### Ministry of Education and Science of Ukraine Khmelnytskyi National University

## **PROGRAM**

of 6th International Conference

# STRATEGIES, MODELS AND TECHNOLOGIES OF ECONOMIC SYSTEMS MANAGEMENT

SMTESM-2019

October 4-6, 2019 Khmelnytskyi, Ukraine

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Bydgoszcz, Poland

- > Digital Technologies in Economic Systems Management
- Modeling of decision making under uncertainty and risk conditions
- ➤ Modern problems of training specialists and adaptation of educational activities to the EHEA requirements

Co-Heads: Pavlo Hryhoruk, Petro Hrytsiuk

Secretary: Olha Dupliak

| 1. | Nataliia Kraus, Kateryna<br>Kraus and Oleksandr<br>Manzhura                         | Newest digital technology in management of national economic system   |
|----|---|---|
| 2. | Yuliya Peretiatko, Tetiana<br>Klymenko and Alexander<br>Sidorenko                   | Online payment gateways and the expediency of their use in small to medium-sized Internet shops in Ukraine                            |
| 3. | Olena Parubets, Olena<br>Panchenko, Olena<br>Bazilinska and Dmytro<br>Sugonyako     | Research on the use of the artfical intelligence<br>by management of the economic system of the<br>state                              |
| 4. | Asaul Anatoliy, Liudmyla<br>Yemchuk, Larysa<br>Skorobohata and Lesia<br>Bilorusets  | Features of the Cluster Structures Development in the Economy Digitalization Conditions   |
| 5. | Mykhaylo Voynarenko,<br>Viacheslav Dzhedzhula and<br>Iryna Yepifanova               | Modeling the efficiency of implementation of energy saving policy at enterprises under uncertainty conditions                         |
| 6. | Oksana Zamazii, Valentyna<br>Stadnyk, Galyna Sokoliuk<br>and Natalja Prylepa        | Optimization management model of the industrial enterprise innovation potential development on the basis of a value-oriented approach |
| 7. | Vasyl Pryimak, Natalia<br>Mishchuk, Stepan<br>Trokhaniak and Volodymyr<br>Vovk      | Fuzzy assessment of educational potential in the regions of Ukraine   |
| 8. | Uliana Vytvytska  | A Three-Phase Methodical Approach to<br>Assessing the Effectiveness of Investment<br>Projects In Oil and Gas Production               |
| 9. | Andriy Oliinyk, Tetyana<br>Donchenko, Katerina<br>Larionova and Hennadii<br>Kapinos | Modeling credit risk in banking   |

| 10. | Larysa Lazebnyk, Nataliya<br>Nykytchenko, Viktoriya<br>Hurochkina and Liudmyla<br>Kravchenko | Modeling of Functional Dependence Emergent<br>Qualities of Economic Systems   |
|-----|--|---|
| 11. | Vyacheslav Glushchevsky,<br>Viktoriia Khoroshun, Lev<br>Feofanov and Kateryna<br>Steshenko   | Marketing decision making in the conditions of information uncertainty and business risks on the basis of the stratification metamodeling toolkit |
| 12. | Andrii Kaminskyi and<br>Maryna Nehrey  | Investment risk measurement of agricultural ETF   |
| 13. | Petro Hrytsiuk, Tetiana<br>Babych and Larysa<br>Bachyshyna                                   | Cryptocurrency portfolio optimization using Value-at-Risk measure   |
| 14. | Lidiia Karpenko, Pavlo<br>Voronzhak, Vasyl Zalizko<br>and Pavlo Kukhta                       | Innovative Dominants of Strategic Control and Continuous Improvement: the Quality and Quantity Imperative   |
| 15. | Lesia Bushovska, Larysa<br>Liubokhynets, Nataliia<br>Tanasiienko and Olga<br>Poplavska       | An optimization multicriteria model of managerial decision making about the efficiency of choice of the enterprises' strategic assets             |
| 16. | Tetiana Zatonatska, Olena<br>Liubkina, Dmytro<br>Zatonatskyi and Maksym<br>Bilychenko        | Modeling of Risks and Threats in the<br>Management of Personnel Security of the<br>Enterprise   |
| 17. | Iryna Kinash, Uliana<br>Andrusiv, Liudmyla<br>Arkhypova and Iryna<br>Popadynets              | Education for sustainable development as a factor in the formation of environmental competencies of future specialists                            |
| 18. | Pavlo Hryhoruk, Svitlana<br>Grygoruk and Mariusz<br>Mazurkiewicz                             | Model for self-assessment of the Internal<br>Quality Assurance System in ESG requirements<br>context  |
| 19. | Olha Kibik, Liudmyla<br>Nikolaieva, Iuliia<br>Khaiminova and Vitaliy<br>Bereza               | The key factors in ensuring the quality of maritime education in Ukraine  |
| 20. | Oksana Beryslavska, Oleg<br>Gushchyn, Victor<br>Dobrovolsky and Volodymir<br>Shulgin         | Civil-military cooperation professionals training during military education reformation   |

