

SYMKOM2020/2021 abstracts accepted

- Levon Agamirov, Andrey Rogalev, Igor Milukov, ASSESSMENT OF RELIABILITY OF STRUCTURAL ELEMENTS OF GAS TURBINES WITH RANDOM CENSORING,
- Malek Alabani, Theoretical Variations of The Thermal Performance of Solar DHW Systems in Libya,
- Artur Andrearczyk, Flow characteristics of an automotive compressor with an additively manufactured rotor disc,
- Jakub BOBROWSKI, Krzysztof SOBCZAK, NUMERICAL INVESTIGATIONS ON THE EFFECT OF AN UNDERBODY BATTERY ON SOLAR VEHICLE AERODYNAMICS,
- Radosław BONDYRA, Jan PRZYTULSKI, DEVELOPMENT OF LAST STAGE BLADE OF 13K215 TURBINE INTERMEDIATE PRESSURE MODULE,
- Maria Laura CANTEROS, Jiri POLANSKY, Study of heat pump for passenger electric vehicle based on coolant R744,
- Ivan DOBREV, Fawaz MASSOUH, Comparative study of actuator disk and actuator line models of a HAWT using wind tunnel PIV measurements,
- Krzysztof Dominiczak, Marta Drosińska-Komor, Romuald Rzadkowski, Jerzy Głuch, Optimisation of turbine shaft heating process under steam turbine run-up conditions,
- Zbigniew Drożyński, Irreversible energy degradation in heat transfer between two fluids – analysis on manifolds,
- Patryk GAJ, Krzysztof SOBCZAK, Joanna KOPANIA, Kamil WÓJCIAK, INFLUENCE OF SHAPE OF SHELL OF STEAM SILENCER ON FLOW AND ACOUSTIC PARAMETERS,
- Adam GÓRALCZYK, Mariusz LEWANDOWSKI, Adam ADAMKOWSKI, Waldemar JANICKI, Optimization algorithms for maximizing production in hydropower plants,
- Sebastian GRÜN, Dirk HÜBNER, Jan MOLTER, INVESTIGATION AND SIMULATION BASED OPTIMIZATION OF AN ENERGY STORAGE SYSTEM WITH PRESSURIZED AIR,
- Alexander HAMMAN, Tobias ALFF, Daniel LEHSER-PFEFFERMANN, Frank Ulrich RÜCKERT, AERODYNAMIC ROTOR DESIGN STUDIES FOR ROTORS OF HEAVY UNMANNED AERIAL VEHICLES,
- Andrzej JAESCHKE, Michal KULAK, Michal LIPIAN, Krzysztof OLASEK, Tomasz WAJMAN, WIND TUNNEL FACILITY OF IMP TUL: TOWARDS BETTER UNDERSTANDING OF LOW-REYNOLDS AERODYNAMICS,
- Guk Chol JUN, Michal HOZNEDL, Michal Kolovratník, Libor SOVA, WET STEAM FLOW IN 1100 MW TURBINE,
- Tomasz KACZMARCZYK, Grzegorz ŻYWICA, EXPERIMENTAL INVESTIGATION OF AN ORC SYSTEM WITH TWO VOLUMETRIC EXPANDERS,
- Vladimir KINDRA, Igor Milukov, Igor SHEVCHENKO, Sofia SHABALOVA, Dmitriy KOVALEV, THERMODYNAMIC ANALYSIS CYCLE ARRANGEMENTS OF THE COAL-FIRED THERMAL POWER PLANTS WITH CARBON CAPTURE AND STORAGE SYSTEMS,
- Vladimir KINDRA, Sergey OSIPOV, Olga ZLYVKO, Ivan SHCHERBATOV, Vladimir SOKOLOV, RESEARCH AND DEVELOPMENT OF STEAM TURBINE POWER PLANTS WITH METHANE-OXYGEN COMBUSTORS,
- Vladimir KINDRA, Andrey ROGALEV, Olga ZLYVKO, Vladimir SOKOLOV, Igor MILUKOV, RESEARCH AND DEVELOPMENT OF A HIGH-PERFORMANCE OXY-FUEL COMBUSTION POWER CYCLE WITH COAL GASIFICATION,
- Vladimir Kindra, Andrey Rogalev, Olga Zlyvko, Alexey Zonov, Matvey Smirnov, Ilya Kaplanovich, Research on oxy-fuel combustion power cycle using nitrogen for turbine cooling,

- Piotr Klimaszewski, Piotr Klonowicz, Piotr Lampart, Łukasz Witanowski, Dawid Zaniewski, Łukasz Jędrzejewski, Tomasz Suchocki, Design and performance analysis of ORC centrifugal pumps,
