MINUTES No 1
of the meeting of Scientific Committee
of VII International Competition of COOMET
"The Best Young Metrologist 2017"

Astana, Kazakhstan 17 May 2017

Participants:
Chairperson of Scientific Committee:
Vladimir KRUTIKOV, COOMET, Russia;

Members of Scientific Committee:
Pavel NEYEZHMAKOV, COOMET, Ukraine;
Toktabek TOKANOV, COOMET, Kazakhstan;
Nikolai ZHAGORA, COOMET, Belarus;
Hans-Dieter VELFE, COOMET. Germany;
Stephen PATORAY, BIML, France;
Chingis KUANBAYEV, BIPM, France;
Linoh MAGAGULA, AFRIMETS, South Africa;
Klaus-Dieter SOMMER, EURAMET, Germany;
Claire SAUNDRY, SIM, USA;

Secretary of Scientific Committee:
Karlygash Sattybayeva, COOMET, Kazakhstan.

Issues:
1. Approving the list of the reports presented for the competition.
2. Approving the evaluation criteria of the reports presented for the competition.
3. Approving the amount of prizes for the winner and the 2nd and the 3rd place winners.

Decisions:
1. Approve the list of the reports presented for the competition (Annex 1).
2. Approve the evaluation criteria of the reports presented for the competition (Annex 2).
3. Approve the following amount of prizes:
   for the winner of the competition –500 €;
   for the 2nd place awardee – 300 €;
   for the 3rd place awardee – 200 €.

Chairperson of Scientific Committee
COOMET President V.Krutikov

Secretary of Scientific Committee K. Sattybayeva

Annex 1

№	Name	Country	Title of the paper
1	Aliaksey Valynets	Belarus, COOMET	Improving accuracy characteristics of the National standard unit of power flux density NE RB 26-15 through the reduction of error due to impedance mismatch in the microwave measuring tract
2	Diana Sentemova	Belarus, COOMET	Comparison of the Josephson voltage standards of the Republic of Belarus and Russian Federation
3	Irina Filipchik	Belarus, COOMET	Research of metrological characteristics of the National Standard of Electrical Resistance Unit
4	Lyubov Chaikova	Belarus, COOMET	Creating a reference source of the light flux on the basis of LED lamps
5	Edyta Beyer	Germany, COOMET	Surface analysis by XRF and XPS for the Avogadro constant and the realization of the kilogram based on silicon spheres
6	Paula Weidinger	Germany, COOMET	Extending the Torque Calibration Range – Necessity and Outline of a Mathematical Approach
7	Albert Adibekyan	Germany, COOMET	A Facility for Spectral Emissivity Measurement under Vacuum for Industrial and Remote Sensing Applications
8	Amanzhol Abiev	Kazakhstan, COOMET	Evaluation of indirect measurement uncertainty in analytical chemistry
9	Zhanat Daev	Kazakhstan, COOMET	Method for measuring the pulsating flow rate of liquids and gases
10	Igor Saprikin	Kazakhstan, COOMET	Application of oil absorption in case of measurements of temperature of a dew point on moisture of natural gases.
11	Madina Userbayeva	Kazakhstan, COOMET	Development of evaluating the service methods quality
12	Ulzhan Kuleimenova	Kazakhstan, COOMET	The role of interlaboratory comparative tests/interlaboratory comparisons in the development of national, competitive products.
13	Zhansaya Omarova	Kazakhstan, COOMET	Metrological support of measuring electrical energy in the housing sector and the development of scientifically justified recommendations for their selection
14	Alexei Pianîh	Moldova, COOMET	Processes required for the assurance of quality results of a measurement standard
15	Efimia Luchian	Moldova, COOMET	Creation and Development of the National Humidity Standard of Gases
16	Anastasia Neklyudova	Russia, COOMET	Improvement unity of measurements of the viscosity liquid medium in the ranges of temperature minus 40 °C to minus 5 °C and 100 °C to 150 °C
17	Anna Villevalde	Russia, COOMET	Metrological support of measurements in brachytherapy
18	Maria Krasheninina	Russia, COOMET	Questions of metrological assurance of the results of the gluten content determination in foodstuffs
19	Kirill Minkov	Russia, COOMET	Experimental researches of titanium dioxide nanoparticles detection possibility in air medium by means of optical resonators
20	Denis Novikov	Russia, COOMET	Metrological support of aspherical surfaces form parameters deviations measurements in the optical industry
21	Alexander Dunaev	Russia, COOMET	Using of the white lasers at the spectral responsivity scale realisation