- Econometric modeling and forecasting of socio-economic processes
- ➤ Mathematical methods, models and information technologies to study economic systems

Co-Chairs: Kateryna Gorbatiuk, Nataliia Maksyshko

Secretary: Olena Ovchynnikova

| 1.  | Oleksandr Chernyak, Yevgen<br>Chernyak and Yurii Horobets                                  | The influence of remittances on macroeconomical figures in Ukraine  |
|-----|--|---|
| 2.  | Tea Munjishvili and Giorgi<br>Gaganidze  | Development of the specific gravitational model describing foreign trade between two countries with simulation method                                       |
| 3.  | Olena Martyniuk, Olena<br>Goncharenko and Olga<br>Vytvytska                                | Modeling of Enterprise Development on the<br>Basis of Approximation of Methods of<br>Innovation Dynamics  |
| 4.  | Oleksandr Baranovskyi,<br>Tetiana Hudz and Nataliia<br>Mirko                               | Analysis and Forecasting of Ukraine<br>Economic Development Cycle   |
| 5.  | Zoryna Yurynets, Oksana<br>Petrukh, Nataliia Danylevych<br>and Ivanna Myshchshyn           | Modeling the Impact of Social and Economic<br>Factors on Innovative Development of<br>Healthcare in the Conditions of Sustainable<br>Development of Ukraine |
| 6.  | Ryszard Pukała, Raisa<br>Kvasnytska, Nataliya Vnukova<br>and Svitlana Achkasova            | The Scale Measurement of the Main<br>Indicators of Capitalization of the Insurance<br>Market (on the Example of Ukraine)                                    |
| 7.  | Merzhynskyi Yevhenii,<br>Melikhova Tetiana and<br>Makarenko Andrii                         | Improvement of a conceptual model forecasting the level of economic security of industrial enterprise   |
| 8.  | Olha Zakharova, Olga<br>Bezzubchenko and Khrystyna<br>Mityushkina                          | Innovative Component of Countries' Competitiveness Growth   |
| 9.  | Mykhaylo Voynarenko,<br>Zakharii Varnalii, Viktoriya<br>Hurochkina and Olena<br>Menchynska | Estimation of innovative business processes of the enterprises in conditions Emergence economics  |
| 10. | Vita Los, Dmytro Ocheretin,<br>Hanna Kucherova and Olha<br>Bilska                          | Neural network technology forecasting the country's business climate  |
| 11. | Olena Ovchynnikova, Tetiana<br>Zavhorodnia and Maria<br>Ignatyshyn                         | Modeling of investment processes by methods of regression analysis  |
| 12. | Liliana Horal, Sofiia Kafka,<br>Larisa Galyuk and Yuriy<br>Chuchuk                         | Forecasting further costs of fixed assets in the gas transportation system for management purposes  |

