

International conference on advances in energy systems and environmental engineering (ASEE17)

List of paper titles:

- Using a coupled inductor controlled by fuzzy logic to improve the efficiency of a Buck converter in a PV system
N. Abouchabana, M. Haddadi, A. Rabh and A. El Hajjaji
- Optimization of operating parameters for rotary wheel desiccant cooling systems
A. Alahmer and Sameh Alsaqoor
- Experimental and theoretical investigation on a flat heat pipe heat exchanger for waste heat recovery in steel industry
S. Almahmoud, G. Bianchi, S. A. Tassou, R. Llera, F. Lago, J. José Arribas and H. Jouhara
- Experimental investigation and CFD simulation of multi-pipe earth-to-air heat exchangers (EAHEs) flow performance
Ł. Amanowicz and J. Wojtkowiak
- Urban stormwater-greywater management system for sustainable urban water management at sub-watershed level
A. S. Arora
- Estimation of the temperature spatial variability in confined spaces based on thermal imaging
G. Augustyn, J. Jurasz, K. Jurczyk, T. Korbiel, J. Mikulik, M. Pawlik and R. Rumin
- Selection of turbulence models in case of numerical simulation of heat-, air- and mass exchange processes
V. Aver`yanov, V. Vasiliev and V. Ulyasheva
- Assessing high shares of renewable energies in district heating systems – A case study for the city of Herten
A. Aydemir, E. Popovski, D. Bellstädt, T. Fleiter and R. Büchele
- A new test procedure to evaluate the performance of substations for collective heating systems
R. Baetens and I. Verhaert
- Influence of Silane on The Structure of Polystyrene Prepared by Sol-Gel Coatings via UV Curing
S. Balbay and C. Acikgoz
- Comparison of methods for solids retention time determination and control
P. Balbierz and M. Knap
- Use of cement-fly ash-based stabilization techniques for the treatment of waste containing aromatic contaminants
K. Banaszekiewicz and T. Marcinkowski
- The influence of multifamily apartment building occupants on energy and water consumption – the preliminary results of monitoring and survey campaign
K. Bandurski, M. Hamerla, J. Szulc and H. Koczyk
- Environmental impact assessment of coal power plants in operation
A. Bartan, S. Kucukali and I. Ar
- The effect of the thermal inertia on the thermal transfer in building wall
L. Bellahcene, A. Cheknane, SMA. Bekkouche and D. Sahel
- Storage Material Selection for an Innovative Pumped Thermal Electricity Storage System
A. Benato and A. Stoppato
- Improving the Energy Efficiency of a Paint and Cataphoresis Facility with an Organic Rankine Cycle Module
A. Benato, A. Stoppato, F. Schiro and N. Destro
- The use of moving bed bio-reactor to laundry wastewater treatment
S. Bering, J. Mazur, K. Tarnowski, M. J.us, S. Mozia and A. W. Morawski

- Efficiency of heat recovery in ventilation in Wroclaw climate
M. Besler, M. Skrzycki
- Energy saving by using natural energy from the shallow ground depths – many years operating results
M. Besler, M. Skrzycki and W. Cepiński
- Effects of climate factors and vegetation on the CO₂ fluxes and δ¹³C from re-established grassland
Y. Bezyk, M. Dorodnikov and I. Sówka
- Cytotoxicity and genotoxicity properties of particulate matter fraction 2.5 μm
M. K. Bełcik, A. Trusz-Zdybek, E. Zaczyńska, A. Czarny and K. Piekarska
- Development and analysis of a packaged Trilateral Flash Cycle system for low grade heat to power conversion applications
G. Bianchi, R. McGinty, D. Oliver, O. Zaher, S. A. Tassou, J. Miller and H. Jouhara
- Phytotoxicity of quaternary ammonium salts with hexafluorophosphate anion
R. Biczak, A. Telesiński and B. Pawłowska
- Application of stochastic approach based on Monte Carlo (MC) simulation for life cycle inventory (LCI) of the rare earth elements (REEs) in beneficiation rare earth waste from the gold processing: case study
B. Bieda, K. Grzesik
- Food waste in Central Europe - challenges and solutions
J. den Boer, P. Kobel, A. Dyjakon, K. Urbańska, G. Obersteiner, M. Hrad, E. Schmied and Emilia den Boer
- Life Cycle Assessment of the use of apple pruning residues for energetic purposes
J. den Boer, A. Dyjakon, P. Bukowski, M. Gómez, F. Sebastián, D. García-Galindo, E. den Boer, S. Germer and Wolf-Anno Bischoff
- Performance of mechanical-biological treatment of residual municipal waste in Poland
E. den Boer and A. Jędrzak
- Organic matter and heavy metals content modeling in sewage sludge treated with reed bed system
D. Boruszko, W. Dąbrowski and P. Malinowski
- Thermal performance in subsurface shallow depth soil layer as a potential heat source for ground heat pumps in Poland
K. Bryś, T. Bryś, M. A. Sayegh, H. Ojrzyńska, J. Danielewicz, T. Nannou, B. Axcell and H. Jouhara
- Energy and environmental evaluation of combined cooling heating and power system
A. Bugaj
- Modeling the defrost process in complex geometries – Part 1: Development of a one-dimensional defrost model
S. van Buren, E. Hertle, P. Figueiredo, R. Kneer and W. Rohlf
- Variability of road traffic noise recorded by stationary monitoring stations
A. Bąkowski and L. Radziszewski
- Comparison of Power Curve Monitoring Methods
P. Cambon, Ch. Masson, A. Tahan, D. Torres and Francis Pelletier
- An Integrated Low Carbon Energy Solution to Cooking Fuel, Tailored to Niger State's Rural Population
A. Carvell, A. Price-Allison, C. Birch, T. Green, K. Harij., S. Maihankuri, A. Raji, M. Uqaili and Valerie Dupont
- Acid emissions monitoring needs in ceramic tile industry: challenges derived from new policy trends
I. Celades, S. Gomar, F. Romero, A. Chauhan, B. Delpech, H. Jouhara
- Industrial applications of the air direct-contact, gravel, ground heat exchanger.
W. Cepiński and M. Besler
- The use of multi criteria analysis to compare the operating scenarios of the hybrid generation system of wind turbines, photovoltaic modules and a fuel cell.
B. Ceran

