# OMPETENTNOST'/ **COMPETENCY (Russia)**

# 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)

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

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

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, D. Mendeleev University of Chemical Technology of Russia, 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, Ukraina, Odessa Vladimir Yu. Korchak, Presidium of RAS, RF, Moscow Aleksey V. Leonov, FSBI 46 Central Research Institute, RF, Moscow

Valery 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

I.S. Gridin, L.A. Kas'yanova, E.V. Kirienko, I.B. Kuskova Phone: +7 (499) 172 7717, 172 5757

A.B. Kostrikov

Individual Entrepreneur Shilenkova E.I. Phone: +7 (916) 324 0613

In the catalogue Newspapers. Journals of Rospechat agency: 83344 In the union catalog Russia Press: 87872

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

Signed for printing 15.05.2019 Matte coated paper 84×108/16 Offset printing. Conv. pp. 7 2000 copies. Order number 120

JSC Kaluzhskaya Tipografiya Standartov 248021, Kaluga, Moskovskaya ul., 256

Authors' ideas may not always coincide with the editorial stuff.
While using materials reference to the journal Kompetentnost' is required Articles' reprinting is allowed only with the editorial stuffs' permission
Editorial stuff 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, 2020

# Content

# 4/2020

## **TECHNICAL** REGULATION

Kh.A. Nevmyatullina T.F. Burukhina E.G. Vinokurov N.Yu. Skopintseva

REACH. Safe Handling of Chemicals in Galvanic Plants

### RESEARCH

D.O. Skobelev Return of Secondary Resources into **Economic Turnover:** Economics, Technology, Law

A.F. Brodnikov N.A. Vikhareva

Installation for Superconductors' Current-Voltage Characteristics Measuring

### MANAGEMENT

👖 Yu.A. Malyukov State Contracts: Investment Support for Production Organization



T.V. Malysheva Resource-Saving Production Systems. Information Flow Management

N.M. Borbats' T.V. Shkolina

> Quality Characteristics Variability Assessment Due to Human Factors

### **TOPICAL THEME**

🔼 🗖 V.V. Pomazanov **JU**S.G. Mardanly V.A. Kiseleva Pharmacv.

**Pharmaceuticals** and National Security

N.K. Artem'eva LI.G. Paveľev V.V. Lysenko A.P. Ostrikov

Mathematical Model and Algorithm for Designing the Energy Balance of Athletes

CL.P. Kleeva Dynamics of Natural Population Growth in the Russian Federation

**NEWS** 

**TRAINING** 

54

Reviewers: Prof. Dr. G.V. Pankina, MAI; Prof. Dr. T.V. Guseva, D.I. Mendeleev University of Chemical Technology of Russia; 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. V.Yu. Korchak, Section of Applied Problems, Russian Academy of Sciences

# Next issues

Best Available Techniques: Urgent Tasks of Training

Innovative Technologies in Personnel Management

Influence of Price Dynamics on the Customs Value of Goods