

## CURRICULUM VITAE

Taras Goy

## PERSONAL INFORMATION

Date of birth:	December 24, 1969
Address:	Faculty of Mathematics and Computer Sciences, Department of Differential Equations and Applied Mathematics, Vasyl Stefanyk Precarpathian National University, 57 Shevchenko st., Ivano-Frankivsk, Ukraine, 76018; e-mail: <a href="mailto:taras.goy@pnu.edu.ua">taras.goy@pnu.edu.ua</a>

## EDUCATION

1986 – 1993	Vasyl Stefanyk Precarpathian National University, Faculty of Mathematics and Physics, <i>student</i>
1993 – 1996	Pidstryhach Institute for Applied Problems of Mechanics and Mathematics of National Academy of Sciences of Ukraine, Department of Mathematical Physics, <i>post-graduate student</i>
1998	Yu. Fedkovych Chernivtsi State University, <i>PhD degree</i> Title of PhD thesis: Nonlocal value-boundary problems for partial differential equations. Thesis Advisor: Prof. Bohdan Ptashnyk
2018 –2020	Vasyl Stefanyk Precarpathian National University, Faculty of Mathematics and Computer Sciences, <i>DrSci student</i>

## RESEARCH INTERESTS

2010 MS Classification:	11B37 Recurrences; 11B39 Fibonacci and Lucas numbers and polynomials and generalizations; 11B65 Binomial coefficients; factorials; $q$ -identities; 11B73 Bell and Stirling numbers; 11B83 Special sequences and polynomials; 11C20 Matrices, determinants; 15A15 Determinants, permanents, other special matrix functions; 15B05 Toeplitz, Cauchy, and related matrices; 15B36 Matrices of integers.
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## PROFESSIONAL EXPERIENCE

**Academic Positions:**

1995 – 1996	Pidstryhach Institute for Applied Problems of Mechanics and Mathematics of National Academy of Sciences of Ukraine, Department of Mathematical Physics (Lviv, Ukraine), <i>mathematician</i>
1996 – 2000	Vasyl Stefanyk Precarpathian National University, Faculty of Mathematics and Computer Sciences (Ivano-Frankivsk, Ukraine), <i>assistant</i>
2002 - till now	Vasyl Stefanyk Precarpathian National University, Faculty of Mathematics and Computer Sciences (Ivano-Frankivsk, Ukraine), <i>associate professor</i>

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**Selected International Conferences (2017–2020):**

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**2017**

July 12–15	30th Int. Conf. of the Jangjeon Mathematical Society (Algeria)
August 22–25	Int. Conf. “Contemporary Problems of Pure and Applied Mathematics” (Kazakhstan)
August 21–26	Int. Conf. “Numbers, Forms and Geometry” (Russia)

**2018**

September 13–15	Int. Scientific Conf. “Modern Problems of Applied Mathematics and Information Technology – Al-Khorezmiy 2018” (Uzbekistan)
September 24–28	6th Int. Conf. on Analytic Number Theory and Spatial Tessellations “Voronoi Impact on Modern Science” (Ukraine)
December 4–7	V Int. Conf. “Non-local Boundary Value Problems and Related Problems of Mathematical Biology, Informatics and Physics” (Russia)

**2019**

July 2–6	XII Int. Algebraic Conf. in Ukraine (Ukraine)
July 1–5	Int. Conf. “31th Journées Arithmétiques” (Turkey)
September 28 – October 1	5th Conf. of the Mathematical Society of the Republic of Moldova (Moldova).
October 16–19	Int. Conf. “Actual Problems of Analysis, Differential Equations and Algebra” (Kazakhstan)
October 23–25	Int. Conf. “Modern problems of Mathematics and Mechanics” (Azerbaijan)

**2020**

March 12–13	Int. Sci. Conf. «Modern Problems of Differential Equations and Related Branches of Mathematics» (Uzbekistan)
October 26 – 30	XI Int. Skorobohatko Math. Conf. (Ukraine)

**MEMBERSHIP**

Member of Editorial Board of the journals:

- *Carpathian Mathematical Publications* (Web of Science, Scopus),
- *JP Journal of Algebra, Number Theory and Applications* (Web of Science).

