



COOMET Recommendation

COOMET
R/GM/18:2008

PROCEDURE of the International Competition “The Best Young Metrologist of COOMET”

Approved at the 18th COOMET Committee Meeting (Kharkov, Ukraine, 15th–16th May 2008)

This document determines the procedure of the competition of young metrologists of National Metrology Institutes (NMIs) and other organisations operating in the field of metrological activity of COOMET Member Countries and the criteria for evaluating their papers (scientific papers).

1 TERMS AND DEFINITIONS

A young metrologist is an expert under the age of 35 who works in the field of scientific and applied metrological activity at NMIs and other metrological organisations of COOMET Member Countries.

A candidate for participation in the competition (hereinafter referred to as candidate) is a person or a group of persons who submit their paper for participation in the competition.

2 GENERAL PROVISIONS

The competition “The Best Young Metrologist of COOMET” takes place once in two years at one of the metrological institutions of COOMET Member Countries. Young metrologists of NMIs and other metrological organisations operating in the field of metrological activity may take part in the competition.

The organizer of the competition “The Best Young Metrologist of COOMET” is COOMET TC-4.

The aims of the competition are as follows,

- to find, support and encourage young metrologists in the achievements in the field of scientific and applied metrological activity that contribute to the development of metrology and cooperation of COOMET Member Countries;
- to inform metrological organisations and the general public by means of mass media about the scientific and applied papers submitted for the competition, the competition results and winners.

Scientific and practical papers published in the complete form may be submitted for participation in the competition (papers that have been recently published or accepted for publication in peer-reviewed measurement and metrological journals are preferred).

The winner of the competition “The Best Young Metrologist of COOMET” and the second and third place winners will be determined on the grounds of the competition results.

The winner of the competition “The Best Young Metrologist of COOMET” will be awarded with a diploma of the first degree and a bonus. The second and third place winners of the competition will be awarded with diplomas of the second and third degrees and bonuses.

The financing of the conducting of and participation in the competition, as well as awarding of the winners is made at the expense of sponsors and institutions of COOMET Member Countries. The Organising Committee is responsible for the collection of the corresponding funds.

3 COMPETITION PROCEDURE

The nomination of candidates for participation in the competition “The Best Young Metrologist of COOMET” is conducted by Academic (Scientific and Technical) Councils of NMIs in the place of their employment. The nomination of candidates for participation in the competition from other metrological organisations is conducted by scientific and technical councils in the place of their employment. The lists of candidates for the participation in the competition from a state should be sent to the Organising Committee by a COOMET Committee Member from the COOMET Member State.

Scientific associates, post-graduates, persons working for doctor's degree, engineering employees of NMIs and other organisations operating in the field of metrological activity may take part in the competition “The Best Young Metrologist of COOMET”.

The group of the candidates whose paper is submitted for participation in the competition must consist of no more than 4 persons. At the same time each candidate must be a direct participant of the work conducted by the group and make an important practical and creative contribution to the paper of the group.

Persons who were included in other groups of candidates in the current year or are individual candidates for participation in this competition should not be included in the group of candidates.

The papers which took part in other similar competitions and received prizes and rewards should not be sent for the participation in the competition.

The candidates for participation in the competition must be under 35 years old at the moment of submitting their papers for participation in the competition.

The acceptance of the papers submitted for the participation in the competition begins from the moment of announcing the competition and ends 5 weeks before its beginning. The papers and the accompanying documents arranged according to *Annexes 1, 2, 3, 4* of this Procedure should be sent by post and e-mail to the address of the Organising Committee. The Organising Committee of the competition is formed from among the scientific associates of the metrological institution that holds the competition with the participation of a TC-4 Member from the COOMET Member State.

The papers submitted for participation in the competition will be preliminarily considered by the Competition Commission. The Competition Commission is confirmed by COOMET President after its presentation by COOMET TC-4.

The competition includes the presentation of the papers by the participants, discussion of the papers and their evaluation by the Competition Commission.

The criteria for evaluating the papers submitted for the competition are as follows:

- belonging of the paper to the sphere of metrological organisation;
- evaluation of the problem under consideration and its connection with important scientific and practical tasks in the field of metrology;
- level of the analysis of the latest research and publications containing the ways of solving this problems and referred to by the author;
- level of stating the problem and formulating the aims of the paper;
- evaluation of the research conclusions and the prospect of future investigations;
- evaluation of the ability to set out the material of the investigation and ground the obtained results.

See the evaluation criteria in detail in *Annex 9*.

According to the results of the discussion the Competition Commission makes a decision on awarding the title “The Best Young Metrologist of COOMET” and determines the second and third place winners of the competition.

