

## International Competition of Student Scientific Works “Black Sea Science 2020”

### Results for the field of “Power Engineering and Energy Efficiency”

Place	Country	Institution	Work Title	Author(s)	Supervisor(s)	Score
I	China	Ningbo Institute of Technology	Experimental Performance Analysis of an Ejector Refrigeration Cycle in Cascade Refrigeration Cycle	Xinyue Xao Yifan Zhou Yini Pan	Guangming Chen	93
II	Ukraine	Odessa National Academy of Food Technologies	Modeling and Analysis of Periodic Operation Ammonia-water Absorption Refrigeration Units in Atmospheric Water Generation Systems	Kravchenko Vladimir	Vasyliv Oleh	89
II	Ukraine	National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”	Integrated Approaches To Determination Of CO2 Concentration And Air Rate Exchange In Educational Institutions	Hetmanchuk Hanna Khreptun Diana	Bilous Inna Vynogradov- Saltykov Volodymyr	88
III	Ukraine	Mykolaiv National Agrarian University	Determination of Rational Geometrical Relations of Single-phase Electromagnetic Systems with Rectangular Cross Sections of Rods	Churilo Ruslan	Sadovoy Aleksey	78
III	Slovakia Belarus	International Sakharov Environmental Institute of Belarusian State University Slovakia State Technical University	Investigation of led light sources and their influence on the power supply network	Baran Aleksandr Lira Dmitriy	Baran Aleksandr	78
	China	Ningbo Institute of Technology	Trigeneration System With Application of Microturbine Mechanical Compression Refrigerating Machine and Ejector Cooling Machine	Xiang Sun Yuefan Xu Junjun Chen	Neng Gao	73
	Ukraine	Vinnitskiy National Agricultural University	Device for Exploring the Parameters Of Solar Panels	Rohach Valentyn	Stadnik Mykola	74,5
	Russia	Moscow Power Engineering Institute	Control System for Autonomous Photovoltaic Power Plant	Chepiga Andrey	Anuchin Alecksey	73
	Ukraine	Odessa State Academy Of Technical Regulation And Quality	Energy Efficient Thermal Control Method for Rolling Bearings	Peretiaka Yevhenii	Peretiaka Nataliia	71

	Ukraine	Mykolaiv National Agrarian University	Structural Synthesis of Single-phase Transformers with Twisted Magnetic Circuits Depending on the Type of Forming Circuits	Ivanov Dmytro	Sadovoy Aleksey	<b>70,5</b>
	Belarus	International Sakharov Environmental Institute of Belarusian State University	Analysis of The Efficiency of The Domestic Heat-insulating Materials Using in Individual House Building	Kuzhelko Dmitry	Krasovsky Vladimir	<b>70</b>
	Ukraine	Shostka Institute of Sumy State university	Absorption Converter of Solar Energy into Electrical Energy	Prima Daniil Pilipets Vasil Antoshenko Denis	Maryinskykh Yuriy	<b>69,5</b>
	Ukraine	Odessa National Academy of Food Technologies	Thermo-economical Model of VRF-air Conditioning System	Basov Anatoliy	Zhikhareva Natalia	<b>67,5</b>
	Ukraine	Odessa State Academy of Civil Engineering and Architecture	Control System for Autonomous Photovoltaic Power Plant	Shcherbina Viktoriya	Kersh Vladimir	<b>68</b>
	Ukraine	Odessa National Academy of Food Technologies	Thermoeconomic Model of a Multi-zone Air Conditioning System with the Development of Air Distribution Systems	Solovjova Polina	Kohut Volodymyr	<b>67,5</b>
	Ukraine	Zaporizhzhia Polytechnic National University	Forecasting the Energy Consumption of A Metallurgical Enterprise	Zinenko Danylo Yaremchenko Yevhenii	Dubrovin Valerii Bakurova Anna	<b>66</b>
	Ukraine	National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	Vertical Concentric Surface Wind Farm for Use in Private Energy Systems	Perfetskiy Viktor		<b>66</b>
	Ukraine	(CIAM) Kyiv International University	Solar Panels Work and Control System Modeling in LabVIEW and LTSpice XVII. Comparison of the Perspectives of Panels Using	Lischynskiy Vadym	Scherbak Leonid	<b>65</b>
	Ukraine	Odessa National Academy of Food Technologies	LPG Re-liquefaction Installation on ANAFI LPG	Chaban Roman	Sokolovska-Yefimenko Viktoriya	<b>65</b>
	Belarus	<u>Sukhoi</u> State Technical University Of Gomel	Energy Trigeneration in Turboexpansion Freon Installations Using VER	Panfilov Aleksey	Ovsyannik Anatoliy	<b>64</b>