- Complex assessment of quick rotation plants used as solid biofuels potential
Ž. Černiauskiene, E. Zvicevičius, V. Tilvikienė, Z. J.kauskiene
- The effect of biologically and chemically synthesized silver nanoparticles (AgNPs) on biofilm formation
J. Chojniak, I. Biedroń, B. Mendrek and G. Płaza
- Use of CFD modelling for analysing air parameters in auditorium halls
R. Cichowicz
- Power plant wastes capitalization as geopolymeric building materials
G. Ciobanu, L. Litu and M. Harja
- Solar energy usage in drying technologies of medicinal and spice plants
A. Čiplienė, E. Zvicevičius and Algirdas Raila
- A review on waste heat recovery from exhaust in the ceramics industry
B. Delpech, B. Axcell and H. Jouhara
- EU energy policies achievement by industries in decentralized areas
N. Destro, A. Stoppato, A. Benato and F. Schiro
- Mixed convection in a three-dimensional ventilated cavity with two isothermal heating Sections
H. Doghmi, B. Abourida, L. Belarche, M. SA.d and M. Ouzaouit
- The use of mathematical models for diagnosis of activated sludge systems in WWTP
J. Drewnowski and M. Zmarzły
- Analysis of a combined heating and cooling system model under different operating strategies
M. Dzierzgowski and R. Zwierzchowski
- Boiling heat transfer augmentation on enhanced surfaces
L. Dąbek and Ł. J. Orman
- Assessment of the possibility of using data mining methods to predict sorption isotherms of selected organic compounds on activated carbon
L. Dąbek, B. Szeląg and A. Picheta – Oleś
- Energy consumption modeling during dairy sewage pretreatment
W. Dąbrowski, R. Żyłka, P. Malinowski and D. Boruszko
- Passive and Safe Thermal Coupling of Generation-IV VHTR to Hydrogen Fuel Production Complex
Mohamed S. El-Genk and J.-M. P. Tournier
- Investigating the water consumption for electricity generation at Turkish power plants
B. El-Khozondar and M. A. Koksal
- Experimental study of air evaporative cooling process using microporous membranes
S. Englart
- CO₂ concentration and occupancy density in the critical zones served by the VAV system
G. Etoua Evina, S. Kajl, L. Lamarche and J. Beltran-Galindo
- The influence of mechanical gear on the efficiency of small hydropower
Z. Ferenc and A. Sambor
- Temperature influence on the fast pyrolysis of manure samples: char, bio-oil and gases production.
M. Fernandez-Lopez, K. Anastasakis, W. De Jong, J. L. Valverde and L. Sanchez-Silva
- The impact of the hot tap water load pattern in the industrial hall on the energy yield from solar collectors
N. Fidorów-Kaprawy and E. Dudkiewicz
- The analysis of the differences between the results of the thermal response test and the data from the operation of the brine-to-water heat pump's vertical exchanger
N. Fidorów-Kaprawy, E. Stefanowicz, W. Mazurek, M. Szulgowska-Zgrzywa and A. Bryszewska-Mazurek
- Solar radiation – to – power generation models for one-axis tracking PV system with on-site measurements from Eskisehir, Turkey
T. Filik, Ü. Başaran Filik and Ö. N. Gerek

