

PROGRAM
of the 40th International Lung Sounds Association
Conference



St. Petersburg Electrotechnical University “LETI”

St. Petersburg, Russia

24th – 25th September 2015

Please, pay your attention that the **session 2** is transferred to **room 5652** (5th Building, 6th floor) and **skype session** is transferred to **small conference hall** (room 3202, 3rd Building, 2nd floor). Our signs will help you to find the way. Thank you for understanding.

CONFERENCE PROGRAM

24th September

9:00 – 10:00 – registration (5th building, conference hall).

10:00 – 10:30 – opening ceremony:

1. Welcome address of LETI Vice-Rector for Research Prof. Mikhail Shestopalov.
2. Welcome address of ILSA President Sadami Ishikawa.
3. Welcome address of ILSA-40 organizers – Alexander Dyachenko.

10:40 – 13:00 – session 1 (6 reports). Chairmen: Shoji Kudo, Alexander Dyachenko

10:40 – 11:00 – *Noam Gavriely, Yulia Goryachev, Yael Buchnik and Amir Ohad.*
«Measuring CABS in Obstructive Airways Diseases».

11:00 – 11:20 - coffee break

11:20 – 11:40 – *Noam Gavriely, Yael Buchnik, Yulia Goryachev and Amir Ohad.*
«Quantitative CABS monitoring in asthma management».

11:40 – 12:00 – *Irina Pochekutova, Vladimir Korenbaum, Veronika Malaeva, Anatoly Kostiv, Valentina Kudryavtseva.*
«Bronchial obstruction patients clusterization by means of two-dimensional analysis of forced expiratory tracheal noise time and band pass energy».

12:00 – 12:20 – *Anna Glazova, Anastasiya Makarenkova, Ekaterina Tur, Marina Pohaznikova.*
«Comparison of chest lung sounds in patients with asthma, COPD and healthy lungs».

12:20 – 12:40 – *Juan Carlos Aviles-Solis, Peder Halvorsen, and Hasse Melbye.*
«Inter-observer variation in categorizing lung sounds».

12:40 – 13:00 – *Yukio Nagasaka, Michiko Tsuchiya, Chizu Habukawa, Chikara Sakaguchi, and others.*
«Breath sounds as biomarker in the management of bronchial asthma».

13:00 – 14:00 – lunch (5th building, dining hall)

14:00 – 16:20 – session 2 (8 reports). Chairmen: Noam Gavriely, Yukka Rasanen
room 5652 5th Building, 6th floor

14:00 – 14:20 – *Michiko Tsuchiya, Yukio Nagasaka, Chikara Sakaguchi, and others.*
«Fine crackles as biomarker of interstitial pneumonia».

14:20 – 14:40 – *Vladimir Korenbaum, Irina Pochekutova, Veronika Malaeva and Anatoly Kostiv.*
«Acoustic biomechanical relationships of forced exhalation revealed by analysis of variance among groups with various degree of bronchial obstruction».

14:40 – 15:00 – *Veronika Malaeva, Irina Pochekutova, Anatoly Kostiv, Svetlana Shin and Vladimir Korenbaum.*
«The correlation between forced expiratory tracheal noise parameters and lung function characteristics in healthy, asthma and COPD patients».

15:00 – 15:20 – *Irina Pochekutova, Vladimir Korenbaum, Veronika Malaeva.*
«An approximate estimation of forced expiratory bronchial resistance in asthma and COPD patients by means of biomechanical and acoustical surrogate measures».

15:20 – 15:40 – *Alexander Dyachenko, Anna Mikhaylovskaya, Victor Vasiliev.*
«On the nature of elastic waves generated by chest wall percussion».

15:40 – 16:00 – *Anton Shiryayev, Vladimir Korenbaum.*
«The features of sound propagation through healthy human lungs, revealed by transmission sounding with complex acoustic signals in 80-1000 Hz frequency band».

16:00 – 16:20 – *Maria Safronova, Irina Pochekutova, Vladimir Korenbaum, Veronika Malaeva.*
«Bronchodilator response of peak frequency of forced expiratory wheezes in healthy and patients with bronchial obstruction».

16:20 – 16:40 - coffee break (room 5652 5th Building, 6th floor)

16:40 – 17:40 – session 3 (Skype presentations). Chairmen: Sadamu Ishikawa, Vladimir Korenbaum
Small conference hall, 3rd Building, room 3202

16:40 – 17:00 - *Hiroshi Nakano and Akemi Nakano.*
«Development of a digital filter to convert mic-sounds to stethoscope-sounds».

