

Coauthors' approval of the contribution Petr Šidlof in joint publications

1a) Journal papers (with impact factor)

- [1] Šidlof P., Zörner S., Hüppe A. (2014), A hybrid approach to computational aeroacoustics of human voice production, *Biomechanics and Modeling in Mechanobiology*, pp. 1–17, DOI 10.1007/s10237-014-0617-1 (accepted for publication Sep 2, 2014, in press)
Contribution of Petr Šidlof: 50%
- [2] Šidlof P., Horáček J., Řidký V. (2013), Parallel CFD simulation of flow in a 3D model of vibrating human vocal folds, *Computers & Fluids* 80, pp. 290–300, DOI 10.1016/j.compfluid.2012.02.005
Contribution of Petr Šidlof: 90%
- [3] Šidlof P., Doué O., Cadot O., Chaigne A. (2011), Measurement of flow separation in a human vocal folds model, *Experiments in Fluids* 51(1), pp. 123–136, DOI 10.1007/s00348-010-1031-9
Contribution of Petr Šidlof: 70%
- [4] Kriesburg S., Thomson S. L., Barney A., Triep M., Šidlof P. et al. (2011), In vitro experimental investigation of voice production, *Current Bioinformatics* 6(3), pp. 305–322, DOI 10.2174/157489311796904637
Contribution of Petr Šidlof: 10%
- [5] Šidlof P., Švec J. G., Horáček J., Veselý J., Klepáček I. et al. (2008), Geometry of human vocal folds and glottal channel for mathematical and biomechanical modeling of voice production, *Journal of Biomechanics* 41(5), pp. 985–995, DOI 10.1016/j.jbiomech.2007.12.016
Contribution of Petr Šidlof: 50%
- [6] Horáček J., Laukkanen A.-M., Šidlof P. (2007), Estimation of impact stress using an aeroelastic model of voice production, *Logopedics Phoniatrics Vocology* 32, pp. 185–192, DOI 10.1080/14015430600628039
Contribution of Petr Šidlof: 20%
- [7] Horáček J., Šidlof P., Švec J. G. (2005), Numerical simulation of self-oscillations of human vocal folds with Hertz model of impact forces, *Journal of Fluids and Structures* 20(6), pp. 853–869, DOI 10.1016/j.jfluidstructs.2005.05.003
Contribution of Petr Šidlof: 20%

1b) Journal papers (peer-reviewed, without impact factor)

- [8] Horáček J., Šidlof P., Urbá V., Veselý J., Radolf V. et al. (2010), Coherent structures in the flow inside a model of the human vocal tract with self-oscillating vocal folds, *Acta Technica* 55, pp. 327–343
Contribution of Petr Šidlof: 25%
- [9] Šidlof P., Lanéville E., Chambeyron C., Doué O., Chaigne A. et al. (2010), Finite Element Modeling of Airflow During Phonation, *Applied and Computational Mechanics* 4(1), pp. 121–132
Contribution of Petr Šidlof: 75%
- [10] Horáček J., Laukkanen A.-M., Šidlof P., Murphy P., Švec J. G. (2009), Comparison of acceleration and impact stress as possible loading factors in phonation: a computer modeling study, *Folia Phoniatrica Logopaedica* 61(3), pp. 137–145
Contribution of Petr Šidlof: 12.5%

2) Conference papers (international)

