

Monthly scientific and practical journal

Published since 2000
(former name Kvalifikatsiya I Kachestvo)

Registration certificate

ПВ № ФЭ-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

Alexander V. Zazhigalkin, FSAEI FVT ASMS

Editorial board

Michael I. Lomakin, Federal Center for Science
and High Technologie, RF, Moscow

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

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

Viktor Ya. Belobragin, LLC Advertising Information
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

Viktor A. Vasil'ev, MAI, RF, Moscow

Vladimir V. Voronin, FSAEI FVT ASMS, 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

Alexander V. Dokukin, Federal Center for Science
and High Technologie, RF, Moscow

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

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

Vladimir Yu. Korchak, N.E. Bauman MSTU, 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 CenterReahim, 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. Kirilenko, 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 5.05.2025

Matte coated paper 84×108/16

Offset printing. Conv. pp. 4

5000 copies. Order number 552025

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, 2025

Content

4/2025

TRAINING

- 4** **M.G. Barinova**
V.E. Il'zit
Yu.M. Sapego
A.I. Solyanik
Training Specialists
for Regional Quality
Infrastructure:
Practice of
Systematic Approach

STANDARDIZATION

- 11** **Yu.V. Kruglova**
An Integrated
Approach to
Standardization
in the Implementation
of CALS
Technologies

TECHNICAL REGULATION

- 16** **K.A. Shalin**
M.A. Nazarenko
Application of the
Risk Influence Integral
Coefficient at the
Enterprise

PRODUCTION ORGANIZATION

- 22** **I.S. Kuroshev**
On the Organization
of Resource Efficient
Production Systems
in Metallurgical
Industry



- 28** **I.I. Ismagilov**
A.S. Katasev
Strategic Management
of a Company
in the Context
of Digitalization
of Economy

MANAGEMENT

- 33** **Ya.V. Denisova**
M.O. Shal'nev
Organization
of Workplaces Based
on Lean Production
Principles

NEWS

3, 52, 62, 63

RESEARCH

- 38** **I.K. Andronchev**
A.Ya. Dmitriev
A.M. Kovaleva
Methodology for
Research Employees'
Metacompetencies
During Production
Modernization

QUALITY MANAGEMENT

- 43** **A.A. Berezina**
Water Quality
Management Models
in Water Resource
Systems

METROLOGY

- 49** **Zelentsov S.G.**
Kutyaykin V.G.
Geyger E.Yu.
Mol'kov V.F.
Estimation
of Uncertainty
of Geometric
Measurements
in Metallography

TOPICAL THEME

- 53** **A.S. Ishkov**
P.A. Maksimov
Hardware & Software
Complex for Testing
Electronic Component
Base
- 58** **R.N. Pigilova**
Energy Supply
of an Industrial
Enterprise: Digital
Technology
Management System

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

Domestic Innovation
ICT Solutions:
Standardization
Trends

Sustainable Development
Strategy: Information Security
Risk Management and
Compliance

Procurement
Management System
of a Large Industrial
Enterprise