- Solar Potential and Energy Consumption Analysis in Iki Eylul Campus of Anadolu University, Eskisehir
Ü. B. Filik, T. Filik and Ö.N. Gerek
- Microbiological stimulation of phytoremediation process using *Salvinia natans* to mercury contaminated water
V. Filyarovskaya, M. Sitarska, T. Traczewska and M. Wolf
- Dynamic environmental control mechanisms for pneumatic foil constructions
J.-F. Flor, Y. Wu, P. Beccarelli and J. Chilton
- Closing of Water Circuits – A Global Benchmark on Sustainable Water Management
S. Fröhlich
- Seasonal coefficient of performance for ground source heat pump and groundwater one in Białystok
A. Gajewski
- Performance and diversity of PAO and dPAO communities in the Miedzybórz and Niemcza Wastewater Treatment Plants.
E. M. Galas and K. Piekarska
- Carbon and Energy Footprint of Electrochemical Vinegar Wastewater Treatment
E. E. Gerek, S. Yilmaz and A. S. Koparal
- Sizing Procedures for Sun-Tracking PV System with Batteries
Ö. N. Gerek, Ü. B. Filik and T. Filik
- Natural Ventilation Systems to enhance sustainability in buildings: a review towards Zero Energy Buildings in schools
M. Gil-Baez, , Á. Barrios-Padura and M. Molina-Huelva
- Influence of PCMs on thermal behavior of building walls: Experimental study using the walls of a reduced scale room
A. Gounni, M. T. Mabrouk, A. Kheiri and M. El alami
- Application of porous materials in oil substances separation from water
A. Gołub and J. Piekutin
- Pretreatment methods as a means of boosting methane production from sewage sludge and its mixtures with grease trap sludge
A. Grosser and E. Neczaj
- Electrodialysis potential for fractionation of multicomponent aqueous solutions
M. Grzegorzek and K. Majewska-Nowak
- Computational and experimental efficiency analysis of photovoltaic systems with different module technologies under Polish climate conditions
S. Gulkowski, A. Zdyb and P. Dragan
- Incineration, pyrolysis and gasification of electronic waste
A. Gurgul, W. Szczepaniak and M. Zabłocka-Malicka
- Monitoring of water supply connections as an element to reduce apparent losses of water?
J. Gwoździej-Mazur
- Dynamic thermal properties of surface heating and cooling systems
A. Górka, H. Koczyk and Filip Pawlak
- Influence of the catchment management on the magnitude of the total solids load conveyed by the stormwater sewer system – case study
J. Górski, K. Górski, Ł. Bąk and B. Szeląg
- Large multi-zone building airtightness measurement
R. Górzeński, M. Szymański and A. Górka
- The slag original from the process of sewage sludge incineration selected properties characteristic
A. Głowacka, T. Rucińska, J. Kiper

- Energy crops cultivated on the slag from incineration of the sewage sludge energy value assessment
A. Głowacka, K. Tarnowski, S. Bering, J. Mazur, J. Kiper and Cz. Wołoszyk
- Model and Design of a Four-Stage Thermoacoustic Electricity Generator with Two Push-Pull Linear Alternators
A. Hamood, A. J. Jaworski and X. Mao
- Removal of oxytetracycline from aqueous solutions by hydroxyapatite as a low-cost adsorbent
M. Harja and G. Ciobanu
- Monitoring of Drug Resistance Amplification and Attenuation with the Use of Tetracycline-Resistant Bacteria During Wastewater Treatment
M. Harnisz, E. Korzeniewska, S. Niestępski, A. Osińska and B. Nalepa
- The prevalence of multidrug-resistant *Aeromonas* spp. in the municipal wastewater system and their dissemination into the environment
M. Harnisz and E. Korzeniewska
- Modelling the defrost process in complex geometries – Part 2: Wall-function based coupling to a multi-region CFD solver
E. Hertle, S. van Buren, P. Figueiredo, R. Kneer and W. Rohlf
- Performance prediction of a CI engine fuelled with waste fried oil methyl Ester-diesel blend using Artificial Neural Network
J. Hirkude, A. Nigalye and A. Nigalye
- Investigations on performance of CI Engine with Waste Palm Oil Biodiesel-Diesel blends using response surface methodology
J. Hirkude, J. Randhir and V. Belokar
- Multicriteria Optimization Approach to Design and Operation of District Heating Supply System over its Life Cycle
P. Hirsch, K. Duzinkiewicz and M. Grochowski
- Pollution of Soils (Pb, Cd, Cr, Zn, Cu, Ni) Along The Ring Road of Wrocław (Poland)
A. Hołtra and D. Zamorska-Wojdyła
- A Novel Design of Reactive Distillation Configuration for 2-Methoxy-2-Methylheptane Process
A. Hussain, M. A. Qyyum, L. Q. Minh, H. Jimin and M. Lee
- A mass transfer model for the adsorption of pesticide on natural waste materials
K. Ignatowicz
- Comprehensive study for Anammox process via multistage anaerobic baffled reactors
S. Ismail and A. Tawfik
- Conceptual design of multi-source CCS pipeline transportation network for Polish energy sector
N. Isoli and M. Chaczykowski
- Towards energy neutrality of wastewater treatment plants via deammonification process
K. Janiak, A. Łojek and M. Muszyński-Huhajło
- Study of heat exchange processes in a screw ash cooler installation
B. Janowska, P. Regucki, A. Andruszkiewicz and W. Wędrychowicz
- Indirect contact freeze water desalination for an ice maker machine – CFD simulation
H. Jayakody, R. Al-Dadah and S. Mahmoud
- Simulation of thermal environment in a three-layer vinyl greenhouse by natural ventilation control
T.-H. Jin, K.-Y. Shin, S.-W. Yoon, Y.-H. Im and K.-C. Chang
- Large scale complementary solar and wind energy sources coupled with pumped-storage hydroelectricity
J. Jurasz, M. Wdowikowski, B. Kaźmierczak, and P. Dąbek
- Anaerobic co-digestion of sewage sludge and molasses
K. Kalemba and K. Barbusiński

