



**DMYTRO MOTORNYI
TAVRIA STATE AGROTECHNOLOGICAL
UNIVERSITY**

**IMPACT
RANKINGS**

2024

PREFACE

*Dear University Community,
Esteemed Partners!*

Ukraine continues to demonstrate an indomitable will in the face of full-scale war, overcoming daily challenges and restoring what has been destroyed with resilience and unity. Despite the relocation of our university, TSATU has not only preserved but significantly strengthened its educational and scientific activities, remaining steadfast in its commitment to the Sustainable Development Goals and demonstrating an unwavering resilience.

According to the results of 2024, Dmytro Motornyi Tavia State Agrotechnological University made a significant contribution to strengthening institutional stability, advancing technological development and supporting the integration of Ukraine into the global space.

Quality education remains our highest priority. Educational programs at TSATU are continuously adapted to ensure the uninterrupted delivery of learning, even in times of crisis, contributing to the training of highly qualified specialists for enterprises across diverse sectors of economic activity. TSATU successfully develops a hybrid model of education, grounded in robust inter-institutional partnerships, while maintaining the continuity of practical training and ensuring the accreditation of educational programmes.

With the support of international partners, TSATU is implementing a comprehensive digital transformation of its academic environment, equipping modern laboratories and promoting strategically important areas of specialist training, particularly by expanding access to engineering, technical, and agrotechnological specialities. We make deliberate investments in priority areas of specialist training, focusing on preparing graduates who are not only ready to embrace innovation but also to create it.



We are convinced that economic growth begins with equality and respect. Our contribution to strengthening practices that ensure decent work, economic development, and innovation is valuable at the regional, national, and international levels.

In the field of ensuring gender equality and social inclusion, TSATU has officially consolidated its Policy on Non-Discrimination, reinforcing the career and academic development of women. TSATU scientists successfully defended Doctor of Philosophy theses and received high academic honours, clearly demonstrating the effectiveness of institutional support for women's leadership in higher education and research.

The university staff actively develops dual education models in partnership with leading enterprises, and integrates advanced IT solutions into the educational process. TSATU scientists have received state funding from the Ministry of Education and Science, secured patents for intellectual property related to agricultural innovations, and actively participate in international scientific and practical events (conferences, seminars, forums, etc.).

Our ongoing search for effective approaches to science-business synergy is strategically focused on shaping post-war recovery model.

Internationalisation processes and the development of global partnerships serve as key drivers for the exchange of best practices and the generation of innovative solutions.

Partnership has become a cornerstone of institutional sustainability for TSATU. We have strengthened cooperation with the global academic community and contributed meaningfully to the achievement of the Sustainable Development Goals by engaging student leaders and providing expert support to regional authorities, business stakeholders and non-governmental organisations.

We firmly believe that education and science must serve as accelerators for building a peaceful society. We actively promote the values of tolerance, justice, and mutual respect. In advancing peace, justice, and strong institutions, TSATU team and students demonstrate a high level of civic consciousness, ensuring elected representation of diverse groups within university governance structures.

The university acts as an initiator of neutral platforms for the discussion of socially significant issues, upholding the principles of freedom of speech and the protection of human rights. TSATU remains firmly committed to its mission: the training of highly qualified, patriotic, and sustainability-oriented specialists capable of contributing to the rebuilding and development of Ukraine in alignment with the Sustainable Development Goals.

We recognise the significance of our collective efforts and the enduring contribution of TSATU to shaping a sustainable and just future. The daily work of our university team reflects a deep commitment to protecting the quality of life for future generations.

Sincerely,

*Doctor of Technical Sciences, Professor
Serhii Kiurchev
Rector of TSATU*



CONTENT

GOAL 4. Quality Education

5

GOAL 5. Gender Equality

7

GOAL 8. Decent Work
and Economic Growth

9

GOAL 9. Industry, Innovation
and Infrastructure

11

GOAL 15. Life on Land

14

GOAL 16. Peace and Justice

16

GOAL 17. Partnership for the Goals

18

Data Analysis
and Reporting Methodology

22

4 QUALITY EDUCATION



QUALITY EDUCATION

576

STUDENTS

GOT BACHELOR DEGREE

ENGAGEMENT AND IMPACT

596

STUDENTS

GOT MASTER DEGREE

Creation and Dissemination of Open Scientific Data

TSATU provides free access to educational resources for those who are not enrolled at the university. The ElarTSATU repository is included in the Webometrics "TRANSPARENT RANKING" (32nd place). The repository database contains 22 fund collections, 61 archives, and 18,700 documents indexed by Google Scholar. Open access to the university's information and resources promotes the dissemination of knowledge beyond its boundaries.

- Monograph "Food technology progressive solutions", published by Scientific Route OÜ (Estonia)
- II International Scientific and Practical Conference "Globalization and the Development of Innovative Systems: Trends, Challenges, Prospects"
- Lecture series for students of Atyrau State University (Kazakhstan)

1720

FRESHMEN

ENTER BACHELOR DEGREE

625

FRESHMEN

ENTER MASTER DEGREE

Targeted Educational Activities for the General Public

Foreign language teachers of the region gained access to modern online teaching methodologies as part of the project "Modern Technologies and Approaches to Blended, Hybrid, and Online Foreign Language Learning". Participation in the popular science project "Book from Scientist", initiated by the Scientist Support Office, and presentation to a wide range of readers of the published textbook "The use of Technology in Agriculture" contributes to the popularization of a scientific approach to solving current problems of certain sectors of the economy

1197

CERTIFICATES

OF ADVANCED TRAINING ISSUED

Initiatives Adapted to the Needs of the Community

The creation of adaptive information and communication materials in Braille for internally displaced persons with visual impairments contributes to an accessible information environment for IDPs

Dissemination of essential knowledge within the community by involving student volunteers in organizing training for children on first aid techniques through interactive workshops and masterclasses

Promoting psycho-education by involving women and girls to participate in stress resistance and psychological first aid training "Thousand days of mental health. Resilience".

122

TEACHERS

OF COLLEGES COMPLETED INTERNSHIP

18,7

THOUSANDS

OF DOCUMENTS IN INSTITUTION REPOSITORY

6

PUBLICATIONS

OF EDUCATIONAL ISSUES

81

EVENTS

WERE HELD FOR GENERAL PUBLIC

LEARNING AND STUDENTS

Initiatives to Ensure Professional Development

As part of the «Agrokebety» project, open meetings were held with TOV «PÖTTINGER UKRAINE» expert and Alex Lissitsa (SEO IMC) with the participation of farmers on the implementation of innovations in soil cultivation, EU agricultural policy and the European Green Deal.

Participation in the international training program "Diversification of Rural Economies through a Network of Community Tourism Advisory Centers" provided entrepreneurs with guidance on opportunities for developing rural tourism.

The university facilitated the dissemination of information to students and business partners on supporting businesses engaged in international economic activities at the "ZAPORIZHZHIA. BUSINESS NEW WAYS 2024" event organized by the Zaporizhzhia Chamber of Commerce and Industry.

Open professional development programs "TechnoMay-2024" on "Modern Engineering" and "NoveFood-2024" on "Innovative Technologies for the Development of the Food Industry" were organized by TSATU in collaboration with partner universities.

The Higher School of Pedagogical Excellence implemented the program "Language Arsenal: Ukrainian as a Marker of National Identity – from Tradition to Modernity".

Dissemination of Expert Knowledge

Expert assessment of volunteering, challenges for relocated business, prospects for tourism development through an interview with «Ukrainian Radio». The participation of teachers as part of the jury of the 20th All-Ukrainian tournament of young programmers, the All-Ukrainian essay competition «My Shevchenko» is a form of providing expertise to promote the development of gifted youth.