- Piotr Klonowicz, Piotr Klimaszewski, Dawid Zaniewski, Łukasz Witanowski, Łukasz Jędrzejewski, Tomasz Suchocki, Preliminary design of a small turbocompressor for air conditioning,
- Joanna KOPANIA, Patryk GAJ, Kamil WÓJCIAK, Low-noise "bionic" throttling damper dedicated to the HVAC systems,
- Arkadiusz Koprowski, Romuald Rzadkowski, Computational fluid dynamics analysis of 1 MW steam turbine inlet geometries,
- Arkadiusz Koprowski, Romuald RZADKOWSKI, Leszek Kubitz, CFD STEADY CALCULATION OF X JOURNAL BEARING,
- Arkadiusz Koprowski, Romuald Rzadkowski, Leszek Kubitz, OPTIMALIZATION OF FLOW IN 1MW STEAM TURBINE,
- Michał Jan KOWALCZYK, Marcin ŁĘCKI, Artur ROMANIAK, Bartosz WARWAS, Artur GUTKOWSKI, Investigation of heat transfer in air channel of minichannel heat exchanger,
- Terezie KREUZOVA, Jiri POLANSKY, Numerical investigation of non-Newtonian flow jet and impact to the wall,
- Władysław KRYŁŁOWICZ, Jacek KARCZEWSKI, Paweł SZUMAN, SIMULATION OF CONTROL OF SMALL STEAM TURBINE,
- Władysław Kryłłowicz, Piotr Świder, Adam Papierski, Kirill Kabalyk, Inlet geometry influence on operational parameters of modernized industrial centrifugal compressors,
- Marcin KUROWSKI, Heat Transfer Coefficient Measurements on Curved Surfaces,
- Leszek KWAPISZ, Jan SZANTYR, SIMPLIFIED DETERMINATION OF THE WIND TURBINE WAKE,
- Daniel Lehser-Pfeffermann, Alexander Hamman, Frank Ulrich Rückert, Location-Optimized Aerodynamic Rotor Design studies and Development of Small Wind Turbines,
- Mariusz LEWANDOWSKI, Adam ADAMKOWSKI, Waldemar JANICKI, Laboratory tests of water-hammer in a variable diameter pipeline,
- Sergiusz LORYŚ, Marek ORKISZ, Neural network approach to compressor modelling with surge margin consideration,
- Jakub ŁAGODZIŃSKI, Zbigniew KOZANECKI, Failure analysis of impeller made of martensitic precipitated hardening stainless steel in moist hydrogen sulfide environment,
- Jakub ŁAGODZIŃSKI, Eliza TKACZ, Zbigniew KOZANECKI, Evaluation of thrust foil bearing load capacity in slow speed conditions,
- Emil MARCHEWKA, Krzysztof SOBCZAK, Piotr REOROWICZ, Damian OBIDOWSKI, Krzysztof JÓŻWIK, Application of Overset Mesh approach in the investigation of the Savonius wind turbines with rigid and deformable blades,
- Artur MAURIN, Adam ADAMKOWSKI, Method for determining backflows using current meters in water turbine performance tests,
- Arkadiusz Musiał, Łukasz Antczak, Łukasz Jędrzejewski, Piotr Klonowicz, Analysis of the use of waste heat from a glass melting furnace for electricity production in the organic Rankine cycle system,
- Vaclav NOVOTNY, Jan SPALE, Daniel SUCHNA, Jan PAVLICKO, Michal KOLOVRATNIK, Andreas P. WEIß, 3D-printed Micro Turboexpander for Absorption Power Cycle Test Rig – Considerations, Design and First Experimental Results,
- Wojciech Nowak, Mikołaj Złotkowski, High-efficiency plant operating in the Allama circuit,
- Jiri POLANSKY, Sonja SCHMELTER, Implementation of turbulence damping in the OpenFoam multiphase flow solver interFoam,

- Balazs Pritz, Piotr Wiśniewski, Sławomir Dykas, IDENTIFICATION OF THE UNSTEADY EFFECTS IN THE FLOW THROUGH CENTRIFUGAL FAN BY USING CFD/CAA METHODS,
