

Franck RUFFIER

Co-Head of Biorobotics Research Group, www.biorobotics.eu
Institute of Movement Sciences (ISM)
CNRS/ Aix-Marseille University, UMR 7287
CP910 163 av. de Luminy
13288 Marseille Cedex 09
Tel (Lab.): (+33/0) 4 91 82 83 66
franck.ruffier@univ-amu.fr
www.ism.univ-amu.fr/ruffier



h-index : 11 ; 438 Citations (Sum of the Times Cited, Web of Sciences, 29 Janv. 2016) www.researcherid.com/rid/G-4797-2013
h-index : 16 ; 1202 Citations (Google Scholar, 29 Janv. 2016) scholar.google.fr/citations?user=H_ylbpqAAAAJ&hl

University Curriculum:

- Feb. 2013: Defense of the “Accreditation to supervise research” (**Habilitation, HDR**), Aix-Marseille University
Sept. 2004: **PhD** from Grenoble INP
Thesis prepared at CNRS, Marseille within the Biorobotics Dpt. advised by N. Franceschini
PhD Thesis Title: Biomimetic Autopilot
Sept. 2000: **Engineer** from ESISAR / Grenoble INP (Automatic Control, Computer Sciences, Electronics)

Professional Experience:

- Since 2013: Co-Founder and Co-Head of the “Marseilles’ Flying Arena”, www.marseilles-flying-arena.eu
Feb/Mars 2012: Visiting Scientist invited by Prof. Michael Dickinson, Univ. of Washington, Seattle, **USA**
Since 2012: Co-Head of the Biorobotics Research Group at the Institute of Movement Science, Marseille
2009/2013: EU CURVACE project on the realization of an artificial compound eye www.curvace.org
April/May 2008: Visiting Scientist invited by Dr. T. Mukai at RIKEN, Nagoya, **Japan**
Since 2005: CNRS Research Scientist at the Institute of Movement Science, Marseille
2004-2005: PostDoc within the Biorobotic Research Group (headed by N. Franceschini), Marseille
1999-2000: Exch student at Lund Univ where I have passed a French Master (DEA) in Automatic Control, **Sweden**

7 most significant publications:

G. Sabiron, T. Raharijaona, L. Burlion, E. Kervental, E. Bornschlegl and **F. Ruffier** (2015)
“Suboptimal lunar landing GNC using nongimbaled optic-flow sensors”
IEEE Transactions on Aerospace and Electronic Systems (TAES), Vol. 51, Issue 4

F. Expert and **F. Ruffier** (2015) *Open Access*
“Flying over uneven moving terrain based on optic-flow cues without any need for reference frames or accelerometers”
Bioinspiration & Biomimetics, 10, 026003 (IOP)

J. R. Serres and **F. Ruffier** (2015)
“Biomimetic autopilot based on minimalistic motion vision for navigating along corridors comprising U-shaped and S-shaped turns”
Journal of Bionic Engineering (Elsevier), 12 (1), pp. 47 - 60

D. Floreano, R. Pericot-Camara, S. Viollet, **F. Ruffier** et al. (2013) **(IF: 9,8)**
“Miniature curved artificial compound eyes”
Proceedings of National Academy of Sciences of USA, PNAS, 2013 Jun 4, 110(23):9267-72

Expert F, Viollet S, **Ruffier F** (2011)
“Outdoor field performances of insect-based visual motion sensors”
Journal of Field Robotics, Wiley, 28(4):529-541

Serres J, Dray D, **Ruffier F**, Franceschini N (2008)
“A vision-based autopilot for a miniature air vehicle: joint speed control and lateral obstacle avoidance”
Autonomous Robots, Springer, 25(1-2):103-122

Franceschini N, **Ruffier F**, Serres J (2007) **(IF: 10,5)**
“A bio-inspired flying robot sheds light on insect piloting abilities”
Current biology, 17(4):329-335

Total number of publications in intern. Journals and referred Proceedings (Web of Science): 46

Total number of patent filed: 8

Awards and Prizes:

- 2008-2013-2015: J. Serres, F. Expert and G. Sabiron, the PhD of whom I supervised, received **4 prizes** for their PhD thesis.
2003-2011: 2 *best paper awards* at IEEE International Conferences – IEEE ICAR 2003 & IEEE Sensors 2011 –
2004: 1 *paper nominate* (Best vision paper finalist) at IEEE ICRA 2004
2005: « La Recherche » Prize with N. Franceschini and S. Viollet (French-speaking international research prize)