TSATU student language ombudsman Vlada Shmaliyi highlighted the prospects for developing language culture in educational institutions during the All-Ukrainian roundtable "Language Issues in the Educational Process in Ukraine: Youth Perspectives." A TSATU student served as a speaker at the International Winter School "Sustainable Development and ESG: Global Challenges, National Priorities, Effective Solutions" (Kazakhstan).

Educational Activities for Children and Youth of the Region

- "Environmental Safety" Olympiad
- "Abit Fest" Admission Festival
- Series of debates for school youth
- Workshop "Idea leaders: second breath"
- Masterclasses and training sessions: "Food Workshop: Personal Diet Training", "Marketing by Taste", "Fashion Trends in Gardening", "I Manage the Community", "Energy Sector – Ukraine's Future", "Physics Made Easy", "My Business in Engineering"

RESEARCH

Publications

- Hesheva, H. (2024). The project formation of virtual graphic images in applications for distance education systems. *CEUR Workshop Proceedings*
- Nazarova, O., Osadchyy, V., Hutsol, T., Hulevskiy, V., Horetska, I. (2024). Mechatronic automatic control system of electropneumatic manipulator. *Scientific Reports*
- Filipishyna, L. M., Pardaeva, O. M., Belopolsky, M., Legeza, D. G., Sarkisian, L. (2024). Sustainable economic development: Comparative analysis of Ukraine and European countries. *E3S Web of Conferences*
- Kucher, O., Yermakov, S., Andreitseva, I., Plotnichenko, S. R., Kozak, O. (2024). Methodological aspects of bioeconomy development strategy formation in Ukraine (example of renewable energy sources). *Engineering for Rural Development*
- Sharov, S., Tereshchuk, S., Sharova, T., Spanatii, O., Kolomoiets, H. A. (2024). Experience of using Google cloud services in Ukrainian universities: survey results. *E3S Web of Conferences*
- Sharov, S., Tereshchuk, S., Filatova, O., Hinkevych, O., Ksendzenko, O. (2024). Survey analysis of university teachers in Ukraine regarding the use of Google workspace for education. *TEM Journal*

5 GENDER
EQUALITY

GENDER EQUALITY

465 WOMEN
ADMITTED TO
STUDY

ENGAGEMENT AND IMPACT

344 WOMEN
OBTAINED
HIGHER
EDUCATION

Encouraging Women to Enroll in Subjects Where They are Underrepresented

19,8%
APPLICANTS
ARE WOMEN

Information and educational activities during the career guidance exhibition "Plan Your Future Today: Educational Pathway in Zaporizhzhia" to promote enrollment in technical fields.

The "Physics Made Easy" event was organized to promote the natural sciences and mathematics, fields traditionally underrepresented by women.

The implementation of the "DigiTech: Enhancing Access to Engineering and Technical Education for Youth" project (supported by USAID and IREX) aims to engage young people in engineering and technical fields and promote the idea of overcoming gender stereotypes in the engineering and technical sector.

29,6%
GRADUATES A4
RE WOMEN

The Recognition of Women's Leadership in Education and Science

17 FEMALE
STUDENTS
RECEIVED
SCHOLARSHIPS
AND AWARDS

- A. Zemlianska was awarded a Certificate of Merit by the State Scientific Institution "Institute of Modernization of Education Content".
- O. Zinovieva received a Letter of Appreciation from the State Scientific Institution "Institute of Modernization of Education Content".
- Eighteen employees of TSATU, including eight women, were awarded a Letter of Appreciation by the Department of Education and Science of the Zaporizhzhia Regional State Administration.
- Two university employees were awarded an Honorary Certificate by the Department of Education and Science of the Zaporizhzhia Regional State Administration. Both of them are women.
- Four university employees, including two women, received a Letter of Appreciation from the Department of Education and Science of the Zaporizhzhia Regional State Administration.
- Two university employees, including one woman - A. Diadenchuk - were awarded a Letter of Appreciation by the Department of Youth, Physical Culture and Sports of the Zaporizhzhia Regional State Administration.
- Professor I. Kolokolchykova was awarded the title of Academician of the National Academy of Sciences of Higher Education of Ukraine.

15 FEMALE
TEACHERS
RECEIVED
REWARDS2 DISSERTATIONS
WERE DEFENDED
BY FEMALE
RESEARCHERS50%
RESEARCH
INSTITUTES ARE
LED BY WOMEN42%
DEPARTMENTS
ARE LED BY
WOMEN

Women Defending Language Policy

On a voluntary basis, they perform the role of language ombudspersons at TSATU: Language Ombudsperson, Professor T. Sharova, and Student Language Ombudsperson, student V. Shmalii.

LEARNING AND STUDENTS

Direct Financial Support and Scholarships for Women

Thirteen academic scholarships have been awarded to female higher education students:

- 5 Presidential Scholarships of Ukraine;
- 2 Scholarships of the Verkhovna Rada of Ukraine;
- 4 Scholarships of the Mayor of Melitopol in the category "Scientific Research and Exploratory Activities";
- 2 Scholarships of the Mayor of Melitopol in the category "Community Volunteer Activities".

The Recognition of Women's Student Leadership and Progress

- Natalia Karmelita won in the category "Student - Defender of the Year."
- Vlada Shmalii was ranked among the top 20 participants of the program "Business Through the Eyes of an Owner: Forum Start-up to IPO" organized by the auditing company Deloitte.
- Polina Chernyshova won at the XIV International Language and Literature Competition named after T. Shevchenko (3rd Degree Diploma).
- Vlada Shmalii won in the regional competition "Student of the Year - 2024" in the category "Student - Community Leader of the Year" and represented the TSATU Student Council at a meeting with the President of Ukraine.

Academic Development of Women

Defended their dissertations for the degree of Doctor of Philosophy:

- Victoria Lemeshchenko-Lahoda, Lecturer at the Department of Foreign Languages
- Olga Sobolevska, Postgraduate Student

RESEARCH

Publications

- Vyhovska, N. G., Ortina, G. V., Iierusalymov, V., Diachek, S. M., Lytvynchuk, I. V. (2024). Gender budgeting in Ukraine: Tools, financial security and gender equality in economic sectors. Scientific Bulletin of Mukachevo State University. Series Economics, 11(2), 18-29.
- Zaiats, N., Rega, I., Boiko, V., Shlieina, L. I., Toporkova, M. (2024). Ensuring gender equality and legal protection of women's rights: achievements, challenges, and prospects. Multidisciplinary Science Journal, 6, 7.

Mentorship Programs for Women

Academic group advisors support all female students throughout their studies, promoting personal development and self-realization, assisting with adaptation at the beginning of their studies, and helping to overcome psychological barriers.

Career counselors provide guidance in selecting fields of study according to women's abilities and interests, supporting career orientation and planning. Mentorship by research supervisors fosters the academic growth of women through participation in competitions of scientific and creative works.

POLICY AND OPERATIONS

- TSATU Development Strategy for 2023-2030
- University Collective Agreement
- Code of Academic Integrity
- Honor Code
- Internal System for Monitoring the Quality of Educational Activities
- Regulations on the Procedure for Granting and Paying Scholarships to TSATU Students
- Regulations on the Internal System for Ensuring the Quality of Higher Education
- Regulations on Academic Integrity
- Gender Equality and Social Inclusion Policy
- Maternity and Parenthood Protection Policy
- Policy to Prevent the Influence of Gender Stereotypes
- Policies on the Prevention of Sexual Exploitation and Sexual Abuse
- Methodological Recommendations: "Fostering Gender Culture among Students in Extracurricular Activities at Agricultural Higher Education Institutions"

8 DECENT WORK AND ECONOMIC GROWTH



DECENT WORK AND ECONOMIC GROWTH

5695 STUDENTS
PURSUING HIGHER EDUCATION

ENGAGEMENT AND IMPACT

25 STUDENTS
COMPLETED INTERNSHIP ABROAD

The System of Professional Development

Identifying professional needs and an individual development trajectory is a form of encouragement and ensuring decent working conditions. The operation of the Institute for Advanced Training and the Higher School of Pedagogical Mastery creates favorable conditions for improving the qualifications of teachers.