Member of Ukrainian Mathematical Society, Ivano-Frankivsk branch.

Member of Scientific Society named after T. Shevchenko in Lviv, Ivano-Frankivsk branch.

Reviewer of Mathematical Reviews.

Reviewer in journals: *Ars Combinatoria*; *Carpathian Mathematical Publications*; *Notes on Number Theory and Discrete Mathematics*; *Discussiones Mathematicae, General Algebra and Applications*; *JP Journal of Algebra, Number Theory and Applications*; *Pure and Applied Mathematics Journal*; *Utilitas Mathematica*; *Far East Journal of Mathematical Sciences*; *Applied Mathematics E-Notes*; *Mathematical Problems in Engineering*; *Quaestiones Mathematicae*; *Annales Mathematicae Silesianae*; *Operators and Matrices*; *Punjab University Journal of Mathematics*; *Integers*; *Mathematics and Statistics*; *Turkish Journal of Mathematics*; *Thai Journal of Mathematics*.

## LIST OF SELECTED PUBLICATIONS

1. Frontczak R., Goy T. More Fibonacci-Bernoulli relations with and without balancing polynomials. *Math. Commun.* (2021), 26(2) (in press). [Scopus](#) [WEB OF SCIENCE™](#)
2. Frontczak R., Goy T. Lucas-Euler relations using balancing and Lucas-balancing polynomials, *Kyungpook Math. J.* (2021), 61(2) (in press). [Scopus](#) [WEB OF SCIENCE™](#)
3. Adegoke K., Frontczak R., Goy T. Some special sums with squared Horadam numbers with and generalized tribonacci numbers, *Palestine J. Math.* (2021), 10(2), (in press). [Scopus](#)
4. Frontczak R., Goy T. Additional close links between balancing and Lucas-balancing polynomials, *Adv. Stud. Contemp. Math.* (2021), 31(2) (in press). [Scopus](#)
5. Frontczak R., Goy T. Combinatorial sums associated with balancing and Lucas-balancing polynomials, *Ann. Math. Inform.* (2020), 52, 97–105. [Scopus](#) [WEB OF SCIENCE™](#)
6. Goy T. Combinatorial properties of Boubaker polynomials, *Math. Probl. Eng.* (2020), 2020, Article ID 1528639. [Scopus](#) [WEB OF SCIENCE™](#)
7. Goy T., Shattuck M. Some Toeplitz–Hessenberg determinant identities for the tetranacci numbers, *J. Integer Seq.* (2020), 23(6), Article 20.6.8. [Scopus](#) [WEB OF SCIENCE™](#)
8. Goy T., Shattuck M. Determinant identities for Toeplitz-Hessenberg matrices with tribonacci number entries, *Trans. Comb.* (2020), 9(2), 89–109. [Scopus](#) [WEB OF SCIENCE™](#)
9. Goy T., Zatorsky R. Hessenberg Matrices: Properties and Some Applications. In: *Hot Topics in Linear Algebra*, edited by I. Kyrchei, Nova Science Publ., New York, 2020, P. 163–204. [Scopus](#)
10. Goy T., Shattuck M. Fibonacci-Lucas identities and the generalized Trudi formula, *Notes Number Theory Discrete Math.* (2020), 26(3), 203–217. [WEB OF SCIENCE™](#)
11. Frontczak R., Goy T. Mersenne-Horadam identities using generating functions, *Carpathian Math. Publ.* (2020), 12(1), 34–45. [Scopus](#) [WEB OF SCIENCE™](#)
12. Goy T., Sharyn S. On Pell-Padovan numbers and their connection on Fibonacci numbers, *Carpathian Math. Publ.* (2020), 12(2), 280–288. [Scopus](#) [WEB OF SCIENCE™](#)
13. Goy T., Shattuck M. Determinant formulas of some Toeplitz–Hessenberg matrices with Catalan entries, *Proc. Indian Acad. Sci. Math. Sci.* (2019), 129, Article 46. [Scopus](#)
14. Goy T., Zatorsky R. On Oresme numbers and their connection with Fibonacci and Pell numbers, *Fibonacci Quart.* (2019), 57(3), 238–245. [Scopus](#) [WEB OF SCIENCE™](#)
15. Goy T. Pell numbers identities from Toeplitz-Hessenberg determinants and permanents, *Novi Sad J. Math.* (2019), 49(2), 87–94. [Scopus](#)
16. Goy T., Shattuck M. Determinants of Toeplitz-Hessenberg matrices with generalized Fibonacci entries, *Notes Number Theory Discrete Math.* (2019), 25(4), 83–95. [WEB OF SCIENCE™](#)
17. Goy T., Shattuck M. Fibonacci and Lucas identities using Toeplitz–Hessenberg matrices, *Appl. Appl. Math.* (2019), 14(2), 699–715. [WEB OF SCIENCE™](#)
18. Goy T. On identities with multinomial coefficients for Fibonacci-Narayana sequence, *Ann. Math. Inform.* (2018), 49, 75–84. [Scopus](#) [WEB OF SCIENCE™](#)
19. Goy T. Horadam sequence through recurrent determinants of tridiagonal matrix, *Kragujevac J. Math.* (2018), 42(4), 527–532. [Scopus](#) [WEB OF SCIENCE™](#)
20. Goy T. On new identities for Mersenne numbers, *Appl. Math. E-Notes* (2018), 18, 100–105. [Scopus](#)