- Single And Competitive Adsorption Of OMPs By Carbon Nanotubes – Mechanism And Fitting Models
G. Kamińska, M. Dudziak, J. Bohdziewicz and Edyta Kudlek
- Stability assessment of the chemical composition of the treated mining water used to replenish the cooling circuit in Jaworzno III Power Plant – Power Plant II
M. Karpiński and Ewa Kmiecik
- Air temperature gradient in large industrial hall
M. Karpuk, A. Pelech, E. Przydróżny, J. Walaszczyk and S. Szczęśniak
- Comparing energy payback and simple payback period for solar photovoltaic systems
W. Kessler
- Analysis of the impact of simulation model simplifications on the quality of low-energy buildings simulation results
M. Klimczak, J. Bojarski, P. Ziembicki and P. Kęskiewicz
- The Quaternary groundwater as the low temperature energy source for heat pumps in Małopolska Province
E. Kmiecik, B. Tewska and J. Mazurkiewicz
- Modification of Rhodamine WT tracer tests procedure in activated sludge reactors
M. Knap and P. Balbierz
- Determination of the solar transmittance for the translucent shutter with PCM in liquid and solid state
A. Komerska, D. Ksionek and M. Rosiński
- Analysis of profitability of using a heat recovery system from grey water discharged from the shower (case study of Poland)
S. Kordana and D. Słyś
- Change-over natural and mechanical ventilation system energy consumption in single-family buildings
M. Kostka and M. Szulgowska-Zgrzywa
- Removal of copper ions from aqueous solutions by means of micellar-enhanced ultrafiltration
I. Kowalska and A. Klimonda
- The emission and combustion characteristics of marine diesel engine with extreme throttled of air or exhaust ducts
J. Kowalski
- Studies on the fuel spray macrostructure atomized with the marine fuel injector
J. Kowalski, J. Lewińska, P. Jaworski and Ł. J. Kapusta
- Influence of the single EGR valve usability on development of the charge directed to individual cylinders of an internal combustion engine
K. Krakowian, A. Kaźmierczak, A. Górniak, R. Wróbel
- Geostatistical methods in the assessment of the spatial variability of the quality of river water
M. Krasowska and P. Banaszuk
- Influence of sputtering deposition parameters on electrical and optical properties of aluminium-doped zinc oxide thin films for photovoltaic applications
E. Krawczak, A. Zdyb, S. Gulkowski, A. Fave and E. Fourmond
- Bioarchitecture – a new vision of energy sustainable cities
A. Krzemińska, A. Zaręba and A. Dzikowska
- Influence of environmental pollution with creosote oil or its vapors on biomass and selected physiological groups of microorganisms
T. Krzyśko-Łupicka, K. Cybulska, P. Kołosowski, A. Telesiński and A. Sudół
- The Occurrence Of Heavy Metals And Metal-Resistant Bacteria In Water And Bottom Sediments Of The Straszyn Reservoir (Poland)
E. Kulbat and A. Sokołowska