The implementation of professional development programs in modern engineering (TechnoMay-2024) and innovative food industry technologies (NoveFood-2024), as well as training teachers in 'SAP S/4HANA' and '3D modeling in Autodesk Inventor' (within the DigiTech project), contributes to the integration of scientific achievements into the educational process.

Twelve academic and teaching staff members of the university completed a 90-hour (3 ECTS credits) industrial internship at enterprises, organizations, and institutions in Ukraine.

44,9 %
GRADUATE EMPLOYMENT RATE

133 PROGRAMS
ACADEMIC AND INDUSTRIAL INTERNSHIP

122 COLLEGE TEACHERS
COMPLETED PROFESSIONAL TRAINING

LEARNING AND STUDENTS

8 TRADE UNION COMMITTEES OF TEACHERS AND STUDENTS IN TSATU

Integration Into the Labor Market

The university monitors the employment of its graduates. According to the results of the Graduate Employment Monitoring published in the report of the Ministry of Education and Science of Ukraine, the employment score of TSATU graduates is 44.89, and the employment rate is 1.05, which confirms the effectiveness of the training.

12 TEACHERS
COMPLETED INDUSTRIAL INTERNSHIP

Training of Specialists in a Dual Education Format

The university's cooperation with leading enterprises of the Zaporizhzhia, Dnipropetrovsk, Kirovohrad, Sumy, Poltava, and other regions of Ukraine provides opportunities for dual education. The most prominent partner enterprises involved in dual education include:

75 %
FACULTY MEMBERS WITH ACADEMIC DEGREES

12 PUBLICATIONS
ON ECONOMIC GROWTH

- PJSC Romny Plant 'Tractorozapchastyna' (Romny);
- PJSC 'Zaporizhzhiaoblenergo';
- LLC 'Motor Sich';
- PJSC 'Zaporizhstal';
- PrJSC 'Zaporizhpolymertara';
- Myronivsky Hliboproduct (MHP), and others.

POLICY AND OPERATIONS

Conflict Resolution

- Collective Agreement between the Administration and the Trade Union Committee
- Regulation on the Commission for Assessing Corruption Risks
- TSATU Code of Honor
- TSATU Code of Academic Integrity
- Regulation on the Commission for Assessing Corruption Risks

Workplace Anti-Discrimination Policy

- Collective Agreement between the Administration and the Trade Union Committee
- Regulations on the Primary Trade Union Organization of Staff and Students
- Policy on the Prohibition of Sexual Harassment and Misconduct in the Workplace
- Policy on the Prevention of Forced Labor, Human Trafficking, and Child Labor

RESEARCH

Publications

- Kovalenko, D. I., Tarasov, S., Strunhar, A., Boltianska, L., Antonenko, K. (2024). Charting paths for socio-economic revival in the wake of military turmoil. *African Journal of Applied Research*, 10(1), 481-494.
- Herasko, T., Tymoshchuk, T., Moisiienko, V. V., Hrytsiuk, N., Alekseeva, T. (2024). Phytocoenotic assessment of herbaceous plant communities in the organic sweet cherry orchard. *Scientific Horizons*, 27(5), 32-50.
- Labenko, O. M., Lyamar, V., Faichuk, O., Hutsol, T., ...Tabor, S., Kiurcheva, L. M. (2024). Assessment of the Efficiency of the Financial Mechanism of Environmental Management. *Production Engineering Archives*, 30(3), 314-325.
- Kolesnikov, M. O., Tymoshchuk, T., Moisiienko, V. V., Vyshnivskiy, P., Rudenko, Y. (2024). Formation of the photoassimilation apparatus of pea (*Pisum sativum* L.) crops under biostimulants in arid conditions of the Southern Steppe of Ukraine. *Scientific Horizons*, 27(4), 76-85.
- Penev, N., Shyriaieva, L., Legeza, D. G., Merkulov, M. M., Honcharova, I. (2024). Marketing analysis of multimodal transportation dynamics in logistics infrastructure. *E3S Web of Conferences*, 558, 01030.
- Filipishyna, L. M., Pardaeva, O. M., Belopolsky, M., Legeza, D. G., Sarkisian, L. (2024). Sustainable economic development: Comparative analysis of Ukraine and European countries. *E3S Web of Conferences*, 558, 01018.
- Vyhovska, N. G., Ortina, G. V., Iierusalymov, V., Diachek, S. M., Lytvynchuk, I. V. (2024). Gender budgeting in Ukraine: Tools, financial security and gender equality in economic sectors. *Scientific Bulletin of Mukachevo State University. Series Economics*, 11(2), 18-29.
- Kucher, O., Yermakov, S., Andreitseva, I., Plotnichenko, S. R., Kozak, O. (2024). Methodological aspects of bioeconomy development strategy formation in Ukraine (example of renewable energy sources). *Engineering for Rural Development*, 850-857.
- Verbivska, L.V., Ilnatushenko, O., Petrovskiy, O., Pochernina, N. V., Zavora, O. (2024). Stimulating economic growth through investment instruments. *Pakistan Journal of Life and Social Sciences*, 22(2), 00779.
- Alsarayrah, T. M. K., Alhasanat, K. A. H., Sokil, O. H., Zhuk, V., Sokil, Y. (2024). Forming the conceptual foundations of a sustainable development accounting system and reflecting its results in reporting. *Eastern-European Journal of Enterprise Technologies*, 4(13(130)), 6-18.
- Tebenko, V., Kutsai, N., Shashyna, M.V., Omelianenko, O., Bakushevych, I. (2024). Digital transformation in business: the impact of technology on efficiency, innovation and competitiveness. *Economic Affairs (New Delhi)*, 69, 307-315.
- Zavadskykh, H., Fradynskiy, O., Puhalskyi, V., Didukhovych, A., Popliuiko, Y. (2024). Financial stability during the post- crisis period: strategies for recovery and support of economic development. *Economic Affairs (New Delhi)*, 69(1).

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



INDUSTRY, INNOVATION AND INFRASTRUCTURE

45 AGREEMENTS
ON SCIENTIFIC COOPERATION

ENGAGEMENT AND IMPACT

132 RESEARCHERS
IN THE FIELD OF STEM

Strengthening Digital and Technical Infrastructure

18 ORGANIZATIONS
BECAME NEW PARTNERS

Based on cooperation with the information and consulting center 'Agro-Tavria,' the DigiTech laboratory was established within the framework of the project 'DigiTech: Enhancing Access to Engineering and Technical Education for Youth.' The project was implemented with financial support from USAID and carried out by IREX.

17 POSITION
IN THE INVENTION ACTIVITY RANKING

Laboratories have been modernized using the advanced equipment received within the framework of the FABU Project (BMEL).

The integration of IT systems has begun based on a partnership agreement with the global company SAP (SAP University Alliances).

74 PATENTS AND INTELLECTUAL PROPERTY PROTECTION DOCUMENTS

Educational equipment was received from the Olena Zelenska Foundation within the framework of the Global Business Coalition for Education (GBC-Education) initiative and the 'Digital Asset for Ukraine' project by HP and Microsoft, with the support of the Department of Education and Science of the Zaporizhzhia Regional State Administration and the Rector of TSATU.