- Andrii Rusanov, Roman Rusanov, The influence of stator-rotor interspace overlap of meridional contours on the efficiency of high-pressure steam turbine stages,
- Romuald RZADKOWSKI, Piotr PIECHOWSKI, Leszek KUBITZ, Mirosław KOWALSKI, Experimental Analysis of Rotor Blades Aliasing,
- Tomasz Staśko, Mirosław Majkut, Krystian Smołka, Sławomir Dykas, SELECTION OF A NUMERICAL MODEL TO PREDICT THE FLOW IN A FAN WITH A CYCLOIDAL,
- Małgorzata STĘPIEŃ, Michał KULAK, Krzysztof SOBCZAK, Krzysztof OLASEK, Krzysztof JÓŻWIK, Influence of boundary layer transition on airfoil performance - XFOIL and CFD study for small wind turbine applications,
- Ryszard Szwaba, Krzysztof Hinc, Tomasz Ochrymiuk, Zbigniew Krzemianowski, Piotr Doerffer, Marcin Kurowski, Open low speed wind tunnel – design and testing,
- Paweł TRAWIŃSKI, DEVELOPMENT OF FLOW AND EFFICIENCY CHARACTERISTICS OF AN AXIAL COMPRESSOR WITH AN ANALYTICAL METHOD INCLUDING COOLING AIR EXTRACTION AND VARIABLE IGV ANGLE,
- Filip WASILCZUK, Michał PIOTROWICZ, Paweł FLASZYŃSKI, Karol MITRASZEWSKI, NUMERICAL SIMULATIONS FOR OFFSHORE WIND FARMS,
- Piotr Wiśniewski, Sławomir Dykas, Guojie Zhang, Numerical studies of air humidity importance in the first stage rotor of turbine compressor,
- Andreas P Weiss, Philipp Streit, Tobias Popp, Patrick Shoemaker, Thomas Hildebrandt, Václav Novotný, Jan Špale, Uncommon turbine architectures for distributed power generation – development of a small velocity compounded radial re-entry turbine (INVITED LECTURE),
- Łukasz Witanowski, Piotr Klonowicz, Piotr Lampart, Tomasz Suchocki, Łukasz Jędrzejewski, Dawid Zaniewski, Piotr Klimaszewski, IMPACT OF ROTOR GEOMETRY OPTIMIZATION ON THE OFF-DESIGN ORC TURBINE PERFORMANCE
- Kamil WÓJCIAK, Partyk GAJ, Joanna KOPANIA, Air flow between two parallel rotating disks,
- Dawid Zaniewski, Piotr Klimaszewski, Łukasz Witanowski, Łukasz Jędrzejewski, Piotr Klonowicz, Tomasz Suchocki, Piotr Lampart, Organic Rankine Cycle turbogenerator case cooling – impact of the cooling water flow path design and heat exchanging surface geometry on the heat dissipation performance,
- Arkadiy ZARYANKIN, On the role of internal shear during fluid motion in the positive longitudinal pressure gradients range,
- Arkadiy ZARYANKIN, O. REYNOLDS EQUATIONS OF MOTION FOR TURBULENT FLOWS- SCIENTIFIC REALITY OR SCIENTIFIC HOAX,
- Arkadiy ZARYANKIN, Mikhail CHERKASOV, Evgeny GRIGORIEV and Ivan LAVYREV, MATHEMATICAL MODELING OF FLOWS IN FLAT WIDE-ANGLE DIFFUSERS WITH SLOTTED STREAMLINED SURFACES,
- Arkadiy ZARYANKIN, Ivan LAVYREV, Mikhail CHERKASOV and Alexander AKATOV, REMOTE NOZZLE STEAM DISTRIBUTION SYSTEM AND NEW GENERATION CONTROL VALVES FOR STEAM TURBINES,
- Paweł ZYCH, Mechanical and economical aspects of the optimisation of a high-speed compressor wheel,
- Jacek Żabski, Przemysław Kowalski, Piotr Lampart, Investigations of a Stirling engine performance,
- Grzegorz ŻYWICA, Małgorzata BOGULICZ, Paweł ZYCH, ANALYSIS OF THE DESIGN CONCEPT AND BEARING SYSTEM FOR A GAS MICROTURBINE WITH AN EXTERNAL COMBUSTION CHAMBER,