- Determining residential energy consumption-based CO₂ emissions and examining the factors affecting the variation in Ankara, Turkey
M. Kus, P. Akan, M. Aydinalp Koksal and G. Gullu
- Energy of the Future: Hydrogen and Light Weakly Bound Nuclei
K. Kuterbekov, Y. Penionzhkevich and B. Ibrayev
- Application of Regression Tress for Prediction of Water Conduits Failure Rate
M. Kutylowska
- The measures for achieving nZEB standard of retrofitted educational building for specific polish location – case study
J. Kwiatkowski, M. Mijakowski and A. Trzqski
- Various methods of heat supply for a building which is operated periodically during the year.
M. Maletka and M. Laska
- Research of CO₂ concentration in naturally ventilated lecture room
M. Laska and E. Dudkiewicz
- The importance of monitoring renewable energy plants: three case histories
R. Lazzarin
- Batch orographic interpolation of monthly precipitation based on free-of-charge geostatistical tools
O. Ledvinka
- Thermodynamic analysis of a combined-cycle solar thermal power plant with manganese oxide-based thermochemical energy storage
Q. Lei, R. Bader, P. Kreider, K. Lovegrove and W. Lipiński
- The effectiveness of the biodegradation of raw and processed polystyrene by mealworms
K. Leluk, B. Hanus -Lorenz, J. Rybak and M. Bożek
- Hydrodynamic characterization of gas-solids fluidized beds by means of electrical capacitance tomography
X. Li, X. Mao and A. J. Jaworski
- Modern proposal of methodology for retrieval of characteristic synthetic rainfall hyetographs
P. Licznar, E. Burszta-Adamiak, J. Łomotowski and J. Stańczyk
- Application of Multi-Enzymatic Hydrolysis for Improving the Efficiency of the Biogas Production in Solid Waste Fermentation Process in Ostróda WWTP
K. Lipiński and K. Umiejewska
- Synthesis of Mesoporous Cerium Compound for CO₂ Capture
G. Liu, K. Tatsuda, Y. Yoneyama and N. Tsubaki
- MODELING AN IMPACT OF ROAD GEOMETRIC DESIGN ONVEHICLE ENERGY CONSUMPTION
B. Luin, S. Petelin and F. Al-Mansour
- The Transmission Characteristics of Indoor Particles under Different Ventilation Conditions
Y. Lv, H. Wang and S. Wei
- Experimental study on the heat transfer characteristics of waste printed circuit boards pyrolysis
H. Ma, N. Du, C. Li, S. Yu and Z. Zhang
- Scientific approach and practical experience for reconstruction of waste water treatment plants in Russia
N. Makisha and E. Gogina
- Renewable energy from waste from a legal perspective: where do we stand?
J. Malinauskaite and H. Jouhara
- Transfer reservoir as a new solution for transfer of stormwater to water receivers
R. Malmur
- The influence of the small platinum clusters on hydrogen sorption properties
A. Martyła, R. E. Przekop, M. Osińska-Broniarz, M. Kopczyk, J. D. Rybka and P. Kirszenstejn

- Approach to the Implementation of Linear-Assisted-Based Battery Chargers
H. Martínez-García and E. García-Vílchez
- On the Modelling of Linear-Assisted DC-DC Voltage Regulators for Photovoltaic Solar Energy Systems
H. Martínez-García and E. García-Vílchez
- Analysis of energy consumption at the Rzeszów Wastewater Treatment Plant
A. Masłoń
- Analysis of the energy potential of municipal solid waste for the thermal treatment technology development in Poland
K. Midor and K. Jąderko
- CFD Analysis of a Full-Scale Ceramic Kiln Module Under Actual Operating Conditions
M. Milani, L. Montorsi, M. Stefani and M. Venturelli
- Co-digestion of sewage sludge from external small WWTP's in a large plant
S. Miodoński
- Nanomaterials in the Environment
B. Mrowiec
- Cycle Analysis of MCFC/Gas Turbine System
A. Musa, A. Alaktwi and M. Talbi
- Shortcut nitrification / partial nitritation start-up for reject water treatment in a SBR
M. Muszyński-Huhajło and S. Miodoński
- Production of bio-fertilizer from microwave vacuum pyrolysis of waste palm shell for cultivation of oyster mushroom (*Pleurotus ostreatus*)
W. L. Nam, M. Huan Su, X. Y. Phang, M. Y. Chong, R. K. Liew, N. L. Ma and S. S. Lam
- Universal device supplying heating, cooling, electrical power and hot domestic water through the Maisotsenko Cycle
A. Nam, D. C. Betts, C. Betts, R. Koo and D. Pandelidis
- Effects of operating variables on heat transfer coefficient and liquid nitrogen consumption of a commercial lab scale cryogenic batch freezer
T. Nannou, J. Herrmann, J. Trembley and H. Jouhara
- Influence of nanofluids on the efficiency of Flat-Plate Solar Collectors (FPSC)
M. B. Nejad, H. A. Mohammed, O. Sadeghi and Swar A. Zubeer
- Heat Losses of a Distribution Network Under Different Operating Conditions for a District Heating and Cooling System
O. Niemyjski and R. Zwierzchowski
- The influence of using heat storage with pcm on inlet and outlet temperatures in substation in dhs
K. Nogaj, M. Turski and R. Sekret
- Atmospheric CO₂ capture for the artificial photosynthetic system
A. Nogalska, A. Zukowska and R. Garcia-Valls
- The mathematical model of rainwater catchment in Wrocław
M. Nowakowska
- Impact assessment of treated wastewater on water quality of the receiver using the Wilcoxon test
P. Ofman, M. Puchlik, G. Simson, M. Krasowska and J. Struk-Sokołowska
- Concept of effective potential assessment as an actual hydropower possibilities in Upper Vistula water region
A. Operacz, K. Chmielowski and B. Szeląg
- Calibration of the computer model describing flows in the water supply system; example of the application of a genetic algorithm
M. Orłowska-Szostak and R. Orłowski