17 MEASURES
ON TECHNOLOGY AND INNOVATION

Industry Partnership and Scientific Cooperation

Faculty members participated in the International Commercial Vehicle Show 'IAA TRANSPORTATION 2024' (Germany) and scientific conferences on the implementation of Artificial Intelligence (AI) and robotics.

TSATU scientists participated in a meeting of Zaporizhzhia agricultural specialists with the Agribusiness Committee of the Ukrainian Chamber of Commerce and Industry. During the event, the draft Strategy for the Development of Agriculture and Rural Areas was discussed as a tool for aligning Ukraine's agricultural policies with those of the EU.

20 WEBINARS
ON THE DEVELOPMENT OF THE INDUSTRY

Provision of Expertise

Scientists from the Mechanical and Technological Faculty participated in a roundtable within the UNDP project 'Strengthening Member-Based Business Associations of Micro, Small, and Medium Enterprises in Ukraine,' during which the issues of regulation of the SME support system, development of industrial ecosystems and infrastructure (including industrial parks), stimulation of innovation, issues of personnel potential development, retraining programs and staff training were discussed).

4 RESEARCH INSTITUTES

16 PUBLICATIONS
ON TECHNOLOGY DEVELOPMENT

LEARNING AND STUDENTS

Participation of Students in “Games of Factories 7.0”

The TSATU student team won 3rd place in the ‘Factory Games 7.0’ for solving a case from MHP, demonstrating a high level of practical skills.

DigiTech

The implementation of the project ‘DigiTech: Enhancing Access to Engineering and Technical Education for Youth’ (USAID, IREX, NGO ‘Zaporizhzhia Information and Consulting Center Agro-Tavria’) contributes to the training of specialists for modern industry. Project results:

- Creation of digital laboratories and workspaces;
- Strengthening the professional competencies of faculty to ensure the training of specialists ready to meet the challenges;
- Enhancing the practical training of students using digital laboratories.

RESEARCH

Scientific and Practical Conferences

- International Conference ‘Synergy of Science and Business in the Post-War Recovery of Ukrainian Regions’
- XIX International Conference ‘Technical Progress in Agro-Industrial Production’
- Scientific Conference ‘UAVs in Agro-Industrial Production’
- II International Conference ‘Modeling and Computer Engineering in Mechanical Engineering – 2024’
- V International ‘Development of Modern Science and Education: Realities, Quality Issues, Innovations’
- The All-Ukrainian Conference on ‘Modern Challenges and Sustainable Development of the Economy and Business’ was organized and held.

Inventive Activity

TSATU ranked 17th in the inventive activity rating of Ukrainian higher education institutions for the first half of 2024, confirming its high activity in creating innovative solutions, including 7 intellectual property protection documents. In particular, a utility model patent No. 154844 was obtained for the ‘Automatic Filling System for the Pressure Network of Irrigation Machines,’ an innovation aimed at improving water use efficiency and irrigation. Additionally, three methods for producing candied cherries were patented, contributing to the diversification of the food industry and the restoration of the regional economy.

Open Seminars on Technology Development

TSATU scientists and students participated in a webinar on ‘Prevention of Emergencies, Response, and Mitigation of Their Consequences’ to discuss issues and prospects for implementing modern developments and technologies aimed at preventing emergencies, ensuring prompt response and mitigation, and promoting occupational safety.

A scientific seminar with international participation on ‘Development of Functional Intermetallic Technologies and Their Application in Power Engineering’ was held at the TSATU Higher School of Pedagogical Mastery for researchers and students. The speaker was Dr. of Technical Sciences, Professor, Honored Scientist of Ukraine, and Director of the ‘ALOTEK International – Innovation and SMA Technologies’ Technopark (Poland), V. Kozyrskiy

A guest lecture on ‘Maximum Power Control of a Hybrid Synchronous Generator for an Autonomous Wind Turbine’ was organized for faculty and students of technical specialties.

Defense of Research Outcomes

TSATU researchers presented their research results during the ‘Rational Nature Management’ session of the Scientific and Technical Council of the Ministry of Education and Science of Ukraine. A study titled ‘Development of Dairy Processing Technology Using New Types of Homogenizers’ was presented (scientific supervisor: Dr. of Technical Sciences, Professor Kyrylo Samoychuk).

Technological schemes for the production of drinking milk, yogurt, and cream have been developed using the designed homogenizers, taking into account the homogenization modes for jet and pulsation homogenizers. These schemes allow achieving product quality indicators fully compliant with existing standards, reduce production costs and labor intensity, and increase profitability and revenue.

Publications

- Kovalenko, D. I., Tarasov, S., Strunhar, A., Boltianska, L., Antonenko, K. (2024). Charting paths for socio-economic revival in the wake of military turmoil. *African Journal of Applied Research*, 10(1), 481-494.
- Dmytriv, V. T., Dmytriv, I. V., Horodetsky, Hutsol, T. [et al.]. (2024). A method for simulating the positioning errors of a robot gripper. *Applied Sciences (MDPI)*, 14
- Nazarova, O., Osadchyy, V., Hutsol, T., ..., Hulevskiy, V., Horetska, I. (2024). Mechatronic automatic control system of electropneumatic manipulator. *Scientific Reports*, 14(1).
- Kolisnychenko, T., Sefikhanova, K. A. (2024). Crafting fermented pepper-based hot sauces. *Food Technology Progressive Solutions*, 7, 169-187.
- Shust, O. A., Kotvytska, N. M., Horlachuk, M. A., Kukina, N. V., Radko, V. (2024). Innovation and investment determinants of the development of the agro-food sector of Ukraine. *Multidisciplinary Science Journal*, 7(1), 2025024.
- Penev, N., Shyriaieva, L., Legeza, D. G., Merkulov, M. M., Honcharova, I. (2024). Marketing analysis of multimodal transportation dynamics in logistics infrastructure. *E3S Web of Conferences*, 558, 01030.
- Panchenko, A., Voloshina, A., Fatyeyev, O., Rezvaya, K., Mudryk, K. (2024). Changing the output characteristics of a planetary hydraulic motor. *Lecture Notes in Mechanical Engineering*, VII, 304-313.
- Kucher, O., Yermakov, S., Andreitseva, I., Plotnichenko, S. R., Kozak, O. (2024). Methodological aspects of bioeconomy development strategy formation in Ukraine (example of renewable energy sources). *Engineering for Rural Development*, 850-857.
- Samoichuk, K., Yalpachyk, V., Kholobtseva, I., Dmytrevskiy, D., Chervonyi, V. (2024). Design improvement of the rotary-pulsation device by resonance phenomena. *Lecture Notes in Mechanical Engineering*, VII, 74-83.
- Kobets, D. L., Terentieva, N., Shkvyria, N., Lysytsia, N., Siemak, I. (2024). Digitalization and its impact on the development of contemporary marketing strategies. *Economic Affairs (New Delhi)*, June, 26-40.
- Alsarayrah, T. M. K., Alhasanat, K. A. H., Sokil, O. H., Zhuk, V., Sokil, Y. (2024). Forming the conceptual foundations of a sustainable development accounting system and reflecting its results in reporting. *Eastern-European Journal of Enterprise Technologies*, 4(13(130)), 6-18.
- Subota, L., Buts, Z., Bashmanivskiy, O., Taranenko, H., Lutsenko, I. (2024). Exploring the influence of modern technologies in education: Evaluating the effects of e-learning and remote instruction on academic performance. *Multidisciplinary Reviews*, 7.
- Alekseyenko, L., Tulai, O., Ferens, B., Tsap, V., Tokalo, V., Artemenko, L. (2024). Informational support for communication of reinvestment recovery of the economy. *Lecture Notes in Networks and Systems*, March, 193-205.
- Yavorska, T. I., Lavruk, V. V., Alokhina, Y. S., Alokhin, V. O., Kovalenko, V. V. (2024). Resource potential of agriculture in Ukraine: energy conservation and food supply. *Acta Geographica Universitatis Comenianae*, 2, 197-225.
- Kubitskiy, S., Yeremenko, D. V., Danylenko, V., Bataiev, S., Varaksina, E. (2024). Evaluating the impact of innovative technologies on global competitiveness through modelling. *Multidisciplinary Science Journal*, 5.
- Zavadskykh, H., Fradynskiy, O., Puhalskiy, V., Didukhovych, A., Popliuiko, Y. (2024). Financial stability during the post-crisis period: strategies for recovery and support of economic development. *Economic Affairs (New Delhi)*, 69(1).