21. Goy T. Fibonacci and Lucas numbers via the determinants of tridiagonal matrix, *Notes Number Theory Discrete Math.* (2018), 24(1), 103–108. [WEB OF SCIENCE™](#)
22. Goy T., Negrych M., Savka I. On nonlocal boundary value problem for the equation of motion of a homogeneous elastic beam with pinned-pinned ends, *Carpathian Math. Publ.* (2018), 10(1), 105–113. [WEB OF SCIENCE™](#)
23. Goy T. Some families of identities for Padovan numbers, *Proc. Jangjeon Math. Soc.* (2018), 21(3), 413–419. [Scopus](#)
24. Goy T.P. On some fibinomial identities, *Chebyshevskii Sb.* (2018), 19(2), 56–66. [Scopus](#)
25. Goy T. On determinants and permanents of some Toeplitz-Hessenberg matrices whose entries are Jacobsthal numbers, *Eurasian Math. J.* (2018), 9(4), 61–67. [Scopus](#) [WEB OF SCIENCE™](#)
26. Goy T., Zatorsky R. Infinite linear recurrence relation and superposition of linear recurrence equations, *J. Integer Seq.* (2017), 20(5), Article 17.5.3. [Scopus](#) [WEB OF SCIENCE™](#)
27. Zatorsky R.A., Goy T.P. Parapermanents of triangular matrices and some general theorems on number sequences, *J. Integer Seq.* (2016), 19(2), Article 16.2.20. [Scopus](#) [WEB OF SCIENCE™](#)
28. Goy T.P. Special functions generated by rising and central factorial powers. *Vestn. Tomsk. Gos. Univ. Mat. Mekh.* (2016), 2(40), 19–32. [WEB OF SCIENCE™](#)
29. Goy T.P., Zatorsky R.A. New integral functions generated by rising factorial powers, *Carpathian Math. Publ.* (2013), 5(2), 217–224. [WEB OF SCIENCE™](#)
30. Goi T.P., Ptashnik B.I. Problem with nonlocal conditions for weakly nonlinear hyperbolic equations, *Ukrainian Math. J.* (1997), 49(2), 204–215. [Scopus](#)
31. Goi T.P., Ptashnik B.I. Nonlocal boundary-value problems for systems of linear partial differential equations with variable coefficients, *Ukrainian Math. J.* (1997), 49(11), 1659–1670. [Scopus](#)
32. Goy T. Problem B-1192, *Fibonacci Quart.* (2016), 54(3), 272.
33. Goy T. Problem B-1210, *Fibonacci Quart.* (2017), 55(2), 179.
34. Goy T. Problem B-1230, *Fibonacci Quart.* (2018), 56(2), 178.
35. Goy T. Solution to Problem B-75, *Fibonacci Quart.* (2020), 58(1), 83–84.
36. Goy T. Problem H-857, *Fibonacci Quart.* (2020), 58(2), 186.