- Analysis of freeze protection methods for recuperators used in energy recovery from exhaust air
A. Pacak, A. Jedlikowski, D. Pandelidis and S. Anisimov
- Propositions of improvement of the cross-flow M-Cycle heat exchangers in different air-conditioning applications
D. Pandelidis, S. Anisimov, K. Rajski and E. Brychcy
- Organic Rankine cycle - review and research directions in engine applications
A. Panesar
- Chemical treatment of wastewater from flue gas desulphurisation
I. Pasiiecznik and W. Szczepaniak
- Energy demand and thermal comfort of HVAC systems with thermally activated building systems as a function of user profile
K. Pałaszyska, K. Bandurski and M. Porowski
- The influence of heat sink temperature on the seasonal efficiency of shallow geothermal heat pumps
G. Pełka, W. Luboń, A. Sowizdzał and D. Malik
- Concentration of polycyclic aromatic hydrocarbons in water samples from different stages of treatment
M. Pogorzelec and K. Piekarska
- Impact of the circulation system on the energy balance of the building
I. Polarczyk and M. Fijewski
- Impact of the circulation system on domestic hot water consumption
I. Polarczyk and M. Fijewski
- Investigation of the biofuel flue and producer gases cleaning efficiency using ESP
R. Poškas, A. Sirvydas, P. Poškas, N. Striūgas, N. Pedišius and V. Valinčius
- The influence of heat recovery method on the yearly demand in dual-duct HVAC systems
E. Przydróżny, A. Przydróżna and S. Szczęśniak
- Seasonal changes in quality of wastewater from fruit and vegetable industry
M. Puchlik and K. Ignatowicz
- A novel vortex tube-based N₂-expander liquefaction process for enhancing the energy efficiency of natural gas liquefaction
M. A. Qyyum, F. Weia, A. Hussain, W. Ali, O. Sehee and M. Lee
- The choice of primary energy source including PV installation for providing electric energy to a public utility building - a case study
B. Radomski, B. Ćwiek and T. M. Mróz
- Numerical modelling of multi-vane expander operating conditions in ORC system
J. Rak, P. Błasiak and P. Kolasiński
- Energetic and exergetic analysis of a novel Kalina power-cooling cycle with ejector absorption refrigeration cycle
J. Rashidi, P. Ifaei and Ch. Yoo and J. T. Kim
- Recovery of useful chemicals from palm oil mill wastewater
Y. Ratanaporn, N.R. Duangkamol, T. Teruoki and M. Takao
- Numerical modelling of series-parallel cooling systems in power plant
P. Regucki, M. Lewkowic and M. Kucięba
- A simplified model of a mechanical cooling tower with both a fill pack and a coil
F. Van Riet, G. Steenackers and I. Verhaert
- Effect of operating conditions on performance of silica gel –water air-fluidised desiccant cooler.
Z. Rogala, P. Kolasiński and Z. Gnutek
- Organic and Elemental Carbon bound to Particulate Matter in the air of Printing Office and Beauty Salon
P. Rogula-Kopiec, J. S. Pastuszka, W. Rogula-Kozłowska and W. Mucha

- The use of lichens in post-smelting dumps reclamation – preliminary results of experimental cultivation of selected species on slag substrate
K. Rola and P. Osyczka
- Design of a graphic interface for calculation of astronomical parameters for the use of solar systems
I. Rougab and A. Cheknane
- The application of spiders and their webs in studies of metal pollution
J. Rybak, B. Hanus-Lorenz, W. Rogula-Kozłowska, K. Loska, K. Widziewicz and R. Rutkowski
- The energy source for heat pumps with vertical heat exchangers
P. Rynkowski
- Assessment of the AERMOD dispersion model over complex terrain with different types of meteorological data: Tracy Power Plant experiment
M. Rzesutek, A. Szulecka, R. Oleniacz and M. Bogacki
- Study on water evaporation rate from indoor swimming pools
I. Rzeźnik
- Thermoacoustic refrigerator driven by a combustion-powered thermoacoustic engine for rural communities
P. Saechan, A. J. Jaworski, M. S. Abbo, O. Masera-Cerutti and I. Dhuchakallaya
- Process simulation and comparison of biological conversion of syngas and hydrogen in biogas plants
C. Awais Salman, S. Schwede, E. Thorin and J. Yan
- The influence of hydraulic conditions on coagulation process effectiveness
A. Sambor and Z. Ferenc
- Heat pump integration platform in European district heating networks
M. A. Sayegh, P. Jadwiszczak, M. Miniewicz, K. Piekarska, T. Nannou, B. Axcell and H. Jouhara
- Sediments from stormwater drainage system as sorbents of organic and inorganic pollutants
A. Sałata and L. Dąbek
- Gas fired boilers: Perspective for near future fuel composition and impact on burner design process
F. Schiro, A. Stoppato and A. Benato
- Experimental study of optical and electrical properties of ZnO nano composites electrodeposited on n-porous silicon substrate for photovoltaic applications
N. Selmane, A. Cheknane, N. Gabouze, N. Maloufi and M. Aillerie
- Optimization for energy efficiency of underground building envelope thermal performance in different climate zones of China
S. Luyang, L. Jing and Z. Huibo
- Hybrid capacitive deionization with anion-exchange membranes for lithium extraction
A. Siekierka and M. Bryjak
- Time series analysis and modelling of SO₂ concentration in the atmospheric air - the case study of Krakow
Z. Skrobacki and L. E. Dąbek
- Environmental aspects and renewable energy sources in the production of construction aggregate
I. Skrzypczak, W. Kokoszka, L. Buda-Ożóg, J. Kogut and M. Słowik
- Evaluation of the correlation between concentration of volatile organic compounds and temperature of the exhaust gases in motor vehicles
M. Skrętowicz, R. Wróbel and M. Andrych-Zalewska
- Analysis of application of alternative drive systems for international heavy-duty transport on Wrocław-Dresden-Prague routes
M. Skrętowicz and Z. Sroka
- The influence of glycerin on nitrogen removal in wastewater treatment with activated sludge
J. Smyk and K. Ignatowicz