15 LIFE ON LAND



LIFE ON LAND

11

PARTNERS

PROTECTED AREA INSTITUTIONS

ENGAGEMENT AND IMPACT

4

PROGRAMS

FOR HIGHER EDUCATION STUDENTS

Expertise in Land Conservation and Sustainable Land Use

M. Hanchuk, a researcher at the Department of Geoecology and Land Management, provided explanations in the media to a wide audience of interested parties regarding the destructive impact of the occupation's activities on the ecosystems and fertile soils of the Melitopol region, which poses a threat of desertification (in particular, concerning the improper clearing of the Malyi Utiuk River and the irrigation of agricultural lands with artesian water).

P. Teliuk, a lecturer at the Department of Geoecology and Land Management, is a participant in an international project in partnership with the Royal Agricultural University aimed at training experts in soil assessment and the restoration of areas affected by hostilities.

5

POLICIES

SUPPORT OF TERRESTRIAL ECOSYSTEMS

21

COURSES

IN NATURAL RESOURCE MANAGEMENT

Educational Outreach

E.Ayubova, a teacher at the Department of Geoecology and Land Management, took part in the congress of the Ukrainian Society for the Protection of Birds – an organization dedicated to the protection of wild fauna and the preservation of ecosystems.

3

SCIENTIFIC CLUBS

STUDY ECOSYSTEMS

Educational Work

The training for children and youth on the topic 'Taste of Gardening' promotes the popularization of knowledge about local plants and sustainable gardening.

8

SEMINARS

ON SUSTAINABLE AGRICULTURE AND NUTRITION

Initiatives Supporting the Principles of Environmentally Sustainable Agriculture and Nutrition

The university initiated the creation and operation of the 'Tavria Organic' Center for Natural Agriculture, ensures transparency in product origins, and involves students in growing environmentally friendly produce in the university's greenhouses, gardens, and fields.

The seminars within the 'NoveFood-2024' professional development program demonstrate scientific and educational support for the principles of environmentally sustainable agriculture and nutrition.

The seminars of the 'TechnoMay-2024' program highlighted the challenges of environmentally sustainable agriculture and resource-saving technologies, which are essential prerequisites for the production of environmentally sustainable food.

4

EVENTS

ON TOURISM DEVELOPMENT POTENTIAL

2

PUBLICATIONS

ON ECOSYSTEM CONSERVATION

LEARNING AND STUDENTS

Open Dialogue

Students of the 'Geodesy and Land Management' program took part in a panel discussion on the analysis of the agricultural land market development and lease relations.

During a series of open meetings within the 'Agrokebety' project, EU agricultural policy and the European Green Deal were discussed to ensure the implementation of European environmental standards in the practices of the university's partner farmers.

RESEARCH

Scientific and Practical Events

Faculty members of the Department of Crop Production and Horticulture, together with students, participated in the International Conference 'Organic Cereals and Oilseeds: Production, Processing, and Export' to advance knowledge of organic technologies and sustainable agriculture as an alternative to intensive land use.

Representation in Unions

Associate Professor V. Skyba is a member of the Public Council under the State Agency of Water Resources of Ukraine. Researchers maintain cooperation with the World Water Quality Alliance (WWQA), which facilitates policy regulation and the exchange of international experience on water quality. TSATU is a member of the international non-profit network Global Waste Cleaning Network (GWCN), which affirms its commitment to promoting proper waste-management practices at the international level.

Publications

- Kaminskyi, V., Kolomiiets, L., Bulgakov, V. M., ..., Ihnatiev, Y. I., Ruciņš, Ā. (2024). Research into soil resource management technologies in context of aggravating exogenic processes. *Journal of Ecological Engineering*, 25(6), 128-143.
- Bulgakov, V. M., Gadzalo, I., Pascuzzi, S., ..., Ihnatiev, Y. I., Olt, J. (2024). Seasonal sequestration capacity of chernozem under different agrotechnological impacts in agrocenosis. *Agronomy Research*, 22(1), 401-417.

Public Environmental Monitoring

Students cooperate with the State Environmental Inspectorate of the Southern District to promote the use of the 'EcoThreat' web resource, engage public inspectors, raise youth awareness, and support public environmental monitoring.

Academic Programs

- «Ecology»
- «Geodesy and Land Management»
- «Agronomy»
- «Horticulture and Viticulture»

Research Programs

- "Justification of anti-stress practices in resource-saving technologies for growing grain, leguminous, and oil crops in the steppe zone of Ukraine" (resource conservation).
- "Development of intensive technologies for producing environmentally safe fruit and vegetable products in open and protected soil in the Southern Steppe of Ukraine" (environmental safety).
- "The current state of the geoecological conditions and biodiversity of the northwestern Pryazovia" (assessment of species biodiversity dynamics).

Student Research Clubs

The 'World Biodiversity,' 'EcoMoDis,' and 'EcoTrack' student clubs of the Department of Geoecology and Land Management study the biodiversity of biosystems and develop skills in using GIS technologies for ecosystem analysis.

16 PEACE, JUSTICE
AND STRONG
INSTITUTIONS



PEACE, JUSTICE AND STRONG INSTITUTIONS

50

**UNIVERSITY
STAFF**

ON ACADEMIC
COUNCIL

ENGAGEMENT AND IMPACT

9

REPRESENTATIVES

ON THE
SUPERVISORY
BOARD

Joint Activities and Dialogue

The Commissioner for the Protection of the State Language, Taras Kremin is a member of the Supervisory Board of TSATU. He visits the university, and is an active participant in discussions regarding its strategic development.

The participation of TSATU researchers in the meeting of Zaporizhzhia agrarians with the Committee of Entrepreneurs of the Agro-Industrial Complex of the Chamber of Commerce and Industry of Ukraine contributes to the development of the regional economy. During the meeting, the researchers joined the discussion of the Draft Strategy for the Development of Agriculture and Rural Areas.

The Dialogue with the labor market is carried out through participation in Round Tables with the Employment Centers of Vilnyansk and Novomykolaivka, involving invited representatives of territorial communities, employers, and enterprises of the agro-industrial complex.

6

UNITS

WITHIN STUDENT
SELF-GOVERNMENT
BODIES

Neutral Platforms for Discussing Issues

2

**MANAGEMENT
TRAINING
PROGRAMS**

10

**PLATFORMS
FOR
DISCUSSING
ISSUES**

- "Idea Leaders" Workshop - a space for generating socially significant projects.
- TechnoMay-2024 Program - dialogue between scholars and practitioners on sustainable agricultural production and resource efficiency.
- NoveFood-2024 Program - expert-practitioner dialogue on the development of the food industry.
- "Language Arsenal" Platform - discussions on national identity and language policy.
- Youth Debates of the Zaporizhzhia Region - a safe environment for discussing political and social challenges.
- "Local Self-Government in Action: The Path to Sustainable Development" - an event dedicated to modern trends in community governance.
- Round Table "Implementing the European Vector of Economic Development through Digitalization".
- "Youth 2035" Workshop - held under the patronage of the Presidential Youth Affairs Council and the Ministry of Youth and Sports of Ukraine.
- Training "Business Etiquette for Public Servants" - within the School of Effective Governance Leaders.
- "EU Institutions: How Do They Work?" - a platform for students to discuss the functioning of European Union institutions.
- Event "Regulation of the Cultural Sphere in the European Union" - organized by the Center for Civil Service Adaptation to EU Standards and the Hanns Seidel Foundation to familiarize participants with EU practices.

