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RESEARH INTERESTS

- **Geotechnical Engineering:** geotechnical monitoring, shallow and deep foundation optimization, slope stability
- **Soil Mechanics:** soft sediment, bearing capacity, settlement, consolidation
- **Dynamics of Foundation:** massive-plate footings under machines with dynamic loads, development methods of reduction of footings vibrations
- **Land Surveying:** land appraisal methods

ACADEMIC POSITIONS

- 2022–now Part–Time **Researcher**, Section of Dynamics of Solids and Structures, Department of Engineering Structures, Faculty of Civil Engineering and Geosciences, Delft University of Technology
- 2000 – 2022 **Full Professor** of the Department of Roads, Geodesy and Land Management, Pridniprovsk State Academy of Civil Engineering and Architecture, Dnipro, Ukraine
- 1984 – 2000 **Assistant Professor**, Department of Foundation and Soil Mechanics, University of Civil Engineering, Dnipropetrovsk, USSR/Ukraine
- 1982 – 1990 **Senior Research Engineer**, Institute of Nuclear Energy Ministry USSR in University of Civil Engineering, Dnipropetrovsk
- 1976 – 1982 **Researcher**, Institute of Nuclear Energy Ministry USSR in University of Civil Engineering, Dnipropetrovsk

ADMINISTRATION POSITIONS

- 2000 – 2022 Head of the Department of Highway & Land Surveying, Pridniprovsk State Academy of Civil Engineering and Architecture, Dnipropetrovsk, Ukraine
- 2002 – 2017 Director of the Institute for Expertise, Designing and Survey, Dnipropetrovsk, Ukraine
- 2004 – 2010 Member of Expert Council of Supreme Accreditation Committee of Ministry of Ukraine
- 2005 – 2010 Member of Supervisory Board of State Property Fund of Ukraine
- 2015 – 2016 Member of Dnipro Regional board of The State Service of Ukraine for Geodesy, Cartography & Cadaster

EDUCATION

- 2002 **Doctor of Science (Foundations)**
Pridniprovsk State Academy of Civil Engineering and Architecture, Dnipropetrovsk, Ukraine
Dissertation: Interaction of the combined solid-plate footings with soil under different types of loads
- 1982 **PhD, Candidate of Science (Foundation and underground construction)**
University of Civil Engineering, Dnipropetrovsk, USSR
Dissertation: Vibrations of connected footings under machines with dynamic loads
- 1976 **Engineer in Civil Engineering (Summa Cum laude)**
University of Civil Engineering, Dnipropetrovsk, USSR

TEACHING

- Soil mechanics and foundation engineering
- Road bed and pavement mechanics
- Structural design
- Engineering surveying
- Geodesy
- Land appraisal

SKILLS

- Field and lab experiments
- Structure health monitoring (Ukrainian state-qualified expert)
- Dynamic analysis of foundations
- Expert on valuation property and business
- Teaching BSc, MSc and PhD classes
- Supervisor of PhD, MSc and BSc students
- Reviewing proceedings and qualified research works in geotechnics
- Proficient in MS Office, Latex, AutoCAD
- Language skills: English, Serbian, Croatian, Polish, Russian and Ukrainian

UNIVERSITY COMMITTEE (MEMBER)

- 2016 – 2022 PhD and Doctoral Committee in Construction design
- 2000 – 2022 Educational Committee of Pridniprovsk State Academy of Civil Engineering and Architecture
- 2000 – 2022 Scientific Committee of the faculties of Pridniprovsk State Academy of Civil Engineering and Architecture
- 2000 – 2022 PhD and Doctoral Committee in Foundation

OTHER PROFESSIONAL EXPERIENCE

- 2012 – 2022 **Expert in Build Surveying (certificate)**
Regional Development, Building, Housing and Communal Services Ministry of Ukraine & Certification Architect's Commission
- 1996 – 2022 **Qualified appraiser (certificates)**
State Property Fund of Ukraine & Ukrainian Valuation Society,

