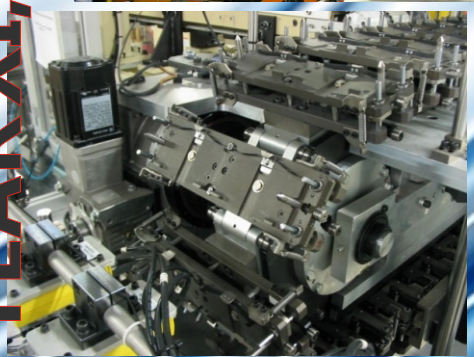
INTERNATIONAL SCIENTIFIC JOURNAL

trans & MOTAUTO WORLD

ISSN PRINT 2367-8399
ISSN WEB 2534-8493

YEAR XI, ISSUE 3/2026



SCIENTIFIC TECHNICAL UNION OF MECHANICAL INGENEERING "INDUSTRY 4.0"
108 RAKOVSKI STR., SOFIA 1000, BULGARIA

trans & MOTAUTO WORLD

INTERNATIONAL SCIENTIFIC JOURNAL

TRANS MOTAUTO WORLD

PUBLISHER:

SCIENTIFIC TECHNICAL UNION OF MECHANICAL ENGINEERING INDUSTRY-4.0

108, Rakovski Str., 1000 Sofia, Bulgaria
tel. (+359 2) 987 72 90,
tel./fax (+359 2) 986 22 40**,**
office@stumejournals.com
www.stumejournals.com

All articles are published after peer review by two independent reviewers.

ISSN PRINT 2367-8399
ISSN WEB 2534-8493
YEAR XI, ISSUE 3 / 2026

EDITORIAL BOARD

CHIEF EDITOR
Prof. Petar Kolev, Bulgaria

MEMBERS:

Prof. Ahmet H. Ertas, TR
Prof. Aleksandar Kostikj, MK
Prof. Andrey Ferenets, RU
Prof. Angel Dimitrov, BG
Prof. Beti Angelevska, MK
Prof. Dainis Berjoza, LV
Prof. Dan Scarpete, RO
Prof. Daniela Todorova, BG
Prof. Emilia Andreeva-Moschen, AT
Prof. Hristo Stanchev, BG
Prof. Igor Penkov, EE
Prof. Igor Smirnov, UA
Prof. Igor Taratorkin, RU
Prof. Iliyan Lilov, BG
Prof. Lech Sitnik, PL
Prof. Ljudmila Boyko, UA
Prof. Madaminjon Aripdzanov, UZ
Prof. Martin Kendra, SK
Prof. Massimo Borghi, IT
Prof. Miho Mihow, BG
Prof. Murat Dogruel, TR
Prof. Natalia Sidenko, LV
Prof. Natasa Tomic-Petrovic, RS
Prof. Nikolay Georgiev, BG
Prof. Nikolay Ovchenkov, RU
Prof. Oleg Sharkov, RU
Prof. Pepo Yordanov, BG
Prof. Polatbeg Zhunisbekov, KZ
Prof. Rinat Kurmaev, RU
Prof. Rosen Ivanov, BG
Prof. Sanjin Troha, HR
Prof. Teymuraz Kochadze, GE
Prof. Tomaz Morchadze, GE
Prof. Vadim Zhmud, RU
Prof. Valyo Nikolov, BG
Prof. Zoran Jovanovic, RS

RESPONSIBLE SECRETARY:
Prof. Nikolay Tonchev, Bulgaria

C O N T E N T S

TRANSPORT TECHNICS. INVESTIGATION OF ELEMENTS.

Influence of non-metallic inclusions and products of corrosion on the wear particles formation on the railway wheel and rail treads
Svetlana Gubenko 96

Characteristics of the materials used in the design of unmanned aircraft aircraft type
Sabi S Minev 101

TRANSPORT. SAFETY AND ECOLOGY. LOGISTICS AND MANAGEMENT

Eco-Efficiency and Service Quality as Dual Drivers of Competitiveness in Liberalized Suburban Rail Transport
Kostadin Trifonov 105

Macrosimulation-based evaluation of a planned urban arterial: the extended branimirova street in sesvete, Zagreb
Toni Tomić, Karlo Babojelić 108

Peculiarities of regional development of cruise tourism in the Mediterranean
Yevheniia Kryzhanovska 111

ENGINES

Investigation of the effect of overcharging on the indicator diagram and heat release coefficient of a gasoline engine
Radoslav Kostov 115

Possibility of creating an increased-capacity gas turbine generator
Marlen Shalamberidze, Giorgi Lobjanidze , Teimuraz Kochadze , Otari Janelidze , Irakli Odisharia 118