11

DOCUMENTS

ON ACADEMIC
FREEDOM
POLICY

6

**FACULTY
MEMBERS
SERVING IN
GOVERNMENT
BODIES**

1

UNIVERSITY

ALUMNI
ASSOCIATION

3

PUBLICATIONS

ON PEACE AND
STRONG
INSTITUTIONS

LEARNING AND STUDENTS

Educational Programs and Certification

The content of the educational programs is published on the Knowledge Management Portal of the National Agency of Ukraine on Civil Service. The training of specialists is carried out within the educational programs "Public Administration and Management" and "Management."

The university ensures the administration of the Unified State Qualification Examination.

Stakeholder Participation in Ensuring the Quality of Education

Employers are involved in the State Examination Committees, in assessing the quality of graduate training, in evaluating qualification papers, in developing and reviewing educational and professional programs, as well as in providing recommendations and reviewing curricula.

RESEARCH

International Scientific and Practical Conferences

- "Modern Science and Education Development: Realities, Quality Issues, Innovations" (with the participation of 200 researchers from 6 countries);
- "Foresight for the Reconstruction of Ukraine: Economic-Legal and Managerial Dimensions" encouraged discussions on digitalization in the context of decentralization, the impact of AI on the public services sector, the development of youth potential, and more.

Publications

- Biloblovsykyi, S., Haidaienko, O. V., Khrystenko, L., Demchuk, O. M., Morozova, H. (2024). Integrated reporting management: Optimising organisational performance. *Multidisciplinary Reviews*, 7, 2024spe016.
- Vyhovska, N. G., Ortina, G. V., Iierusalymov, V., Diachek, S. M., Lytvynchuk, I. V. (2024). Gender budgeting in Ukraine: Tools, financial security and gender equality in economic sectors. *Scientific Bulletin of Mukachevo State University. Series Economics*, 11(2), 18-29.
- Zaiats, N., Rega, I., Boiko, V., Shlieina, L. I., Toporkova, M. (2024). Ensuring gender equality and legal protection of women's rights: achievements, challenges, and prospects. *Multidisciplinary Science Journal*, 6, 7.

Student Self-Government Activity

Student Language Ombudsperson V. Shmalii represented the Student Self-Government Organization of TSATU at a meeting with the President of Ukraine.

Acting Head of the Student Council Ye. Petrushchenko took part in a meeting with the leadership of the Ministry of Education and Science of Ukraine, where the issues of supporting relocated higher education institutions were discussed. He also attended the Ukrainian Youth Forum 2024 'Free to Dream!', with the participation of the President and the Prime Minister, to contribute to the development of national youth policy.

Representatives of the Student Council took part in the VII Congress of the Ukrainian Student League, which brought together delegates from 80 universities, demonstrating the influence of youth on state processes.

POLICY AND OPERATIONS

- Regulations on the Academic Council of TSATU
- Regulations on Student Self-Government
- Regulations on Surveys of Participants in the Educational Process
- Anti-Corruption Program
- Action Plan for Preventing and Combating Corruption at TSATU
- Code of Academic Integrity
- Code of Honor
- Regulations on Planning and Accounting of the Main Types of Work of Academic Staff at TSATU
- Regulations on the Internal Quality Assurance System of Education
- Regulations on the Research Department
- Regulations on the Professional Development of Academic Staff

17 PARTNERSHIPS
FOR THE GOALS



PARTNERSHIPS FOR THE GOALS

>100

COURSES

COVERS THE ASPECTS OF SDG

7

DIRECTIONS

OF INTERNATIONAL COOPERATION ON SDG-RELATED ISSUES

11

PROGRAMS

BUILD AWARENESS OF THE SDG-S

39

SEMINARS

HELD IN COOPERATION WITH PARTNERS

4

ACTIVITIES

FOR GENERAL PUBLIC ON SDG-RELATED ISSUES

5

INITIATIVES

IMPLEMENTED WITH PARTNERS

3

PROGRAMS

OF ACADEMIC MOBILITY AND INTERNSHIP

2

CONSECUTIVE YEARS

OF SDG REPORTING

44

PUBLICATIONS

ON PARTNERSHIP-RELATED ISSUES

ENGAGEMENT AND IMPACT

International Cross-Sector Dialogue

The participation of TSATU representatives in the working meeting between the Zaporizhzhia Regional Military Administration and executive committees of the state of Pennsylvania serves as a direct dialogue aimed at developing cooperation in the fields of energy, education, innovation, and agriculture.

The meeting of educational program guarantors with a representative of the Higher School of Occupational Safety Management in Katowice (Poland) regarding a dual-degree program contributes to the integration of Ukrainian education into the European space.

Regional “Government–Business–Science” Dialogue

A direct contribution to shaping the regional economic strategy is the participation of the rector and researchers of TSATU in a series of “Government-Business Dialogue” meetings attended by the Head of the Zaporizhzhia Regional Military Administration, as well as in the meeting of the Zaporizhzhia Region Entrepreneurs’ Council, which brought together representatives of business, executive authorities, and civil society organizations to discuss the challenges of wartime and strategies for jointly confronting the threats faced by entrepreneurs.

The participation of researchers in the roundtable held within the UNDP project “Strengthening Member-Based Business Associations of Ukrainian MSMEs” focused on discussing issues related to MSME support regulation, infrastructure development, and innovation promotion.

Cooperation with Non-Governmental Organizations

In cooperation with the NGO “Youth Online,” the initiative “A Step Toward a Barrier-Free Information Space” has been implemented. Together with the NGO “Agro-Tavria,” the DigiTech project is being carried out to improve access to engineering and technical education for young people. In collaboration with the NGO “Innovative Horizons of Ukraine,” programs are being implemented related to language policy, the introduction of innovative technologies, and the integration of sustainable development principles within the higher education.

Dialogue with Business

Cooperation with Izateks Invest Group LLC focuses on conducting joint research and implementing the results in practice.

At the “ZAPORIZHZHIA. BUSINESS NEW WAYS 2024” event organized by the Zaporizhzhia Chamber of Commerce and Industry, TSATU researchers discussed tools for supporting businesses engaged in foreign economic activity, as well as current issues related to ensuring export and import operations.

LEARNING AND STUDENTS

Adaptation of best practices in achieving the SDGs

- Implementation of the course "Academic Literacy in Preparing World-Class Publications" (Swedish University of Agricultural Sciences).
- International internships on the topics "Fundraising and Basics of Grant Activities" and "Non-Formal Education and Academic Integrity," conducted by the Research Institute of the Lublin Science and Technology Park and the International Foundation of Scientists and Educators (IESF).
- The project "Modern Technologies and Approaches to Blended, Hybrid, and Online Foreign Language Teaching," supported by the EU under the House of Europe program.
- The international project "Bavarian Horizons - Cultural Bridges between Ukraine and Bavaria" (Germany).
- Participation of faculty members in the 3rd National Tourism Summit.
- Faculty internships within the Erasmus+ VEHUB4YOU project (University of Foggia, Italy, and RISEBA University, Latvia).
- Teacher training course "Artificial Intelligence in Scientific and Educational Marketing" (Estonia).