State Committee on Land Surveying of Ukraine & International Center of Privatization, Investment of Capital & Management,

MEMBERSHIP IN PROFESSIONAL AND HONORARY SOCIETIES

2021 – now	Vice-president of Ukrainian Society for Soil Mechanics, Geotechnics and Foundation
2000 – 2010	Vice-president of Ukrainian Valuation Society
2012 – now	Member of International Society for Soil Mechanics and Geotechnical Engineering
2008 – now	Full member of Civil Engineering Academy of Ukraine
2011 – now	Full member of International Engineering Academy

HONORS AND AWARDS

- Ukrainian Orthodox Church order “Saint Nestor Chronicler” Second Class (2016)
- The Paton Prize laureate of International Engineer Academy (2011)
- Budnikov Medal of Civil Engineering Academy of Ukraine (2012)
- Anniversary Medal “75 Years Pridniprovsk State Academy of Civil Engineering and Architecture” (2015)
- Anniversary Medal “100 Years Civil Engineering education in Dnipro” (2016)
- “For outstanding service” Medal of International Engineer Academy (2016)
- Prize of Civil Engineering Academy of Ukraine “Who is Who in Construction & Architecture” (2010)
- Diploma of Ministry of Education & Science (2009)
- Honored Appraiser of Ukrainian Valuation Society (2004)

INTERNATIONAL RESEARCH & TEACHING PRACTICE

- Research project at Kozlodue nuclear power plant in Bulgaria (1985)
- Research project at computer center of Civil Engineering Department of University in Beograd, Yugoslavia (1986-1987)
- Professional training in Blufffield College, USA (1998)
- Director of the Center of international understanding Ukraine – USA (2001-2020)
- Invited lecture in High school of engineering & economics in Slupsk, Poland (2015 – 2018)
- Recognized European Valuer TEGOVA (2018-2023)
- Presenting at “Kongres saveza drustva za seizmicko Gradevinarstvo Jugoslavije”. Zagreb. Yugoslavia (1986)
- Presenting at 17 Jugoslovenski kongres teorijske I primenjene mehanike, Zadar. Yugoslavia (1986)
- Presenting at The Polish – Ukrainian conference “Theoretical Foundation in Civil Engineering. Warsaw. Poland (1996)
- Presenting at The 5th conference on dynamical systems theory and applications. Lodz. Poland (1999)
- Presenting at The 4th Euromech, Solid Mechanics Conference. Metz. France. (2000)
- Presenting at The 7th Conference on Dynamical Systems. Theory and Applied, Lodz. Poland (2003)
- Presenting at The XIV European Conference on Soil Mechanics and Geotechnical Engineering. Madrid. Spain (2007)

- Presenting at The Polish – Ukrainian conference “Theoretical Foundations of Civil Engineering, Warsaw/ Poland (2009)
- Presenting at the 15th European Conference on Soil Mechanics and Geotechnical Engineering. Athens. Greece, oral presentation, panelist of discussion session (2011)
- Presenting at The International conference Numerical analysis and applied mathematics ICNAAM. Greece (2011)
- Presenting at The Polish-Ukrainian conference “Theoretical foundations of civil engineering”. Warsaw. Poland (2011)
- Presenting at The 18-th International Conference on Soil Mechanics and Geotechnical Engineering, Paris. France. Oral presentation. (2013)
- Presenting at the 8th European Conference on Numerical Methods in Geotechnical Engineering. Delft. The Netherlands (2014)
- Presenting at The fifth International Symposium on Geotechnical and Risk (ISSGR). Rotterdam. The Netherlands. Oral presentation (2015)
- Presenting at The XVII conference ECSMGE Geotechnical Engineering foundation of the future, Reykjavik, Iceland, oral presentation (2019).
- Chairing the session The third international conference “Challenges in Geotechnical Engineering. Zielona Gora. Poland. Oral presentation (2019)