| 13. | Oleg Pursky, Oleksander                     | Model for Consumers Priorities Detection in                        |
|-----|---|--|
| 13. | Kharchenko, Olena Fomina                    | E-trade Based on Classifying a Client's                            |
|     | and Daria Holovina                          | Personal and Consumer Profile                                      |
| 14. |   | Granger causality analysis of profitability and                    |
| 17. | Prykarpatsky and Dmytro                     | efficiency in ukrainian banking sector                             |
|     | Mazharov                                    | ennergy in unitarities culturing section                           |
| 15. |   | Modelling of trade relations between EU                            |
| 10. | Kibalnyk, Tetiana Burlaienko                | countries by the method of minimum spanning                        |
|     | and Oksana Dubinina                         | trees  |
| 16. |   | Statement of simulation experiments on the                         |
|     | Sokolovska and Oksana                       | models of formation the advertising strategies                     |
|     | Klepikova                                   | of pharmaceutical enterprises                                      |
| 17. | Vasyl Porokhnya and                         | Simulation modeling of the relative influence                      |
|     | Oleksandr Ostapenko                         | of the benefits of defense capability strategies                   |
|     |   | on the security of states  |
| 18. |   | Application of fuzzy clustering to shaping                         |
|     | Mantalyuk, Oksana                           | regional development strategies in Ukraine                         |
|     | Proskurovych and Oleksandr                  |  |
|     | Valkov                                      |  |
| 19. |   | Investigation of the markets dynamics type for                     |
|     | Oksana Vasylieva                            | a comparative analysis of the investment                           |
|     |   | instruments attractiveness   |
| 20. | Oksana Bashutska, Lesia                     | Modeling the impact of social transfers on the                     |
|     | Buiak, Mykola Shynkaryk and                 | inequality of income distribution in society                       |
| 2.1 | Oksana Bodnar<br>Maryna Iurchenko, Lyudmyla | Analysis of the intensity of trading on the                        |
| 21. | Remnova and Olena Gonta                     | Analysis of the intensity of trading on the Ukrainian stock market |
|     | Remnova ana Otena Gonta                     | Oktainian stock market   |
| 22. | Iryna Perevozova, Nadiia                    | Application of the Harrington function to                          |
|     | Daliak, Oksana Lisova and                   | assess the performance of oil and gas                              |
|     | Dmitriy Naumov                              | companies  |
| 23. | Valery Heyets, Mykhaylo                     | Equilibriums in logistic chain with various                        |
|     | Zvieriakov and Anatoliy                     | optimization criteria of participants                              |
|     | Kholodenko                                  |  |
| 24. | Nila Khrushch, Pavlo                        | Assessing Bank Financial Security Level                            |
|     | Hryhoruk, Liudmyla Prystupa                 | Using the Comprehensive Index Technology                           |
|     | and Liudmyla Vahanova                       |  |
| 25. | Yurii Chebukin, Halyna Raiko,               | A Study of a Territorial System Functioning                        |
|     | Viktor Kozel and Yevhen                     | Framework as a Multilevel Complex Structure                        |
|     | Danylets                                    | and the Competitive-Optimal Forecasting of                         |
|     |   | some of its Elements Taking Inconsistency                          |
|     | 4 1 14                                      | and Uncertainty into Account                                       |
| 26. | Andrii Mazarchuk, Constantin                | Information system "Electronic University":                        |
|     | Belovsky and Tetiana                        | the experience of Khmelnytskyi National                            |
| Ш   | Zavgorodnia                                 | University   |

> New trends of economic systems management in the conditions of integration strategies implementation

Head: Nila Khrushch, Olga Garafonova

Secretary: Liudmyla Prystupa

| 1.  | Iuliia Samoilyk, Mykola Zos-<br>Kior, Valerii Illin and Olena<br>Illina                 | The globalization trends of the agrarian sector development  |
|-----|---|--|
| 2.  | Svetlana Kovalchuk, Alona<br>Tanasiichuk, Svetlana<br>Sirenko and Yevhena<br>Zaburmekha | Marketing supprt of transformational economic processes  |
| 3.  | Mykhailo Kuzheliev, Tetiana<br>Posnova, Alina<br>Nechyporenko and Olena<br>Sokyrko      | Theoretical aspects of investing in human capital in the conditions of formation of the creative economy                               |
| 4.  | Svitlana Yehorycheva,<br>Mykola Lakhyzha and<br>Nataliia Stetsenko                      | Public Management of Public Investment Projects in Ukraine under Conditions of European Integration                                    |
| 5.  | Iryna Forkun, Iryna Kravets,<br>Olga Harvat and Tetyana<br>Gordeeva                     | Social security system: financial aspect of functioning  |
| 6.  | Hanna Starostenko, Iryna<br>Forkun, Tetyana Gordeeva<br>and Jan Mrozowski               | Modeling and level estimation of efficiency of fiscal decentralization in Ukraine  |
| 7.  | Larisa Marmul, Valentina<br>Aranchiy, Maryna Navalna<br>and Svitlana Kucherenko         | Assessment of Problems and Prospects of<br>Increasing the Level and Efficiency of Social<br>Responsibility of Agricultural Enterprises |
| 8.  | Valentyna Stadnyk, Pavlo<br>Izhevskiy, Nila Khrushch<br>and Tetjana Tomalja             | Investment priorities of the national economy sectors development  |
| 9.  | Svitlana Luchyk, Yulia<br>Manachynska, Volodymyr<br>Yevdoshchak and Marharyta<br>Luchyk | 6D-model of business valuation management: actuarial aspect  |
| 10. | Viktoriya Marhasova,<br>Nataliia Tkalenko, Olga<br>Garafonova and Oleksandra<br>Sakun   | Investment resource of structural modernization of economy   |