RESEARCH

Publications

- Hrykvivska, O. V., Karpinskyi, R. M., Prystemskyi, O. S., Andrushchenko, M. V., Namliieva, N. V. (2024). Innovative management of the production risks of agricultural enterprises. *Journal of Global Innovations in Agricultural Sciences*, 12(1), 1-17.
- Kovalenko, D. I., Tarasov, S., Strunhar, A., Boltianska, L., Antonenko, K. (2024). Charting paths for socio-economic revival in the wake of military turmoil. *African Journal of Applied Research*, 10(1), 481-494.
- Biloblovskyi, S., Haidaienko, O. V., Khrystenko, L., Demchuk, O. M., Morozova, H. (2024). Integrated reporting management: Optimising organisational performance. *Multidisciplinary Reviews*, 7, 2024spe016.
- Zaytseva, V. M., Tsviliy, S., Demko, V. S., Klopov, I., Kovalenko, V. (2024). Internalization of the investment environment in the international tourism industry. *Apuntes del Cenes*, 43(78), 43-75.
- Herasko, T., Tymoshchuk, T., Moisiienko, V. V., Hrytsiuk, N., Alekseeva, T. (2024). Phytocoenotic assessment of herbaceous plant communities in the organic sweet cherry orchard. *Scientific Horizons*, 27(5), 32-50.
- Svnynous, N. I., Holub, N. O., Datsenko, I. V., Sytnyk, V. H. R., Kapelista, I. M. (2024). Determinants of ensuring food security of manufacturers of the grain and oil group of Ukraine on the European market. *Zywnosc. Nauka. Technologia. Jakosc/Food. Science Technology. Quality*, 31(2), 88-119.

Awareness of the SDGs

A testing system has been introduced for formal assessment in the course "Sustainable Development Strategy."

During their studies at the International Winter School on "Sustainable Development and ESG: Global Challenges, National Priorities, Effective Solutions," TSATU master's and postgraduate students completed a final assessment of their achievement of program learning outcomes in the field of the SDGs and received certificates, demonstrating their successful mastery of international ESG and SDG concepts.

Youth Partnership

TSATU students took part in a discussion on the role of youth in the country's recovery during the youth forum "The Role of Youth in the Reconstruction of Ukraine," held in Kyiv as part of the project "Dialogues of Victory: Youth Participation in Ukraine's Recovery."

The forum was organized by the NGO "Youth Platform" with the support of UNDP Ukraine.

During a series of meetings between students and an expert from PÖTTINGER UKRAINE LLC, as well as Alex Lissitsa, the ideologist of the "Agrokebety" project and SEO of IMC, discussions focused on the implementation of innovations in soil cultivation, EU agricultural policy, and the European Green Deal.

- Labenko, O. M., Lymar, V., Faichuk, O., Hutsol, T., ..., Tabor, S., Kiurcheva, L. M. (2024). Assessment of the efficiency of the financial mechanism of environmental management. *Production Engineering Archives*, 30(3), 314-325.
- Opryshko, O. A., Pasichnyk, N. A., Kiktev, N. A., Dudnyk, A., Hutsol, T. & Kukharets, V. (2024). European Green Deal: Satellite Monitoring in the Implementation of the Concept of Agricultural Development in an Urbanized Environment. *Sustainability (MDPI)*, 16(7), 1-19.
- Bulgakov, V. M., Holovach, I., Martyniuk, V., ..., Ruciņš, Ā., Ihnatiev, Y. I. (2024). Mathematical model of movement and cleaning beetroots from soil lumps with spiral separator. *Engineering for Rural Development*, 683-695.
- Bulgakov, V. M., Gadzalo, I., Pascuzzi, S., ..., Ihnatiev, Y. I., Olt, J. (2024). Seasonal sequestration capacity of chernozem under different agrotechnological impacts in agroecosis. *Agronomy Research*, 22(1), 401-417.
- Bulgakov, V. M., Gadzalo, I., Chernovol, M. I., Holovach, I., Ihnatiev, Ye. & Mitkov, V., Olt, J. (2024). Structural- aggregate condition and utilization of productive water reserve depending on the tillage method of podzolized chernozem in agroecosis. *Agronomy Research*, 22(2), 750-773.
- Bulgakov, V. M., Holovach, I., Savchenko, I., ..., Olt, J., Ihnatiev, Y. I. (2024). Theoretical study of flexible blade movement in cleaning carrot root crop heads without extracting them from soil. *Engineering for Rural Development*, 722-731.
- Ivanova, I., Serdyuk, M. Y., Tymoshchuk, T., ..., Shepel, A. V., Savchuk, Y. (2024). Prediction of cherry fruit technological characteristics by ridge-regression method. *Future of Food: Journal on Food, Agriculture and Society*, 12(1), 39-50.
- Kolesnikov, M. O., Tymoshchuk, T., Moisiienko, V. V., Vyshnivskiy, P., Rudenko, Y. (2024). Formation of the photoassimilation apparatus of pea (*Pisum sativum* L.) crops under biostimulants in arid conditions of the Southern Steppe of Ukraine. *Scientific Horizons*, 27(4), 76-85.
- Kyrylov, Y., Ibatullin, M., Konovalenko, A. S., Shilo, Z. S., Pochernina, N. V. (2024). Global changes in the development of the export potential of the grain sub- complex of the agrarian sector of Ukraine. *Ekonomika APK*, 31(3), 22-33.
- Uhodnikova, O.I., Oleksenko, R.I., Cirella, G.T., Kravets, Oleg, ..., Shchetinina, T., Kravets, Olena. (2024). Strategic communication and public marketing for territory positioning in Ukraine: media engagement, resource utilization, and image formation. *Contributions to Economics*, 20, 353-373.
- Kukina, N. V., Makarenko, Y. P., Melnyk, L. M., Zavaloka, Y. M., Sidnenko, M. V. (2024). Financial dominant of activation of investment opportunities of agro-food production entities of Ukraine. *International Journal of Agriculture and Biosciences*, 13(1), 1-17.
- Shust, O. A., Kotvytska, N. M., Horlachuk, M. A., Kukina, N. V., Radko, V. (2024). Innovation and investment determinants of the development of the agro-food sector of Ukraine. *Multidisciplinary Science Journal*, 7(1), 2025024.
- Kulish, T., Sokil, Y., Legeza, D. G., ..., Budnikevich, I., Diyora, B. (2024). Digitalization of consumers' behavior model in the dairy market. *Lecture Notes on Data Engineering and Communications Technologies*, 187-205.
- Bulgakov, V. M., Trokhaniak, O., Aboltins, A., ..., Almeida, A., Kuvachov, V. (2024). Investigation of contact stresses in engagement elements of screw conveyor safety clutch. *Engineering for Rural Development*, 714-721.
- Bulgakov, V. M., Aboltins, A., Adamchuk, V. V., Kuvachov, V., Kyurchev, V. [et al.]. (2024). Investigation of wide span vehicle technological part movement stability. *Engineering for Rural Development*, 522-530.
- Bulgakov, V. M., Aboltins, A., Adamchuk, V. V., Kuvachov, V., Kyurchev, V. [et al.]. (2024). Investigation of wide span vehicle technological part suspension system compacting impact on soil. *Engineering for Rural Development*, 513-521.
- Penev, N., Shyriaieva, L., Legeza, D. G., Merkulov, M. M., Honcharova, I. (2024). Marketing analysis of multimodal transportation dynamics in logistics infrastructure. *E3S Web of Conferences*, 558, 01030.
- Filipishyna, L. M., Paradaeva, O. M., Belopolsky, M., Legeza, D. G., Sarkisian, L. (2024). Sustainable economic development: Comparative analysis of Ukraine and European countries. *E3S Web of Conferences*, 558, 01018.
- Kuznietsov, M., Lysenko, O., Khomutov, S. (2024). Seasonal storage of energy in a hybrid energy system. *Vidnovluyana Energetika*, 1(76), 6-21.