PUBLICATIONS

- 6 monographs and textbooks
- More than 200 technical and research papers (most of them are in Ukrainian and Russian)
- 27 patents and author’s certificates
- 52 guidelines for students

BOOKS

- The monograph with co-authorship “Constructive methods for reducing vibrations in the foundations of machines with dynamic loads” (1987, Moscow)
- Textbook with co-authorship “Rural roads and squares” (2000, Dnipropetrovsk)
- The monograph "Combined massive-slab foundations" (2001, Dnipropetrovsk)
- Textbook with co-authorship “Structures on highways” (2004, Dnipropetrovsk)
- Textbook “Land appraisal”(2016, Dnipro)

SELECTED PAPERS AND PATENTS

1. Feklin V.I. A tool for forming a hole in macroporous compressible soil and a method of forming a hole by the same tool / V.I. Feklin, V.B. Shwez, Y.A. Kirichek & oth. - Australian patent №547821. – 1982.
2. Feklin V.I. A tool for forming a hole in macroporous compressible soil and a method of forming a hole by the same tool / V.I. Feklin, V.B. Shwez, Y.A. Kirichek & oth. - Indian patent AN№3380.- 1982.
3. Feklin V.I. Outil pour le sondage de sols macroporeux compressibles et procede de sondage utilisant ledit outie. / V.I. Feklin, V.B. Shwez, Y.A. Kirichek & oth. - France Brivet D. Inw. Vention №2506383 OBF №47/ - 1982.
4. Feklin V.I. A tool for forming a hole in macroporous compressible soil/ V.I. Feklin, V.B. Shwez, Y.A. Kirichek & oth. - USA patent, 4.485.765. – 1984.