The winner of the competition will be given the title of “The Best Young Metrologist of COOMET” and granted with the diploma of the first degree and a bonus by a COOMET Presidential Council Member in a solemn atmosphere. The form of the diploma is given in *Annex 5*.

The second and third place winners of the competition “The Best Young Metrologist of COOMET” will be granted with the diplomas of the second and third degree by a COOMET Presidential Council Member. The forms of the diplomas are given in *Annexes 6* and *7*.

The list of the papers submitted for the competition as well as the names of the participants will be published on the website of COOMET and in metrological journals of NMIs of COOMET Member Countries for the examination of NMIs and other metrological organisations as well as the general public. By the decision of the Competition Commission Members the papers of the winner and the second and third place winners will be published in metrological journals of NMIs of COOMET Member Countries.

The financing of the costs for conducting the competition and participating in it as well as for rewarding the winners and the second and third place winners of the competition is made at the expense of sponsors and institutions of COOMET Member Countries. The Organising Committee is responsible for collecting the required funds.

Full name of the organisation
(ZIP code, postal address, telephone number, e-mail, bank details)

INFORMATION*

about the young metrologist who is a candidate for participation in the competition
“The Best Young Metrologist of COOMET-2007”

Candidate for participation in the competition	“The Best Young Metrologist of COOMET”
Title of the paper submitted for the competition	
Full name	
Date of birth	
Position	
Telephone number, e-mail	
Home address	
Home telephone number	
Work experience in the field of metrology	
Academic degree	
Academic status	
Other information	

Head of the organisation _____ / _____ /
(signature) (name)

Seal

* If a group of authors takes part in the competition the form “Information” should be filled in for each member of this group.

INFORMATION*

on the scientific and practical activity of a candidate for participation in the competition
“The Best Young Metrologist of COOMET-2007”

1 Main directions of the scientific and practical activity: _____

2 Title of the paper submitted for participation in the competition and annotation to it:

3 Number of published papers: total _____, including:
monographs _____, articles _____, reports _____, inventions _____, patents _____.

4 Participation in the work of national and foreign metrological organisations and other associations of scientists: _____
(indicate the names of organisations and the degree of participation)

5 Additional information about the candidate: _____

_____ 200_ _____
(candidate's signature)

Academic (Scientific and Technical) Council Secretary _____ / _____ /
(signature) (name)

* The form should be filled in by a candidate and agreed with the Academic (Scientific and Technical) Council Secretary. If a group of authors takes part in the competition the form “Information” should be filled in for each member of this group.

EXTRACT

from the Minutes No. _____ of _____ 200__
of the Academic (Scientific and Technical) Council Meeting

(full name of the organisation)

HEARD: On promoting the paper of _____
(name(s) of the candidate(s))

(title of the paper)

for participation in the competition **“The Best Young Metrologist of COOMET-2007”** in 2007

AGREED: To propose for participation in the competition **“The Best Young Metrologist of COOMET”** in 2007 the paper of

(full name(s) of the candidate(s))

(title of the paper)

(Give the reasoned grounding of the decision made in 10-12 printed lines)

Academic (Scientific and Technical) Council Chairperson _____ / _____ /
(signature) (name)

Academic (Scientific and Technical) Council Secretary _____ / _____ /
(signature) (name)

Seal

Requirements to papers

1. The scientific papers (articles, reports) having the following structural parts will be admitted for participation in the competition:
 - statement of the problem in the general form and its connection with important scientific or practical tasks;
 - analysis of the latest research and publications containing the ways of solving these problems and referred to by the author;
 - determination of the way of solving the general problem the paper (article, report) is devoted to;
 - statement of the task, formulation of the aims of the paper (article, report);
 - presentation of the main material of the research with the grounding of the obtained scientific results;
 - conclusions on the research data and the prospect of future investigations in this direction.
2. The paper (article, report) submitted for participation in the competition must be of metrological character.
The paper (article, report) must be accompanied by a formal letter from the organisation where the paper was written.
3. The paper (article, report) must be printed on a computer on one side of a sheet of paper with 2 line spaces, left margin of 3 cm, top, bottom and right margins of 2 cm. The volume of the paper (article, report) must not exceed 6-8 standard A4 size pages, including the illustrations, inscriptions to them, tables, the list of literature. The article must be submitted in Russian or English in duplicate. Besides the paper (article, report) prepared in Microsoft Word, annotations in Russian and English as well as a floppy disk with the text of the paper (article, report) must be submitted. Besides the text the file must contain all formulas and tables. The illustrations that are not made in Word Graphics Editor must be represented in separate files, preferably in TIF, BMP, JPG, WMF, CorelDRAW formats. The minimal size of photographs is 9×12 cm. The formulas must be represented only in Microsoft Equation 3.0.
4. The initial data of the article (report) must include: name(s) of the author(s); title of the paper; name of the institution where the paper was written, city and country.
The signatures of all the authors, their full names, positions, academic degrees and statuses, addresses (home and work), phone numbers and e-mail must be stated at the end of the paper (article).
5. Illustrations and inscriptions to them (in duplicate) should be submitted on separate sheets of paper.
6. Only the formulas referred to in the text should be numbered (in round brackets on the right).
7. Tables and references to them must have consecutive order numbers.
8. Abbreviations of words, names, titles, measures, physical, chemical, mathematical quantities must be commonly accepted, units of measurement must be represented according to SI.