| 11. | Oksana Bondar-Podhurska,<br>Alla Glebova and Olha<br>Yudicheva   | Quality format of innovational model for development economy in ukraine: standardization and certification                                   |
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| 12. | Valentyna Tropina and<br>Tetiana Rybakova  | Financial Mechanisms of Foreign Economic<br>Activity Regulation in Top Trading Countries   |
| 13. | Liudmyla Prystupa, Viktor<br>Koval, Iryna Kvach and<br>Andrei Hrymalyuk  | Transformation of cycles of state regulation in international trade  |
| 14. | Olena Kozyrieva, Olga<br>Garafonova, Olehandr<br>Sumets and Angela<br>Olkhovska  | Methodical approach to determining the points of economic growth in the center and peripheral rates in ukraine                               |
| 15. | Yevheniia Sribna, Svetlana<br>Minakova, Olena Franchuk<br>and Liudmyla Antonova  | Logistic schemes in the development of integration processes of the formation of the global economy  |
| 16. | Raisa Kvasnytska, Lesia<br>Matviichuk, Inna<br>Dotsenko and Yuliia<br>Kovalenko  | Indicative express-estimation of financial security of banking activity  |
| 17. | Iryna Hrynchyshyn, Olena<br>Panukhnyk, Mariana Bil,<br>Nazariy Popadynets,<br>Khrystyna Patytska and<br>Iryna Leshchuh | Scientific-methodical foundations of estimation of territorial communities' endogenous capacity in ukraine in conditions of decentralization |
| 18. | Sviatoslav Kis, Galyna<br>Malynovska, Viktor<br>Petrenko and Oleh Yatsiuk  | Matrix of personality intelligent characteristics as an instrument for its development management  |
| 19. | Yuliya Shutyak and<br>Valentyna Lukianova  | Economic Security of the Enterprise: Any Future for Research?  |
| 20. | Halyna Ivanchenko, Nataliia<br>Mitsenko, Ihor Mishchuk<br>and Olexandra Shaleva  | Creation of local integrated production-trading systems: actuality, determinants, conformity of conditions                                   |
| 21. | Viktor Nyzhnyk, Yevhenii<br>Rudnichenko, Lyudmyla<br>Bohatchyk and Liudmyla<br>Kravchenko                              | Mechanism of Management of Foreign<br>Economic Activity of Industrial Enterprises  |
| 22. | Illia Morhachov, Iryna<br>Buzko, Ievgen Ovcharenko<br>and Natalia Tkachenko  | Communication of scientific and technological systems with regional innovative processes   |

| 23. | Mykola Butko, Svitlana     | European Experience of Clustering and Its      |
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|     | Povna, Olha Popelo and     | Adaptation Towards Acceleration of Innovative  |
|     | Galyna Samiilenko          | Development of the Economy of Ukraine          |
| 24. | Tadeusz Trocikowski,       | Innovation-Investment Activity in the          |
|     | Larysa Dzhulii, Natalya    | Achievement of Enterprise Commercial and       |
|     | Belyakova and Volodymyr    | Innovative Success                             |
|     | Chenash                    |  |
| 25. | Oksana Mykoliuk, Valentyna | Forming the energy security strategy of modern |
|     | Bobrovnyk and Oleksiy      | industrial enterprises                         |
|     | Svistunov                  |  |
| 26. | Andriy Grytsenko and Iryna | Transformation of Economic Systems             |
|     | Yanenkova                  | Management under the conditions of digital     |
|     |                            | technologies implementation                    |

- > Formation processes of strategy and tactics for financial management of business entities
- > Strategic dominants for the global and national financial markets development
- ➤ The Global Challenges for Development of Economy in CEE Countries

