

## Monthly scientific and practical journal

Published since 2000  
(former name Kvalifikatsiya I Kachestvo)

Registration certificate  
ПИ № ФС-77-75122 от 22.02.2019

The journal is included in the list of publications,  
recommended by Higher Attestation Commission (VAK)

### Founder and publisher

**Academy for Standardization, Metrology  
and Certification (ASMS)**

109443, Moscow, Volgogradsky pros., 90, 1  
Phone: +7 (499) 172 4730. Fax: +7 (499) 742 5241  
E-mail: info@asms.ru www.asms.ru

### Chief Editor

Vladimir V. Voronin, FSAEI FVT ASMS, RF, Moscow

### Editorial board

Svetlana A. Kalintseva, FSAEI FVT ASMS, RF,  
Moscow

Stanislav Bartusek, Technical University of Ostrava,  
Czech Republic, Ostrava

Viktor Ya. Belobragin, LLC Advertising Informational  
Agency Standards and Quality, RF, Moscow

Boris V. Boytsov, International Public Organization  
Academy of Quality Problems, and Moscow Aviation  
Institute (MAI), RF, Moscow

Fedor V. Bulygin, All-Russian Research Institute  
of Metrological Service (VNIIMS), RF, Moscow

Tatiana V. Guseva, FSAB Research Institute  
Environmental Industrial Policy Centre, RF, Moscow

Ol'ga P. Dvoryaninova, Voronezh State University  
of Engineering Technologies, RF, Voronezh

Nina I. Dunchenko, Russian State Agrarian  
University — Moscow Timiryazev Agricultural  
Academy, RF, Moscow

Lev K. Isaev, All-Russian Research Institute  
of Metrological Service (VNIIMS), RF, Moscow

Wilfried Kirmse, Technical University of Berlin (TU),  
Germany, Berlin

Leonid V. Kolomiets, Odessa State Academy  
of Technical Regulation and Quality, Ukraine, Odessa

Vladimir Yu. Korchak, Presidium of RAS, RF, Moscow

Aleksey V. Leonov, FSBI 46 Central Research  
Institute, RF, Moscow

Alexandr V. Malkov, D. Mendeleev University  
of Chemical Technology of Russia, RF, Moscow

Valeriy A. Novikov, FSAEI FVT ASMS, RF, Moscow

Yuriy A. Pal'chun, Novosibirsk Branch FSAEI FVT  
ASMS, RF, Novosibirsk

Vladimir V. Pomazanov, Self-Regulatory  
Organization Center Reahim, and SEI HE MO State  
Humanitarian and Technological University, RF,  
Moscow Region

Anatoliy I. Solyanik, Russia Voronezh Branch FSAEI  
FVT ASMS, RF, Voronezh

### Editorial staff

I.S. Gridin, L.A. Kas'yanova,

E.V. Kirienko, I.B. Kuskova

Phone: +7 (499) 172 7717, 172 5757

### Layout and logo design

A.B. Kostrikov

### Original layout

Individual Entrepreneur Shilenkova E.I.

Phone: +7 (916) 324 0613

### Subscription

In the union catalog Russia Press: 87872

In the publishing department

Phone: +7 (499) 172 7717. E-mail: komp@asms.ru

Signed for printing 10.06.2022

Matte coated paper 84×108/16

Offset printing. Conv. pp. 7

2000 copies. Order number 612022

### Printing

Printing House LLC Polygraphic complex,

125315, Moscow,

Chasovaya str., 28, bldg. 4, fl. 3, room 42V

Authors' ideas may not always coincide

with the editorial staff.

While using materials reference to the journal

Kompetentnost' is required

Articles' reprinting is allowed only with the editorial staff's

permission

Editorial staff is not responsible for the content

of the advertisements

Materials in the category Company are published

on the rights of advertising

© Academy for Standardization, Metrology  
and Certification, 2022

# Content

## 5/2022

### TRAINING

- 3** O.N. Fedonin  
A.Z. Simkin  
T.P. Mozhaeva  
A.S. Proskurin  
Further Vocational  
Training Educational  
Processes  
Monitoring

### TOPICAL THEME

- 8** A.V. Leonov  
A.Yu. Pronin  
Dynamic Cost  
Management Model  
for the Creation  
of High-Tech  
Products

### RESEARCH

- 17** M.S. Batanov  
V.P. Monakhova  
M.O. Romashova  
Distribution Density  
of the Random  
Process Derivative  
Probability

### NEWS

**45**

## Reviewers:

Prof. Dr. **T.V. Guseva**, Research Institute Environmental Industrial Policy Center;

Prof. Dr. **V.A. Vasil'ev**, Russian State University of Aviation Technology (MAI);

Prof. Dr. **N.I. Dunchenko**, Russian State Agrarian University — Moscow Timiryazev

Agricultural Academy; Prof. Dr. **A.I. Solyanik**, Voronezh ASMS Branch;

Prof. Dr. **V.Ya. Belobragin**, Academy for Quality Problems;

Prof. Dr. **I.A. Makeeva**, State Scientific Institution, Research Institute for Dairy Industry;

Prof. Dr. **A.V. Malkov**, D.I. Mendeleev University of Chemical Technology of Russia;

Prof. Dr. **V.Yu. Korchak**, N.E. Bauman Moscow State Technical University

Prof. Dr. **A.V. Leonov**, 46 Central Research Institute of RF Defense Ministry

## Next issues

On the Methodology for  
Assessing the Oil-Oxidizing  
Ability of Biologics-Oil  
Destructors

Application of Expert  
Assessment Methods in  
the Selection of Technical  
Control Tools

Conformity Assessment  
of Cosmetic  
Products Containing  
Nanomaterials

**28** I.G. Mulenko  
O.V. Puchka

V.V. Ryabko

E.O. Puchka

On the Accuracy  
of Methods  
for Measuring  
the Capacity  
of Tanks

### MANAGEMENT

**37** A.N. Shmeleva

The Pandemic  
and the Real  
Estate Crowdfunding  
Market: Issues  
and Prospects

**43** E.Yu. Churakova  
M.Yu. Kuprikov

Trends in Supply  
Chain Management

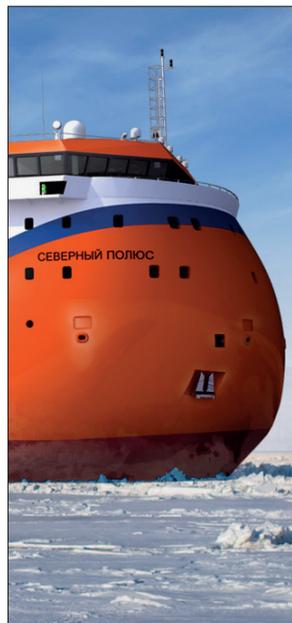
### REVIEW

**46** M.I. Grechikov  
V.A. Grushnikov

Most Significant  
Shipbuilding  
Innovations  
2021

### TRAINING

**56**



### METROLOGY

**24** S.V. Kas'yanov  
V.A. Novikov

R.A. Yamalieva

Metrological Support  
in the System  
of Continuous  
Quality  
Improvement