5. Feklin V.I. Tool Forming a Hole in Macroporous Compressible Soil and a Method of Forming a Hole by the Same Tool. / V.I. Feklin, V.B. Shwez, Y.A. Kirichek & oth. Canadian patent №1177059. - 1984.
6. Feklin V.I. Verkeuge zur Herstellung von Bohrlochern in lockeren zusammendruckbaren Boden und verfahren zum Herstelen von Bohrlochern unter verwendung eines solehen werkzeugs. / V.I. Feklin, V.B. Shwez, Y.A. Kirichek & and. Patent Bundesrepublik Deutschland 3218995. - 1983.
7. Kiricek J. Interakcija vise dinamicki opterecenih temelja I tla // Zbornik radova IV Kongres saveza drustva za seizmicko Gradevinarstvo Jugoslavije. – Zagreb. – 1986. – K.1 - s. 125 -130.
8. Kirichek J.A. Dynamics of connected bodies on an elastic-viscous ground // Zb. Rad. 17 Jugoslovenski kongres teorijske i primenjene mehanike. - Zadar. – RO Centar/ - 1986. – C. 267 – 272.
9. Feklin V.I. A tool for forming a hole in macroporous compressible soil/ V.I. Feklin, V.B. Shwez, Y.A. Kirichek & oth. Patent Japap №1341105. (In Japanese). – 1987.
10. Kirichek Y.A. Temperature deformation of the foundation wall // Proc. Of the Polish – Ukrainian seminar “Theoretical Foundation in Civil Engineering. – Warsaw. – 1996. №4. – Vol. 1. - Part II. - P. 229 – 231.
11. Andrianov I. Asymptotic approaches in nonlianer dynamics of the reinforced strip / Andrianov I., Zarubinskaya M., Danishevskyy S., Kirichek Y. // 5th conference on dynamical systems theory and applications // Lodz. - 1999. – ABA GRAF. - P. 77-82.
12. Kirichek Y. About oscillations of deepened combined massive – plate bodies on elastic – viscosity basement / Kirichek Y., Bolshakov V. // Book of abstracts II.- 4th Euromech Solid Mechanics Conference.- Metz: MetzV. - 2000. – P.632.
13. I. Andrianov, Y. Kirichek, S. Koblik. Elastic half-plane with embedded punch / I.Andrianov, Y. Kirichek, S. Koblik. // Proc. 7th Conf. on Dynamycal Sustems. - Theory and Appl. – Lodz. - 2003. – Vol. 2. P. 756-774.
14. Andrianov I. Asymptotic study of elastic half-plane with embedded punch. / Andrianov, I.V., Awrejcewicz, J., Kirichek, Yu.A., Koblik, S.G. // Theoretical & Applied Mechanics, vol. 45, No 1. - 2007 - pp. 5-14.
15. Andrianov I. Modified Muravski model for elastic foundations/ I. Andrianov, Y. Kirichek, L. Khorseva. // Proc. Teoretical Foundations of Civil Engineering. – Warsaw. – 2009. – Vol. 17. - pp. 23-30.
16. Kirichek Y. Analysis of the Behavior of Massive Plate Foundation on Viscoelastic Base Y.Kirichek // Proc. of the 15th European Conference on Soil Mechanics and Geotechnical Engineering. IOS Press. Amsterdam. 2011. - Part 1. – p.p.557-562.
17. Andrianov I. Periodical Solution of Certain Strongly Nonlinear Wave Equations / Andrianov I., Bolshakov V., Kirichek Y., Topol H. // IP Conf. proc. 1389. – Int. Conf. Numerical analysis and appled mathematics ICNAAM 2011. – Melville New York. - 2011. – Vol. A. - P.P. 442-445.
18. Andrianov I. A comment on the compatibility conditions/ Andrianov I., Kirichek Y., Prudko E. A // Theoretical foundations of civil engineering. Polish-Ukrainian conference. – Warsaw: 2011. – Vol. 19. – P.P. 21-24.
19. Andrianov I. Modifield Muravskii model for elastic foundations/ Andrianov I., Kirichek Y., Awrejcewicz. // Acta Mechanica Sinica. – 2011. Vol. 27. - №1. p.p.68-71.
20. Kirichek Y. Combined massive and plate foundations under machines with dynamic loadings / Kirichek Y., Bolshakov // Proc. of the 18-th International Conference on Soil Mechanics and Geotechnical Engineering.- Paris. – Vol. 4. - 2013.- p.p. 3451 – 3454.
21. Y. Kirichek. In situ testing in soil dynamics/ Y. Kirichek // Proc. of the 15-th European conference on soil mechanics and geotechnical engineering. – Amsterdam - Berlin – Tokio – Washington DC. – 2013. – Part 4. – IOS Press. – 271-276.

22. Kirichek Y. Limit State Design of Shallow Foundation / Kirichek Y., Tregub A. // Proc. Fifth International Symposium on Geotechnical and Risk (ISSGR).- Rotterdam.- IOS Press. - 2015. – P. 374 – 379.
23. Kirichek Y. Safety concepts for shallow foundations / Kirichek Y., Bolshakov V., Tregub A. // Proc. of XVI ECSMGE Geotechnical Engineering for Infrastructure and Development. – Edinburg. - ICE Publishing. – 2015. - Vol.3. - P. 967 – 972.
24. Kirichek Y.A. Reducing the vibration level of the footings for equipment by viscoelastic connection / Kirichek Y.A. // Proceedings of the XVII ECSMGE-2019 Geotechnical Engineering foundation of the future ISBN 978-9935-9436-1-3, 2019 doi: 10.32075/17ECSMGE-2019-0812. P.1-6. [https://www.ecsmge-2019.com/uploads/2/1/7/9/21790806/812-ecsmge-2019_kirichek.pdf].
25. Kirichek Y The parameters of nonlinear models for shallow foundation / Kirichek Y, Tregub A. // Proceedings of the third international conference “Challenges in Geotechnical Engineering 2019. – Zielona Gora/ - 2019. - P. 18.