22	Denis Sokolov	Russia, COOMET	The referance range finder based on the femtosecond laser for the length measurement in the rage up to 60 m. Design and application
23	Alexander Chubanov	Russia, COOMET	Qubits and their applications in metrology
24	Oleg Khapugin	Russia, COOMET	Current status, problems and prospects of the metrological support of brightness measuring instruments
25	Mikhail Aleynikov	Russia, COOMET	Application of H-maser with increased power in fountain atomic clocks
26	Ekaterina Guskova	Russia, COOMET	Development of the method for measuring the catalytic activity of a chemically substance
27	Kirill Malikov	Russia, COOMET	A new method of verification/calibration of stationary coordinate measuring machines with the help of a high-precision interference measuring system
28	Julia Skovorodkina	Ukraine, COOMET	Application of coordinate equipment for measuring parameters of gear
29	Valerii Tereshchenko	Ukraine, COOMET	Development of LED method of reproduction of luminous intensity unit
30	Stanislav Karpenko	Ukraine, COOMET	Features of evaluation drift effect during key comparison COOMET.EM-K5
31	Serhii Kursin	Ukraine, COOMET	The measurement automation and optimization the system of reproduction and transferring of the immitance units
32	Yuliia Kulish	Ukraine, COOMET	Improvement of the metrological characteristics of State primary standard phase angle between two voltages unit by measurements automation
33	Jose Manuel Mantilla	Spain, EURAMET	Five years of research in absolute radiation thermometry at CEM

Evaluation Criteria

Innovation	1	**Is the paper's subject topical?** Weight coefficient 0.1 Marks from 1 to 5	The paper's subject is "hot" if it concerns a scientific direction actively developed by the world community (or directed to solve a problem acknowledged by the scientific community)
	2	**Scientific novelty and/or social and economic effect** Weight coefficient 0.3 Marks from 1 to 5	The paper is characterized by the scientific novelty if it presents new (unknown before) scientific results and/or the paper has a social and economic effect if it contains results which are practically useful for the country
	3	**Originality** Weight coefficient 01 Marks from 1 to 5	The paper is original if methods that were applied in the paper have not been used before for solving similar problems. In case of considering work, presented at CYM before, while evaluation the hugeness of progress of work in accordance with previous results presented on previous CYM
	4	**Potential for international cooperation** Weight coefficient 0.1 Marks from 1 to 5	The paper is important for international cooperation if which it can be used for cooperation projects within the COOMET region or on global scale
Quality of the reports' presenting	5	**Structure and scientific validity** Weight coefficient 0.1 Marks from 1 to 5	The content of the presentation is systematically structured and scientifically correct. The logical chain (approach, solution, correctness of results, validation of conclusions) clearly proves the correctness of the obtained results
	6	**Quality of the paper's adjusting** Weight coefficient 0.1 Marks from 1 to 5	The well-adjusted paper should be set out with clear and strict language with observance of general language forms and the commons standards of writing a papers scientific*. Font of presentation should be convenient for reading to everybody including listeners in the back rows. Visual presentation and oral explaining should be complement to each other in optimal way and provide best perception of report content by audience. The paper should contain necessary illustrative material. *including item of Annex 5 Recommendation COOMET R/GM/18
	7	**Quality of presenting the paper** Weight coefficient 0.2 Marks from 1 to 5	While evaluating the quality of presenting work the following criteria are taken into account: • reporter realizes communication with the listeners • reporter observes the time limit • reporter speaks correctly, clear and comprehensible • reporter answers to the questions correctly and convincing • reporter uses an additional equipment for his presentation (flip chart, white board, etc.)

According to these criteria:
maximum sum mark – 5
minimum sum mark – 1
(the rounding of the intermediate values to 0.01 mark)
The final mark is determined according to the formula

$$C = \sum_{i=1}^{7} a_i \bullet b_i,$$

where a_i is the weight of criterion i, b_i is the mark of criterion i.