- Adaptive Heat Pump and Battery Storage Demand Side Energy Management
F. Sobieczky, C. Lettner, T. Natschläger and P. Traxler
- Biomass universal district heating systems
V.M Soltero, S. Rodríguez-Artacho, R. Velázquez and R. Chacartegui
- Environmental aspects of the geothermal energy utilisation in Poland
A. Sowizdżał, B. T.ewska and A. Drabik
- Hydraulic optimization and modeling of hydro-cyclone-systems for treatment and purification of any kind of waters
L. Spangemacher, S. Fröhlich and H. Buse
- Changes in microbiological composition of soils and soil contamination with drug-resistant bacteria caused by the use of sewage sludge in nature
E. Stanczyk-Mazanek, L. Pason and U. Kepa
- Evaluating the financial efficiency of energy and water saving installations in passive house
A. Stec, A. Mazur and D. Słyś
- COD fractions changes in the SBR-type reactor treating municipal wastewater with controlled percentage of dairy sewage
J. Struk-Sokołowska and J. Rodziewicz
- Laboratory tests of overpressure differential systems for smoke protection of lobbies
P. Szałański and J. Misiński
- Steam gasification for waste valorization with energy recovery
W. Szczepaniak and M. Zabłocka-Malicka
- Profile of occupants activity impact on indoor air
A. Szczurek, M. Maciejewska and A. Dolega
- Detection of comfortable temperature based on thermal events detection indoors
A. Szczurek, M. Maciejewska and M. Uchroński
- Measurement of acetates in air using differential ion mobility spectrometer
A. Szczurek, M. Maciejewska, Ż. Zajiczek and M. Maziejuk
- Preliminary sanitary analysis of supply and exhaust air of ventilation units working at special rooms
S. Szczęśniak, A. Trusz-Zdybek, and K. Piekarska
- Prediction of wastewater quality indicators at the inflow to the wastewater treatment plant using data mining methods
B. Szeląg, K. Barbusiński, J. Studziński, L. Bartkiewicz
- Possibility of the modelling of electricity production from hydropower
B. Szeląg, and A. Operacz
- Implementation of ferric hydroxide-based media for removal of toxic metalloids
M. Szlachta and P. Wójtowicz
- The analysis of the air-to-water heat pump operation with consideration of the actual profile of the domestic hot water demand
M. Szulgowska-Zgrzywa, A. Chmielewska, K. Piechurski and J. Danielewicz
- Characteristics of selected elements of the air quality management system in urban areas in Poland
I. Sówka, D. Kobus, A. Chlebowska Styś and M. Zathej
- Integrated assessment of soil quality after application of the biogas fermentation residues – a laboratory experiment
A. Telesiński, K. Cybulska, M. Płatkowski, M. Stręk, G. Jarnuszewski, I. Wrońska, P. Mularewicz, T. Kajdan, R. Biczak and P. Kołosowski
- A numerical investigation of laminar forced convection in a solar collector with non-circular duct
T. J. Teleszewski