17:00 – 17:20 – *Alex Rudnitskii.*
«Heart sound cancellation from lung sound recordings using empirical mode decomposition technique».

17:20 – 17:40 – *Thomas Talbot.*
«Assessment metrics & performance specifications for a virtual standardized patient comprehensive pulmonary auscultation simulator».

17:40 – 18:00 – *Raymond Murphy, Founder of ILSA.* «History of ILSA».

18:20 – 20:00 – get-together party (5th building, University restaurant).

25th September

9:00 – 11:40 – session 4 (8 reports). Chairmen: Zafar Yuldashev, Noam Gavriely

9:00 – 9:20 – *Masato Takase.*

«Determination of lung sound spectral parameters with and without background noise subtraction».

9:20 – 9:40 – *Vladimir Korenbaum, Alexandr Tagiltcev, Anatoly Kostiv, Sergei Gorovoy and Anton Shiryaev.*

«A comparative analysis of acoustic sensors for recording respiratory sounds at the chest surface».

9:40 – 10:00 – *Victor Kopiev, Michail Mironov and Michail Yakovets.*

«On a possible mechanism of sound generation and amplification in a corrugated tube».

10:00 – 10:20 – *Sadamu Ishikawa, and Peter La Camera.*

«Small pneumothorax managed without chest tube insertion with guide of lung sound mapping in 2 young patients with polycystic lung disease».

10:20 – 10:40 – *Sadamu Ishikawa, Peter La Camera.*

«Cardiac response to respiration in deep breath-in vs. 2 breath-in and 2 breath-out».

10:40 – 11:00 – *Alexander Kalinkin, A.N. Varaksin, S.B. Gatilov, N.I. Kurenkov.*

«New approach to evaluation of sleep breathing disorders based on the analysis of the sounds of snoring and pauses of breathing cycle».

11:00 – 11:20 – *Anatoly Kostiv, Vladimir Korenbaum.*

«Monitoring physiologic status of a diver by means of respiratory sounds recorded under diving suite in situ».

11:20 – 11:40 – coffee break

11:40 – 13:00 - session 6 (posters). Chairpersons: Olga Kuznetsova, Yukio Nagasaka

1. *Anna Mikhaylovskaya, Alexander Dyachenko, Antonina Osipova.*

«Tracheal sounds of forced expiration during short- and long-term immersion».

2. *Yuri Gorshkov.*

«Computerized respiratory sounds analysis on the basis of multilevel wavelet transform».

3. *Anna Poreva, Yevgeniy Karplyuk, Anastasiia Makarenkova and Anatoliy Makarenkov.*

«Application of polyspectrum analysis to diagnostic signs' detection of lung Sounds in patients with the chronic obstructive pulmonary disease».

4. *Natalya Geppe, Elena Pavlinova, T.I. Safonova, Irina Kirshina.*

«Possibilities of a computer bronchophonography in diagnostics malfunction of external respiration at children with cystic fibrosis».

5. *Natalya Geppe, Svetlana Shatalina, Vladimir Malishev, L.S. Starostina, N.G. Kolosova, A.M. Borovkova, Buharov D.G.*

«Computer bronchophonography as a new method for lung function assessment in children with bronchopulmonary diseases».

6. *Vladimir Korenbaum, Alexandr Tagiltcev, Sergei Gorovoy, Anton Shiryaev and Anatoly Kostiv.*

«On estimating a wheezing source distance by means of intensimetry processing of sound responses recorded above the chest».

7. *Dmitry Balakin, Vitaly Shtykov.*

«Processing breath sounds with the Gauss-Hermite functions».

8. *Alexander Dyachenko, Gregory Lyubimov, Inna M. Skobeleva, Mark M. Strongin.*

«Study of sound generation in the area of dynamic trachea collapse as a source of forced expiratory tracheal noise».

13:00 – 13:30 - closing ceremony

1. From ILSA-40 organizers – Vladimir Korenbaum,
2. From the host-organizers of ILSA-40 – Zafar Yuldashev,
3. ILSA President Sadamu Ishikawa,
4. From ILSA-41 organizers – Masato Takase.
5. Wishing to speak.

13:40 – 14:30 - lunch

14:40 – 19:40 - city tour, meeting place: 5th building yard, near the monument to Alexander Popov.