ANALYTICAL CHEMISTRY TODAY AND TOMORROW. PITTCON 2012 - 2015

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In 1949, in Pittsburgh (USA) held a scientific conference, initiated a non-profit Corporation, United Pittsburghese spectroscopic society (SSP) and the Society of analytical chemists of Pittsburgh (SASP). Since 1968, when the number of participants exceeded 5.000 people each year the conference was held in large U.S. cities. However, the title of the conference «PITTCON» remained.

The aim of our study was to analyze the scientometric data conferences «PITTCON» 2012-2015. In programs conference presents all modern methods of analysis. During the conference, an exhibition of the latest analytical instruments. «PITTCON» -2015 will be held March 8-12 in New Orleans.

In 2014, «PITTCON» the number of reports was dominated by chromatographic methods of analysis - 390 (120 chromatography - mass spectrometry). In General, methods of spectroscopy was dedicated 172 report. All types of sensors have been reported in the 140 reports. Electrochemical methods of analysis were presented in 128 reports, mass spectrometry (without chromatography) in 93, capillary electrophoresis 42, chemical analysis 20.

According to the statistics 40-50% of all analytical determinations performed chromatography methods (petrochemical up to 70%). The most commonly used HPLC (83 report), UHPLC (34), HPLC-MS and HPLC-MS/MS (84), hydrophilic (10), ion (30), chiral (16). 90 papers presented at various gas chromatography.

Among spectroscopic and related techniques – Raman spectroscopy - 50 reports, infrared spectroscopy (45), fluorescence (30), UV-visible spectroscopy (16), inductively coupled plasma (12), atomic absorption-NMR (9) and other.

Proposed and investigated many of the newest sensors - electrochemical, chemical and biosensors, sensors based ionic liquids, microfluidic, other.

Many of the scientific sessions at the conference took place from pharmacy (158), biochemistry and medicine (152), food analysis (94), environmental control (92), industrial analyses (214), clinical methods of analysis (70) and other.

Among the new scientific sessions select nanotechnology, nanomaterial's (52 reports), proteomics, metabolomics, glycomics, lipidomics, peptidomics and others (36 reports), microfluidics (65 reports), ionic liquids (as a fixed phase in gas chromatography, solvents, standard electrodes) -15 reports.

Conclusions. «PITTCON» is the signature event in the world of analytical chemistry in the number of papers and participants. Conference materials permit comprehensive scientometric data with modern development methods, analytical chemistry, applied spectroscopy, and analytical instruments.