- Karpchuk, H., Budko, V.I., Lysenko, O. (2024). Technical achievable potential of photovoltaic conversion of solar radiation for the conditions of Ukraine. *EPJ Photovoltaics*, 15, 30.
- Kholoshyn, I. V., Nazarenko, T. G., Mantulenko, S. V., Mazykina, O. B., Varfolomyeyeva, I. M. (2024). Geography of the COVID-19 pandemic in Ukraine and the world: similarities and differences. *IOP Conference Series: Earth and Environmental Science*, 1415, 012042.
- Vyhovska, N. G., Ortina, G. V., Ierusalymov, V., Diachek, S. M., Lytvynchuk, I. V. (2024). Gender budgeting in Ukraine: Tools, financial security and gender equality in economic sectors. *Scientific Bulletin of Mukachevo State University. Series Economics*, 11(2), 18-29.
- Kucher, O., Yermakov, S., Andreitseva, I., Plotnichenko, S. R., Kozak, O. (2024). Methodological aspects of bioeconomy development strategy formation in Ukraine (example of renewable energy sources). *Engineering for Rural Development*, 850-857.
- Verbivska, L.V., Ihnatushenko, O., Petrovskiy, O., Pochernina, N. V., Zavora, O. (2024). Stimulating economic growth through investment instruments. *Pakistan Journal of Life and Social Sciences*, 22(2), 00779.
- Sharov, S., Tereshchuk, S., Sharova, T., Spanatii, O., Kolomoiets, H. A. (2024). Experience of using Google cloud services in Ukrainian universities: survey results. *E3S Web of Conferences*, 508(6), 03005.
- Sharov, S., Chakraborty, S., Zemlianskyi, A., Kolmakova, V. A., Prosiankina-Zharova, T. I. (2024). Quantitative analysis of online courses for learning the javascript programming language. *International Journal on Advanced Science, Engineering and Information Technology*, 14(4), 1216-1225.
- Sharov, S., Tereshchuk, S., Filatova, O., Hinkevych, O., Ksendzenko, O. (2024). Survey analysis of university teachers in Ukraine regarding the use of Google workspace for education. *TEM Journal*, 13(1), 315-325.
- Saregar, A., Sunyono, N., Distrik, I. W., Nurhanurawati, N., Sharov, S. (2024). Teaching and learning optics: a bibliometric analysis with a detailed future insight overview. *Journal of Studies in Science and Engineering*, 4(1), 142-158.
- Skyba, V., Vozniuk, N., Vozniuk, S. (2024). GIS resources as a tool for monitoring and managing river basin conditions. *International Conference of Young Professionals "GeoTerrace-2024"*, October, 1-5.
- Alsarayrah, T. M. K., Alhasanat, K. A. H., Sokil, O. H., Zhuk, V., Sokil, Y. (2024). Forming the conceptual foundations of a sustainable development accounting system and reflecting its results in reporting. *Eastern-European Journal of Enterprise Technologies*, 4(13(130)), 6-18.
- Subota, L., Buts, Z., Bashmanivskiy, O., Taranenko, H., Lutsenko, I. (2024). Exploring the influence of modern technologies in education: Evaluating the effects of e- learning and remote instruction on academic performance. *Multidisciplinary Reviews*, 7.
- Trachova, D., Demchuk, O. M., Trachov, V. (2024). Methodological and technological solutions to improve the security of Ukraine's accounting system during the hostilities. *Lecture Notes on Data Engineering and Communications Technologies*, 269-288.
- Alekseyenko, L., Tulai, O., Ferens, B., Tsap, V., Tokalo, V., Artemenko, L. (2024). Informational support for communication of reinvestment recovery of the economy. *Lecture Notes in Networks and Systems*, March, 193-205.
- Yatsukh, O., Chyhyrnskyi, A., Pürhani, S. H., Bulhakova, O. V., Durman, M. (2024). The impact of digital ecosystems on the financial management efficiency in state institutions. *Theoretical and Practical Research in the Economic Fields*, 15(2), 471-481.
- Yavorska, T. I., Lavruk, V. V., Alokhina, Y. S., Alokhin, V. O., Kovalenko, V. V. (2024). Resource potential of agriculture in Ukraine: energy conservation and food supply. *Acta Geographica Universitatis Comenianae*, 68(2), 197-225.
- Yavorska, T. I., Kostyuk, O., Kostyuk, M., Tsviliy, S., Ogloblina, V. (2024). The determinants of neutralizing the influence of the production risks of agricultural enterprises on the competitiveness of the processing industry. *Zywnosc. Nauka. Technologia. Jakosc/Food. Science Technology. Quality*, 31(2(139)), 211-239.
- Kubitskyi, S., Yeremenko, D. V., Danylenko, V., Bataiev, S., Varaksina, E. (2024). Evaluating the impact of innovative technologies on global competitiveness through modelling. *Multidisciplinary Science Journal*, 5.
- Zavadskykh, H., Fradynskiy, O., Puhalskyi, V., Didukhovych, A., Popliuiko, Y. (2024). Financial stability during the post-crisis period: strategies for recovery and support of economic development. *Economic Affairs (New Delhi)*, 69(1).



DATA ANALYSIS AND REPORTING METHODOLOGY

Involvement in Global Rankings

The methodology for preparing the report takes into account the approaches used in international university sustainability rankings, primarily the Times Higher Education Impact Rankings. The indicators are closely aligned with the THE IR methodology for the corresponding reporting year, as well as with national and institutional priorities.

During data selection, the criteria of relevance, transparency, and reproducibility are applied, ensuring comparability of results over time and with other higher education institutions, and serving as a validation of the quality of internal sustainability policies and practices.

Information Sources

The information base of the report includes a standardized set of quantitative and qualitative indicators for the reporting period, as defined by the THE Impact Rankings methodology. The main groups of sources include: the university's official reporting, data from internal systems, unit reports, the results of surveys of students, staff, and other stakeholders, as well as materials from the official TSATU website and other public resources.

Openness and Accessibility Principle

The preparation and presentation of the report are based on the principle of openness and accessibility of information. TSATU ensures public access to policies, procedures, and results related to the achievement of the SDGs by publishing relevant documents, news, descriptions of practices, and statistical data on its website. The links to sources remain valid throughout the THE IR evaluation cycle.

Analysis of SDG-Related Activities

Analysis of TSATU's activities in the field of sustainable development is carried out through mapping initiatives to the corresponding UN SDGs and their targets. For each area of activity, relevant indicators are identified in accordance with the structure of THE IR criteria for the selected SDGs. Quantitative data are supplemented with descriptions of policies, programs, projects, and case studies that demonstrate the real impact on students, staff, local communities, and partners.

Development of an Activity Improvement Plan

Based on the conducted analysis, conclusions are drawn regarding the university's strengths and the areas that require improvement. The reporting results are used to develop an action plan aimed at enhancing performance across specific SDGs. The report enables the transformation of evaluation outcomes into concrete managerial decisions and initiatives aimed at strengthening the university's social, economic, and environmental impact.



**DMYTRO MOTORNYI TAVRIA STATE
AGROTECHNOLOGICAL UNIVERSITY**

WWW.TSATU.EDU.UA

office@tsatu.edu.ua

www.tsatu.edu.ua/stalyj-rozvytok