Ing. Vojtěch Petrucha, Ph.D.

Education

Ph.D. - 3/2012 - 2/2007, CTU in Prague, FEE, Department of Measurement, Sensors and Magnetics Laboratory, http://measure.feld.cvut.cz
Ing. (M.Sc.) - CTU in Prague, Faculty of Electrical Engineering, www.fel.cvut.cz
High School of Electrical Engineering, Bozetechova 3, Olomouc, www.spseol.cz

Stay abroad

9/2007 - 3/2008
Technical University of Denmark, Lyngby, Magnetometry section of the National Space Institute, www.space.dtu.dk

Work experience

Since 2009 - Department of Measurement, FEE CTU in Prague (2007-2011 – partial job).
2005 - ON Semiconductor - Roznov pod Radhostem, Wafer probing section
2006 - 2010 Novuco (Tuso, Hoodoo Bytes) HW, SW developer

Current projects

Non-magnetic Platform for Scalar Calibration of Magnetometers (and Accelerometers)

In Space Propulsion 1 - work within a group of european companies - institutes on a cryogenic propulsion system (development of a complete data acquisition chain for a new electric propellant turbopump testing), cooperation with Snecma (rockets and satellites engines division)

Vectorially compensated triaxial vector fluxgate magnetometer (SGS, CTU internal grant, TACR)

Past project

Microaccelerometer Physical Sensor Simulator (cooperation with VZLU)

Publications (2008-1012):

Janošek, M. - Ulvr, M. - Petrucha, V. - Kupec, J.: Triaxial Magnetic Compensation System for Well-defined Metrological Calibrations of Magnetometers. In *EMSA 2012 - Book of Abstracts*. Praha: CTU Publishing House, 2012, p. 155. ISBN 978-80-01-05078-1.

Petrucha, V.: An Offset Temperature Dependence of a Fluxgate Magnetometer and its Compensation. In *EMSA 2012 - Book of Abstracts*. Praha: CTU Publishing House, 2012, p. 50. ISBN 978-80-01-05078-1.

Petrucha, V. - Kašpar, P.: Calibration of a Sensitivity and Orthogonality Temperature Dependence of a Triaxial Vector Magnetometer. In *Magnetic Measurements 2012*. Bratislava: Slovak University of Technology, 2012, p. 21. ISBN 978-80-227-3770-8.

Petrucha, V. - Kašpar, P.: Magnetic Microwires Detection for Security Applications. In *56th Annual Conference on Magnetism and Magnetic Materials*. San Francisco: American Institute of Physics and Magnetic Society of the IEEE, 2011, p. 582.

Petrucha, V. - Mlejnek, P. - Ripka, P. - Chvojka, M. - Posolda, P.: Tester for a Space Micro-accelerometer. *Sensors and Actuators*. 2010, vol. 2010, no. A162-2, p. 324-328. ISSN 0924-4247.

Petrucha, V.: Single Op-Amp Fluxgate Signal Conditioning. In *Magnetic Measurements 2010*. Praha: Czech Technical University in Prague, 2010, p. 91-92. ISBN 978-80-01-04616-6.

Petrucha, V. - Kašpar, P.: Compact Fluxgate Sensor with a Vector Compensation of a Measured Magnetic Field. In *IEEE Sensors 2010 - Proceedings* [CD-ROM]. Stoughton, Wisconsin: IEEE Sensors Council, 2010, p. 1795-1798. ISBN 978-1-4244-8168-2.

Petrucha, V. - Ripka, P. - Kašpar, P. - Merayo, J.: Automated System for the Calibration of Magnetometers. *Journal of Applied Physics*. 2009, vol. 2009, no. 105, p. 07E704-1-07E704-3. ISSN 0021-8979.

Petrucha, V. - Kašpar, P.: Calibration of a Triaxial Fluxgate Magnetometer and Accelerometer with an Automated Non-magnetic Calibration System. In *IEEE SENSORS 2009 - The Eighth IEEE Conference on Sensors* [CD-ROM]. Christchurch: IEEE Sensors Council, 2009, p. 1510-1513. ISBN 978-1-4244-5335-1.

Petrucha, V. - Mlejnek, P. - Ripka, P. - Chvojka, M. - Posolda, P.: Tester for Space Micro-Accelerometer. In *Eurosensors XXIII: Sensors, Actuators and Micro/Nanosystems* [CD-ROM]. Lausanne: Elsevier Science, 2009, ISSN 1876-6196.

Petrucha, V. - Kašpar, P.: Algorithms for Scalar Calibration of Magnetometers. In *Magnetic Measurements' 08*. Budapest: Hungarian Academy of Sciences, 2008, p. 45.

Petrucha, V. - Kašpar, P. - Ripka, P. - Merayo, J.M.G.: Automated System for the Calibration of Magnetometers. In *53rd Annual Conference on Magnetism and Magnetic Materials - Book of Abstracts [CD-ROM]*. Austin: American Institute of Physic , 2008, p. 202. ISSN 1087-3848.

Petrucha, V. - Merayo, J.M.G. - Brauer, P. - Primdahl, F. - Kašpar, P.: Non-Magnetic Platform for Scalar Calibration of Magnetometers. In *IEEE SENSORS 2008 - The Seventh IEEE Conference on Sensors* [CD-ROM]. Lecce: IEEE Sensors Council, 2008, p. 1444-1447. ISSN 1930-0395.

Petrucha, V. - Merayo, J.M.G. - Brauer, P. - Primdahl, F. - Kašpar, P.: Non-Magnetic Platform for Scalar Calibration of Magnetometers. In *IEEE SENSORS 2008 - The Seventh IEEE Conference on Sensors*. Lecce: IEEE Sensors Council, 2008, p. 735-736.