- Comparison of the availability of groundwater information sources in Poland with other European countries. Knowledge inventory for hydrogeology research – project KINDRA.
B. Tomaszewska, M. Dendys, and M. Tyszer
- Experimental process investigation of a latent heat energy storage system with a staggered heat exchanger with different phase change materials for solar thermal energy storage applications
N. P. Tsolakoglou, M. K. Koukou, M. G. Vrachopoulos, N. Tachos, K. Lymberis and V. Stathopoulos
- A method of determining the thermal power demand of buildings connected to the district heating system with usage of heat accumulation
M. Turski, R. Sekret
- The efficiency of macroporous polystyrene ion- exchange resins in natural organic matter removal from surface water
A. Urbanowska, and M. Kabsch-Korbutowicz
- Performance evaluation of different micro-CHP configurations in real life conditions and the influence of part load behaviour
I. Verhaert, F. Van Riet, R. Baetens, M. De Pauw and M. Van Erdeweghe
- Intake power measurement as a criterion for control of HVAC systems
J. J. Walaszczyk, A. Przydróżna, and E. Przydróżny
- The effect of inflation rate on the cost of medical waste management system
M. J. Walery
- Selected heavy metals speciation in chemically stabilised sewage sludge
E. Wiśniowska, M. Włodarczyk-Makula
- Absorption cooling sources atmospheric emissions decrease by implementation of simple algorithm for limiting temperature of cooling water
K. Wojdyga, M. Malicki
- Investigations of hot water temperature changes at the pipe outflow
J. Wojtkowiak, and C. Oleśkowicz-Popiel
- The application of impedance measurement to assess biofilm development on technical materials used for water supply system construction
M. Wolf, T. Traczewska, and T. Grzebyk
- The effectiveness of removing precursors of chlorinated organic substances in pilot water treatment plant
M. Wolska, S. Szerzyna, J. Machi, M. Mołczan, W. Adamski and J. Wiśniewski
- Rheological properties of disintegrated sewage sludge
P. Wolski
- The quantity and quality of biogas produced from the biological sludge processed by the inoculum of bacterial strains
I. Wrońska, and K. Cybulska
- Vibration and air quality tests inside the tractor cabin
R. Wróbel, M. Skrętowicz, K. Trzmiel, K. Pentoś, and K. Pieczarka
- Prospects for the use of SMR and IGCC technologies for power generation in Poland
A. Wyrwa, W. Suwała
- How effective is aeration with vortex flow regulators? Pilot scale experiments
P. Wójtowicz and M. Szlachta
- An application of data mining in district heating substations for improving energy performance
P. Xue, Z. Zhou, X. Chen and J. Liu
- Mechanically Enhanced Electrospun Nanofibers for Wastewater Treatment
F. Yalcinkaya

- Influence of Cross-sectional Ratio of Down Comer to Riser on the Efficiency of Liquid Circulation in Loop Air Lift Bubble Column
T. Yamamoto, H. Kawasaki and H. Mori
- Microwave pyrolysis using self-generated pyrolysis gas as activating agent: An innovative single-step approach to convert waste palm shell into activated carbon
P. N. Y. Yek, R. K. Liew, M. S. Osman, C. C. Wong, and S. S. Lam
- Energy production for environmental issues in turkey
I. Yuksel, H. Arman, and I. H. Demirel
- The role of energy systems on hydropower in turkey
I. Yuksel, H. Arman, and I. H. Demirel
- Zero energy buildings in the logistics warehouse systems
P. Zajac, S. Kwasniowski
- Energy sustainable cities. From Eco Villages, Eco Districts towards Zero Carbon Cities
A. Zaręba, A. Krzemińska, and J. Łach
- Energy potential of the modified excess sludge
I. Zawieja
- Evaluation of external and internal irradiation on uranium mining enterprise staff by tooth enamel EPR spectroscopy
K. Zhumadilov, A. Ivannikov, A. Khailov, S. Orlenko, V. Skvortsov, V. Stepanenko, K. Kuterbekov, S. Toyoda, P. Kazymbet, and M. Hoshi
- Dosimetry study of East Kazakhstan residents by tooth enamel EPR spectroscopy
K. Zhumadilov, A. Ivannikov, V. Skvortsov, V. Stepanenko, T. Rakhypbekov and M. Hoshi
- Enhancement of sedimentation and coagulation with static magnetic field
M. Zieliński, M. Dębowski, A. Hajduk, P. Rusanowska
- Optimization of energy cost in water supply system
I. Zimoch, and E. Bartkiewicz
- A review of photovoltaic cells cooling techniques
S. A. Zubeer, H. A. Mohammed and M. Ilkan
- Novel model of trigeneration system generating hot, cold and desalinated water using low grade heat recovery from nuclear reactor set.
R. Zwierzchowski, M. Malicki and M. Lipka
- Characteristics of large thermal energy storage systems in Poland
R. Zwierzchowski
- Impact of external conditions on energy consumption in industrial halls.
A. Żabnieńska-Góra
- Intensification of anaerobic digestion efficiency with use of mechanical excess sludge disintegration in the context of increased energy production in wastewater treatment plants
M. Żubrowska-Sudoł, J. Podedworna, A. Bisak, K. Sytek-Szmeichel, P. Krawczyk and A. Garlicka
- Energy Efficiency of a Solar Domestic Hot Water System
M. Zukowski