles as a novel platform for the development of molecular MRI probes, Mauro Botta, Gabriele A. Rolla, Lorenzo Tei, Simona Ghiani, Claudia Cabella, Alessandro Maiocchi
13. Lipidic nanoparticles incorporating multimeric Gd-AAZTA complexes, Giuseppe Gambino, Lorenzo Tei, Mauro Botta
14. Folate receptor targeted delivery of supramolecular drug-carriers monitored by PET, H. Schieferstein, A. Kelsch, J. Postema, B. Biesalski, H.G. Buchholz, N. Bausbacher, O. Thews, F. Roesch, R. Zentel, T.L. Ross
15. New methods for direct and mild ¹⁸F-labeling of macromolecules, J. Postema, T.L. Ross
16. Radiolabelling of different nanoparticles for dual-modality imaging, K. Stockhofe, D. Goempel, W. Tremel, T.L. Ross
17. Oligoproline-Octreotide Conjugates for Tumor Targeting, Patrick Wilhelm
18. Complexation of Cu^{2+} by DOTA^{5-} and its consequences to water exchange, Shima Karimi, Gail Hunter, Loïck Moriggi, Lothar Helm
19. TiO₂ nanoparticles as carries of ²²⁵Ac/²¹³Bi and ²¹²Pb/²¹²Bi in vivo generators, Edyta Leszczuk
20. Exendin-4 labeled with ^{99m}Tc, ¹¹¹In and ⁶⁸Ga - a comparative biodistribution evaluation, Dariusz Pawlak, Barbara Janota, Piotr Garnuszek, Renata Mikolajczak
21. Near-infrared Emitting Lanthanide Dendrimer Complexes for Biologic Imaging in Cells and in Small Animals, Stephane Petoud
22. A R_{2p}/R_{1p} ratiometric approach to visualize Matrix Metalloproteinase-2 activity by MRI, Valeria Catanzaro, Giuseppe Digilio, Valeria Menchise, Sergio Padovan, Martina Capozza, Linda Chaabane and Silvio Aime
23. Is the radiolabeling of DOTA-based phosphonic acids with ⁴⁴Sc efficient as NOTA-based phosphonic acids with ⁶⁸Ga ? R. Kerdjoudj, C. Alliot, P. Hermann, F. Rösch and S. Huclier-Markai.

WG2

24. Ultrasound-mediated drug delivery and imaging, Catharina DeLange Davies
25. Targeted-receptor Bimodal Probe for Sentinel Lymph Node Detection, João D.G. Correia, M. Morais, M.P.C. Campello, C. Xavier, S. Hernot, T. Lahoutte, V. Caveliers, & I. Santos
26. Multimodal contrast agent for the imaging of pancreatic amyloids in type 2 diabetes, B. Stransky-Heilkron, M. Plissonneau, P. Mowat, M. Dumoulin, C. Louis, F. Lux, O. Tillement, C. Marquette, V. Forge, X. Montet & Eric Allemann

27. A tyrosine-based amphiphilic chelating molecule for magnetic resonance imaging. Synthesis steps and characterization, C. Xamaphoummine, A. Babic, L. Helm, A.S.Chauvin, E. Allemann
28. In vitro cell interaction and in vivo biodistribution of poly (dl-lactide-co-glycolide) nanospheres with encapsulated selenium nanoparticles for the treatment of liver diseases, Magdalena Stevanovic (WG2/WG5)
29. Polymeric nanocapsule for triple-modal imaging as a theranostic system in cancer therapy, Jie Bai & Khuloud Al-Jamal
30. Small-core Gold Nanoparticles Stabilized with a Thiolated DOTA-based Ligand, F. Silva, M.P. Campello, L. Gano, A. Paulo & I. Santos

WG3

31. Labeling of AGuIX Nanoparticles with Gallium-68: initial *in vitro* and *in vivo* results, C. Tsoukalas, F. Lux, C. Truillet, S. Xanthopoulos, T. Tsotakos, N. Kyza, M. Paravatou-Petsotas, O. Tillement, P. Bouziotis
32. Nano-thermometer with Thermo-sensitive Polymer Grafted USPIOs behaving as Positive Contrast Agents in low-field MRI, Hannecart, D. Stanicki, L. Vander Elst, R.N. Muller, S. Lecommandoux, J. Thévenot, C. Bonduelle, A. Trotier, P. Massot, S. Miraux, O. Sandre, S. Laurent
33. Grafting of AGuIX® nanoparticles with an apoptosis marker, M. Dentamaro, S. Laurent, F. Lux, L. Vander Elst, C. Truillet, M. Plissonneau, O. Tillement, R.N. Muller
34. Carboxy-silane coated iron oxide nanoparticles: a convenient platform for bimodal imaging, D. Stanicki, S. Boutry, S. Laurent, L. Wacheul, E. Nicolas, L. Vander Elst, D.L.J. Lafontaine, R.N. Muller
35. Development and characterization of novel multimodal nanoplatforms of diamond for medical imaging, S. Montante, S. Laurent, L. Vander Elst, R.N. Muller
36. Targeting Immuno-liposomes using TCR-like antibodies directed against melanoma antigens, M. Saeed, E. Schooten, M. Bolkestein, T.L.M. ten Hagen, A.M.M. Eggermont, R. Debets, G.A. Koning

WG4

37. Identification of new bio-effects of ultrasound and microbubbles assisted drug delivery, Chantal Pichon

WG5

38. Superparamagnetically grafted multi-walled carbon nanotubes for dual-modality SPECT/MR biomedical imaging, Julie Tzu-Wen Wang
39. Comparative in vitro and in vivo evaluation of nanosized Liposome appropriately modified for being labelled with Tc-99m by two different radiolabelling approaches, Eirini Fragogeorgi