Co-Chairs: Raisa Kvasnytska, Dmytro Zherlitsyn

Secretary: Tetyana Gordeeva

| 1. | Nelia Volkova, Valeriia<br>Volkova, Liana Ptashchenko<br>and Alina Glushko               | Strategic ways of minimizing banks' bad loan debts  |
|----|--|---|
| 2. | Tetyana Calinescu, Ganna<br>Likhonosova and Olena<br>Zelenko                             | Creativity of international development strategies and audit of entities financial management   |
| 3. | Liliana Horal, Vira Shyiko<br>and Oleg Yaroshenko  | Modeling Breakeven Zone Using the Integral Methods  |
| 4. | Dmytro Zherlitsyn<br>and Volodymyr Mandra  | Efficiency of the Sea Commercial Port<br>Information System   |
| 5. | Dmytro Zherlitsyn, Stanislav<br>Levytskyi, Denys<br>Mykhailyk and Victoriia<br>Ogloblina | Assessment of Financial Potential as a<br>Determinant of Enterprise Development   |
| 6. | Tetiana Gogol, Valentin<br>Nekhai and Vadym Kolotok                                      | Strategic and tactical planning in management of financial and economic security of enterprises: financial component  |
| 7. | Tetiana Savchuk, Inna<br>Negrych, Iryna Medvid and<br>Kateryna Holubchak                 | Research on economic content of provisions of future costs and payments and their impact on financial position and financial results of the enterprise activity |
| 8. | Lidiia Karpenko, Pavlo<br>Voronzhak, Oksana<br>Zhylinska and Pavlo Pashko                | Innovative Trends in the Process Modelling of<br>International Strategies: Systematic of<br>Fundamental Factor Models   |
| 9. | Oksana Savko, Ivanna<br>Melnychuk, Vitalii Sharko<br>and Iryna Bodnaruk                  | The use of data envelopment analysis to select financial strategies for industrial enterprises  |

| 10. | Mariia Bondarchuk, Olga<br>Gonchar and Khrystyna.<br>Dzhuryk                                      | Theoretical and methodical approaches to the estimation of the income of the united territorial communities  |
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| 11. | Pavlo Ilchuk and Olha Kots  | Refinancing Operations: Evolution of the Role and Identification of the Influence on the Ukrainian Banking System Liquidity  |
| 12. | Olena Bulatova, Tetiana<br>Shabelnyk, Tetyana Marena<br>and Nataliia Reznikova                    | Influence of regional financial market models on the structure of global financial assets  |
| 13. | Olga Gonchar, Alla<br>Cherep and Alexander<br>Cherep  | Substantiation of the model of innovative development of the enterprise  |
| 14. | Mykhailo Vedernikov,<br>Oksana Chernushkina, Lesia<br>Volianska-Savchuk and<br>Maria Zelena       | Modern Aspects of Industrial Enterprises' Production Efficiency Management   |
| 15. | Mykhailo Vedernikov,<br>Natalia Bazaliyska, Lesia<br>Volianska-Savchuk and<br>Oksana Chernushkina | Economic and statistical modeling of interaction with bihevioral and resulting indicators of labor activity of industrial enterprises in the aspects of forming the mechanism of improving efficiency of their functioning |
| 16. | Oksana Zhylinska and Olena<br>Bazhenova   | Innovation driven economic growth: evidence for G7 countries   |
| 17. | Liana Ptaschcenko, Alina<br>Glushko, Nelia Volkova and<br>Valeriia Volkova                        | Ukraine depressive national economy destructive factors  |
| 18. | Olha Pyroh, Lyudmyla<br>Katan and Vladimir Katan  | Stability of Economic Development of Global Cities: Evaluation and Perspectives  |
| 19. | Vitalina Babenko, Oleg<br>Boichenko and Yelyzaveta<br>Koniaieva                                   | Efficiency of human resource management in industrial automation enterprises with prospects of innovative susceptibility   |
| 20. | Olena Menchynska, Serhii<br>Sobchuk, Zhanna Harbar<br>and Victor Harbar                           | Fiscal policy under economic transformation  |
| 21. | Petro Kurmaiev, Nataliia<br>Vdovenko, Marina Pavlenko<br>and Paraskoviia<br>Kolisnichenko         | Competitiveness of the agrarian sector: a comparative analysis of Poland and Ukraine   |