

AUBRY Jean-Pierre

President @ AubryConseil

Former Associated Professor, University Bourgogne France-Comté, Institute Femto-ST, France

Retired from position of CEO & CTO of Oscilloquartz Switzerland

2018 – xxxx : consultant “**AubryConseil**”, **RC Vannes, France**, www.aubryconseil.fr

- Strategic Support towards SME and start up, support for deriving business plan, looking for partners and funding, technical, international marketing, etc...Advisory Board member of various start up
- Cooperation on H2020 programs build-up
- Member of COPIL (Comité de Pilotage) of LABEX First-TF
- member of EFTF (European Frequency and Time Forum) scientific committee

Oct. 2015 -Sept.2017 : **Associated Professor, Chair of Excellence, UBFC, University Bourgogne Franche Comté , & LABEX Action, *Institute Femto-ST, Optic Department, Besançon***

- Research on Kerr and Brillouin non linearities on Whispering Gallery more fluoride-type material resonators, aiming to provide low noise stand alone microwave generation and combs generators, teaching solid state physics at ENSMM (engineering School), UBFC Besançon

2013-2017 : consultant “**AubryConseil**”, **RC Neuchâtel , Suisse**

- Strategic Support towards SME and start up, support for deriving business plan, looking for partners and funding, technical, international marketing, etc...Advisory Board member of various start up
- **Senior Scientist at EPFL-ESPLAB** (Electronic and Signal Processing laboratory, Neuchâtel) on time dissemination over wireless link at nanosecond level using White Rabbit protocol,
- contribution on OSEO-BPI France program build-up on “TaaS”, Time as a Service , project
- Marcel Ecabert Award, EFTF 2014

1979– 2012 : **Industrial activities**

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- **General Manager, CEO, 1998-2012, Oscilloquartz SA, subsidiary of Swatch Group, Switzerland, 100p** – components and Time-Frequency systems for telecommunication infrastructure – Network synchronization , PTP, GNSS receivers, Cesium Atomic clocks, low noise crystal oscillators, cooperation on MAC TFC program (European CSAC),
 - **Technical Manager, CTO, 1996-1998, Oscilloquartz SA, subsidiary of Swatch Group - Switzerland**
 - **Technical Manager, CTO, 1979-1996, CEPE. Thomson CSF (Thales)’s subsidiary – France –** Piezoelectric resonators (Quartz, LiTaO3, AlPO4,..), ion beam milling and chemical etching, X-ray, filters and oscillators

1975- 1979 – **PHD – University of Nancy I (France), Université de Nancy I, IUT de Longwy, CUCES-CNAM (Conservatoire national des Arts et Métiers)**

- Research activities on electronic transition in Rare Earth doped fluoride-type material – teaching basic physics of semiconductors.

1970- 1975 – Engineering school, **INSA** (Institut National des Sciences appliquées), **Rennes, France**- Option Génie Physique

Extract of publication (most representative publications)

Publications on physics state and infrared physics

- G.Villermain-Lecolier, G.Morlot, P.Strimer, J.P.Aubry and A.Hadni, *Physical Review B*, vol 15, number 1, Jan 1977, p130
- J.P.Aubry, G.Morlot, G.Villermain-Lecolier, and A.Hadni, *Infrared physics*, 1978, Vol.18, pp 901-908

Publication on acoustic materials properties and characterisation (quartz; XPO4, LiNbO3, ...)

- R. Brendel, J.J. Gagnepain, J.P. Aubry : , *Proc. 40th AFCE*. 1986, pp. 121, 126
- B.Capelle, Y.Epelboin, J.Detaint, D.Picchedda, J.P.Aubry, O.Cambon, *Proc. 21th EFTF*, 2007
- S Galliou, M Goryachev, R Bourquin, P Abbe, J-P Aubry, and M E Tobar, *Extremely Low Loss Phonon-Trapping Cryogenic Acoustic Cavities*, *Nature, Sci. Rep.* 3, 2132; DOI: 0.1038 / srep 02132 (2013).
- P.Hermet, J.Haines, J-P.Aubry – O.Cambon, *J.Phys.Chem.C*, 2016, 120(47), pp26645-26651

Publication on acoustic resonators design and filter devices

- J.P. Aubry, *Proc. of IEEE ultrasonic symposium*, 1983, p.478
- J.Detaint, J.P.Aubry, J.P.Michel, A.Zarka, B.Capelle, R.Lefevre, E.Philippot, J.Schwartz, *Proc. URSI symposium on Signals Systems and Electronics* p. 433-438 (1989).
- O. Cambon, M Deleuze, J.P. Michel, J.P. Aubry, E.Philippot, , *J. de Phys. IV, C2*, pp.85-91, 1994.

Publication on high stability oscillators and frequency sources

- K.K. Tuladhar, G Jenni, .JP. Aubry, *Proc. 11th EFTF*, p.273, 1997
- J. Chauvin, P. Weber, J.P. Aubry, F. Lefebvre, F. Sthal, S. Galliou, E. Rubiola and X. Vacheret, *Proc. AFCS & 21st EFTF*, 2007,

Publication on GNSS, Time transfer and Synchronisation

- F. Chastellain, C. Botteron, E. Firouzi, P.A. Farine, P. Weber, J.P. Aubry, *ION GNSS 2005*,
- M. Frei, D. Manetti, G. Zamuner, F. Chastellain, E. Firouzi, C. Botteron, P.-A. Farine, N. Voinol, P. Weber, and J.-P. Aubry, *Proc. AFCS & 21st EFTF*, 2007
- M.Frei, D.Manetti, E.Firouzi, G.Wälchli, C.Botteron, P.-A Farine, N.Voinol, P.Weber, J.-P. Aubry, *Proc. 22nd EFTF*, 2008
- M.Rico, C.Botteron, J.P.Aubry, P-A.Farine, “ns-level time transfer over a microwave link using PTP-WR protocol”, *ESPLAB-EPFL, Proc. 29th EFTF*, Denver, 2015

Publication on optical Oscillators and frequency sources

- S.Diallo, G.Lin, J.P.Aubry, Y.Chembo, *Brillouin scattering in Lithium Fluoride Crystalline resonator for microwave generation*,*Proc.30th EFTF*, York, 2016
- J-P. Aubry, S.Diallo, R.Martinenghi, Y.Chembo ; *Brillouin and Kerr-based Whispering Gallery Mode crystalline fluoride-type resonators for low noise microwave source*, *Proc.31st EFTF*, Besançon, 2017
- S.Diallo, J-P.Aubry, Y.Chembo, *Effect of crystalline family and orientation for ultra-low noise microwave generation based on Stimulated Brillouin Scattering in whispering-gallery mode resonators*, *Optics Express*, 2017, Vol. 25, No. 24 | 27 Nov 2017 | *OPTICS EXPRESS* 29934

Complete list of publications available on request