- [1] Šidlof P., Vlček V., Štěpán M., Horáček J., Luxa M. et al. (2014), Wind tunnel measurements of flow-induced vibration of a NACA0015 airfoil model, in: *Proceedings of the ASME 2014 PVP Conference - symposium Fluid-structure interaction*, Anaheim, CA, USA
Contribution of Petr Šidlof: 75%
- [2] Šidlof P., Zörner S., Hüppe A. (2014), Vowel spectra simulated using a 3D aeroacoustic model of phonation, in: *International Conference on Voice Physiology and Biomechanics - ICVPB 2014*, Salt Lake City, UT, USA
Contribution of Petr Šidlof: 50%
- [3] Šidlof P., Štěpán M., Vlček V., Řidký V., Šimurda D. et al. (2014), Flow past a self-oscillating airfoil with two degrees of freedom: measurements and simulations, *EPJ Web of Conferences* 67, pp. 02108, DOI 10.1051/epjconf/20146702108, (Experimental Fluid Mechanics 2013, Kutná Hora, Czech Republic)
Contribution of Petr Šidlof: 50%
- [4] Bílek P., Šidlof P. (2014), Detection of damage of a filter by visualization of filtration process, *EPJ Web of Conferences* 67, pp. 02008, DOI 10.1051/epjconf/20146702008, (Experimental Fluid Mechanics 2013, Kutná Hora, Czech Republic)
Contribution of Petr Šidlof: 12.5%
- [5] Řidký V., Šidlof P. (2014), Parallel numerical simulation of oscillating airfoil NACA0015 in the channel due to flutter instability, *EPJ Web of Conferences* 67, pp. 02098, DOI 10.1051/epjconf/20146702098, (Experimental Fluid Mechanics 2013, Kutná Hora, Czech Republic)
Contribution of Petr Šidlof: 12.5%
- [6] Šidlof P., Zörner S. (2013), Computational aeroacoustics of human phonation, *EPJ Web of Conferences* 45, pp. 01083p.1-8, DOI 10.1051/epjconf/20134501085, (Experimental Fluid Mechanics 2012, Hradec Králové, Czech Republic)
Contribution of Petr Šidlof: 75%
- [7] Bílek P., Šidlof P. (2013), Measuring of filtration efficiency of nonwoven textiles in volume from scattered light by seeding particles, *EPJ Web of Conferences* 45, pp. 01014, DOI 10.1051/epjconf/20134501014, (Experimental Fluid Mechanics 2012, Hradec Králové, Czech Republic)
Contribution of Petr Šidlof: 12.5%
- [8] Zörner S., Šidlof P., Hüppe A., Kaltenbacher M. (2013), Acoustic perturbation equations and Lighthill's acoustic analogy for the human phonation, *Proceedings of Meetings on Acoustics* 19(1), pp. 060309, DOI 10.1121/1.4799392
Contribution of Petr Šidlof: 25%
- [9] Řidký V., P. Šidlof, Vlček V. (2013), Numerical simulations of the flow with the prescribed displacement of the airfoil and comparison with experiment, *EPJ Web of Conferences* 45, pp. 01080, DOI 10.1051/epjconf/20134501080, (Experimental Fluid Mechanics 2012, Hradec Králové, Czech Republic)
Contribution of Petr Šidlof: 12.5%
- [10] Šidlof P., Zörner S., Hüppe A. (2013), Numerical simulation of flow-induced sound in human voice production, *Procedia Engineering* 61, pp. 333-340, DOI 10.1016/j.proeng.2013.08.024, (Parallel CTI) 2013, Changsha, China)
Contribution of Petr Šidlof: 75%
- [11] Horáček J., Bílek V., Radolf V., Šidlof P. (2013), Impact stress in a self-oscillating model of human vocal folds, in: *International Conference on Vibration Problems 2013*, Lisbon, Portugal
Contribution of Petr Šidlof: 12.5%
- [12] Šidlof P., Horáček J., Řidký V. (2012), Analysis of the flow field in a 3D model of convergent and divergent vocal folds, in: *International Conference on Voice Physiology and Biomechanics - ICVPB*