9. Bibliographic references in the text of the article (report) should be represented by means of numbers in square brackets with order numeration within the whole article (report) according to the list of literature. Names of authors, title of the paper, place of publication, publishing house, year of publication, volume number, issue number, total number of pages should be indicated for books. Names of authors, title of the journal, year of publication, volume or part, issue number, pages (from - to) should be indicated for journal articles. The list of literature should be formed in the order of its using in the text, regardless of the language.
10. Articles and reports not drawn up according to the above mentioned rules will not be considered and returned to their authors.
11. Articles and reports as well as floppy disks sent to the competition will not be returned to the authors.



**ДИПЛОМ
DIPLOMA**

1 СТЕПЕНИ
DEGREE

Награждается победитель конкурса
is given to the winner of the competition

**“Лучший молодой метролог КООМЕТ”
“The Best Young Metrologist of COOMET”**

20__

(фамилия и имя/ name)

(наименование страны/ country)

за достижения в сфере научной и прикладной метрологической деятельности, которые способствуют развитию науки и сотрудничества стран-членов КООМЕТ.

for the achievements in the field of scientific and applied metrological activity that contribute to the development of science and the collaboration of COOMET Member States.

Президент КООМЕТ
The President of COOMET



ДИПЛОМ DIPLOMA

2 СТЕПЕНИ
DEGREE

Награждается победитель конкурса
is given to the winner of the competition

**“Лучший молодой метролог КООМЕТ”
“The Best Young Metrologist of COOMET”**

20__

(фамилия и имя/ name)

(наименование страны/ country)

за достижения в сфере научной
и прикладной метрологической
деятельности, которые
способствуют развитию
науки и сотрудничества
стран-членов КООМЕТ.

for the achievements in the field of
scientific and applied
metrological activity that
contribute to the
development of science and the
collaboration of COOMET Member
States.

Президент КООМЕТ
The President of COOMET



**ДИПЛОМ
DIPLOMA**

3 СТЕПЕНИ
DEGREE

Награждается победитель конкурса
is given to the winner of the competition

**“Лучший молодой метролог КООМЕТ”
“The Best Young Metrologist of COOMET”**

20__

(фамилия и имя/ name)

(наименование страны/ country)

за достижения в сфере научной и прикладной метрологической деятельности, которые способствуют развитию науки и сотрудничества стран-членов КООМЕТ.

for the achievements in the field of scientific and applied metrological activity that contribute to the development of science and the collaboration of COOMET Member States.

Президент КООМЕТ
The President of COOMET



ДИПЛОМ DIPLOMA

За лучший доклад на английском языке
For the best report in English

**“Лучший молодой метролог COOMET”
“The Best Young Metrologist of COOMET”**

20__

(фамилия и имя/ name)

(наименование страны/ country)

за достижения в сфере научной и прикладной метрологической деятельности, которые способствуют развитию науки и сотрудничества стран-членов COOMET.

for the achievements in the field of scientific and applied metrological activity that contribute to the development of science and the collaboration of COOMET Member States.

Президент COOMET
The President of COOMET

Evaluation Criteria (Instructions for the Competition Commission Members)

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 has the purpose of solving a problem acknowledged by the scientific community)
	2	Scientific novelty of the paper 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
	3	Originality Weight coefficient 0.1 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
	4	Potential for international cooperation Weight coefficient 0.1 Marks from 1 to 5	The paper is important for international cooperation if there are international projects which it can be used in
Quality of the reports' presenting	5	Scientific rigor and validity Weight coefficient 0.1 Marks from 1 to 5	The paper is distinguished for scientific rigor and validity if proper approaches to solving the problem posed are used in it and the submitted material clearly proves the correctness of the results obtained
	6	Quality of the paper's adjusting Weight coefficient 0.1 Marks from 1 to 5	The paper is well adjusted if it has an optimal structure and the necessary illustrative material, the language of the paper must be clear and strict and observe the common standards of writing a scientific paper
	7	Quality of presenting the paper Weight coefficient 0.2 Marks from 1 to 5	The quality of presenting the paper is high if the report has an optimal structure (including illustrative material), the time limit is observed, the style of speaking is clear and comprehensible, the answers to the questions are correct and convincing

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

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

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