- [13] Bílek P., Šidlof P., Huřka J. (2012). Visualization of water flow during filtration using flat filtration materials. *EPJ Web of Conferences* 25, pp. 01005, DOI 10.1051/epjconf/20122501005, (Experimental Fluid Mechanics 2011, Jičín, Czech Republic)
Contribution of Petr Šidlof: 12.5%
- [14] Bílek P., Šidlof P., Wiener J. (2012). Testing of nanofibrous textiles by one micrometer particles on the basis of visualization of filtration process, in: *12th World Textile Conference Antex*, Zadar, Croatia
Contribution of Petr Šidlof: 12.5%
- [15] Šidlof P., Horáček J., Staněk J. (2011). Parallel CFD simulation of flow on moving meshes on a heterogeneous computational cluster, in: *Parallel CFD 2011*, Barcelona, Spain
Contribution of Petr Šidlof: 75%
- [16] Šidlof P., Müller B., Horáček J. (2011). Numerical Analysis of Airflow in Human Vocal Folds Using Finite Element and Finite Volume Method, in: *Computational Fluid Dynamics 2010*, Springer, pp. 917-919 (ICCFD6, St. Petersburg, Russia)
Contribution of Petr Šidlof: 87.5%
- [17] Šidlof P., Horáček J. (2010). Flow separation from the vocal fold surface, in: *Advances in Quantitative Laryngoscopy - AQL 2010*, Erlangen, Germany
Contribution of Petr Šidlof: 75%
- [18] Šidlof P., Doaré O., Cadot O. (2010). Coherent turbulent structures in flow through the human vocal tract, in: *Experimental Fluid Mechanics 2010*, Liberec, Czech Republic
Contribution of Petr Šidlof: 75%
- [19] Horáček J., Šidlof P., Uruba V., Veselý J., Radolf V. et al. (2009). PIV Measurement of Flow Patterns in a Human Vocal Tract Model, in: *Proceedings NAG/DAGA 2009*, Rotterdam, Netherlands, pp. 1737-1740
Contribution of Petr Šidlof: 25%
- [20] Šidlof P., Horáček J. (2009). Pressure profiles in glottis during phonation, in: *3rd Advanced Voice Function Assessment International Workshop*, Madrid, Spain, pp. 9-12
Contribution of Petr Šidlof: 75%
- [21] Horáček J., Švec J. G., Šidlof P. (2009). Numerical simulation of videokymographic images of self-oscillating vocal folds, in: *Proceedings of 3rd Advanced Voice Function Assessment International Workshop*, Madrid, Spain, pp. 13-16
Contribution of Petr Šidlof: 25%
- [22] Šidlof P., Doaré O., Chaigne A. (2009). Flow separation in flow-induced vibration of human vocal folds, in: *Fluid & Elasticity 2009*, Carry-le-Rouet, France, pp. 64-64
(bodové hodnocení: 2, podíl: 75%, body: 1.5)
- [23] Šidlof P., Chaigne A., Doaré O., Cadot O. (2008). Simulation of acoustic pressure and flow velocity in human glottis, *Journal of the Acoustical Society of America* 123(5), pp. 3664 (Acoustics '08, Paris, France)
Contribution of Petr Šidlof: 75%
- [24] Šidlof P., Doaré O., Cadot O., Chaigne A., Horáček J. (2008). Mathematical and physical modeling of flow-induced vibrations of human vocal folds, in: *International Conference on Flow Induced Vibration - FIV 2008*, Prague, Czech Republic, pp. 141-146
Contribution of Petr Šidlof: 87.5%
- [25] Šidlof P., Doaré O., Cadot O., Chaigne A., Horáček J. (2008). Finite element modeling of airflow in vibrating vocal folds, in: *International Conference on Voice Physiology and Biomechanics - ICVPB 2008*, Tampere, Finland, pp. 199-201
Contribution of Petr Šidlof: 75%

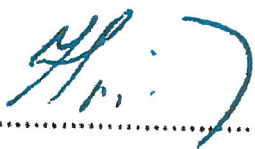
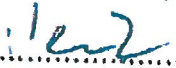
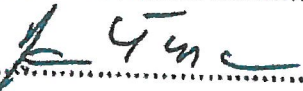
- [26] Šidlof P., Douaré O., Cadot O., Chaigne A., Horáček J. (2007), PIV measurements of velocity fields in glottis on a physical vocal fold model, in: *Models and analysis of vocal emissions for biomedical applications - MAEBA 2007*, Firenze, Italy, pp. 177-180
Contribution of Petr Šidlof: 75%
- [27] Horáček J., Laukkanen A.-M., Šidlof P. (2007), Estimation of output-cost-ratio using an aeroelastic model of voice production, in: *Models and analysis of vocal emissions for biomedical applications - MAEBA 2007*, Firenze, Italy, pp. 105-108
Contribution of Petr Šidlof: 25%
- [28] Horáček J., Šidlof P., Švec J. G., Griffond-Boitier F., Laukkanen A.-M. (2006), Computational simulation of production of Czech vowels using an aeroelastic model of the vocal folds and a FE model of the vocal tract, in: *International Conference on Voice Physiology and Biomechanics - ICTPB 2006*, Tokyo, Japan, pp. 73-74
Contribution of Petr Šidlof: 25%
- [29] Horáček J., Laukkanen A.-M., Šidlof P., Švec J. G., Murphy P. (2006), Estimation of impact stress and acceleration using an aeroelastic model of voice production, in: *The Voice Foundations: 55th Annual Symposium - Care of the Professional Voice*, Philadelphia, USA
Contribution of Petr Šidlof: 25%
- [30] Šidlof P., Douaré O., Cadot O., Laméville F., Chambeyron C. et al. (2006), Flow past a 2D vibrating model of vocal folds: FEM calculations and PIV measurements., in: *Journée d'étude "Cordes Vocales", 2006*, Palaiseau, France
Contribution of Petr Šidlof: 75%
- [31] Horáček J., Griffond-Boitier F., Šidlof P., Švec J. G., Laukkanen A.-M. (2006), Computational Modelling of Production of Vowels, in: *6th European Solid Mechanics Conference - ESAC 2006*, Budapest, Hungary
Contribution of Petr Šidlof: 10%
- [32] Horáček J., Laukkanen A.-M., Šidlof P. (2005), Studies with an Aeroelastic Model of Human Vocal Folds Vibration: Closing Rate of the Glottis in SPL Control, in: *The Voice Foundations 34th Annual Symposium - Care of the Professional Voice, 2005*, Philadelphia, USA
Contribution of Petr Šidlof: 25%
- [33] Horáček J., Laukkanen A.-M., Šidlof P. (2005), Preliminary observations of impact stress using an aeroelastic model of voice production, in: *The 6th Pan European Voice Conference : PEVOC 6, 2005*, London, UK
Contribution of Petr Šidlof: 25%
- [34] Horáček J., Šidlof P., Švec J. G., Griffond Boitier F. (2005), Numerical simulation of human voice production using aeroelastic model of self-oscillations of the vocal folds and finite element model of the vocal tract, in: *Third MIT Conference on Computational Fluid and Solid Mechanics 2005*, Cambridge, USA, pp. 984-988
Contribution of Petr Šidlof: 25%
- [35] Šidlof P., Horáček J. (2005), Vocal fold motion and voice production: mathematical modelling and experiment, in: *Forum Acusticum 2005: 4th European Congress on Acoustics*, Budapest, Hungary, pp. 2737-2741
Contribution of Petr Šidlof: 87.5%
- [36] Šidlof P., Veselý J., Švec J. G., Šram F., Horáček J. (2005), Videokymographic and acoustic analysis of vibration of silicone lips for use in tracheo-esophageal shunt valves, in: *High Tech Rehabilitation after Laryngectomy, 2005*, Groningen, The Netherlands, pp. 37-37
Contribution of Petr Šidlof: 75%

3) Conference papers (Czech)

- [37] Řídký V., Šidlof P., Vlček V. (2013), Parallel numerical simulation of airflow past an oscillating NACA0015 airfoil, in: *Engineering Mechanics 2013*, Svratka, Czech Republic, pp. 497-501
Contribution of Petr Šidlof: 12.5%
- [38] Horáček J., Laukkanen A.-M., Šidlof P. (2007), Computer modelling of relations between glottal area variation and sound pressure level at the vibrating vocal folds, in: *Engineering Mechanics 2007*, Svratka, Czech Republic, pp. 81-82
Contribution of Petr Šidlof: 10%
- [39] Šidlof P., Doaré O., Cadot O., Cherfa L., Chaigne A. et al. (2006), PIV Measurements of Flow Past a Self-Vibrating Model of Vocal Folds, in: *Interactions and Feedbacks 2006*, Prague, Czech Republic
Contribution of Petr Šidlof: 75%
- [40] Horáček J., Laukkanen A.-M., Šidlof P. (2005), Preliminary observations of impact stress using an aeroelastic model of voice production, in: *Interaction and feedbacks 2005*, Prague, Czech Republic, pp. 25-32
Contribution of Petr Šidlof: 10%

Coauthors

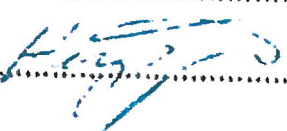
Jaromír Horáček (IT CAS, Prague)
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