

Associate Professor Lidia Elena KOZMA at her 60th anniversary

IULIAN COROIAN

Our colleague, Associate Professor Lidia Elena Kozma, born Plămădeală, was born on January 17, 1945, in Câmpia Turzii, Cluj county, Romania.

She attended primary and secondary school in her native village and took her university degree in 1968, at the Faculty of Mathematics and Mechanics of the "Babeş-Bolyai" University from Cluj-Napoca, with major "mechanics of fluids".



She started her professional activity in industry, as a mathematician in a research institute for the refrigeration industry from "Tehnofrig", Cluj-Napoca. Then, since 1971 she was accepted as assistant professor at the "Institutul de Subingineri" (Engineering College) Baia Mare, which later became "Higher Training Institute", and finally "North University of Baia Mare", since 1991.

Since 1990, she became associate professor within the Department of Mathematics and Computer Science from North University of Baia Mare.

In 1985, she obtained her Ph.D degree in Mathematics at the University of Bucharest with the thesis "Fluid motion with mass and temperature transfer", under the supervision of the professor Caius Iacob, member of the Romanian Academy.

During her didactical career, Lidia Elena Kozma taught the courses: General Mathematics, Topography, Calculus, Special Mathematics (for engineers), Complex Analysis, Mathematical Modelling (for master courses), Didactics of Geometry (for master courses).

The domain of research in which she works is concerned with Fluid Mechanics, Mathematical Modelling and Complex Analysis.

We mention the positions that she has, held at times:

- vice-rector of the North University of Baia Mare, between 1998-2004,
- member of the editorial board of the journals Carpathian Journal of Mathematics and Creative Mathematics published by Department of Mathematics and Computer Science from North University of Baia Mare,
- member of the Romanian Society of Mathematical Sciences,
- member of the American Mathematical Society, as well as of the European Mathematical Society,
- reviewer at "Mathematical Reviews" and "Zentralblatt für Mathematik,
- founder of the Fine Art Department within the North University of Baia Mare,

- founding member of the Union of Plastic Artists "Baia Mare School", since 1997.

We must mention one extra-mathematics passion of professor Lidia Elena Kozma, the painting. She is a very good amateur scene painter, achieving a lot of graphics, water-colors and oil paintings, exhibited in nine personal exhibitions and several group exhibitions from Baia Mare Artists Gallery and others.

Also, she is an active participant in the Bridge Club in Baia Mare with very good results at competition level.

Lidia Elena Kozma has a wonderful family: her husband Alexandru Kozma, a very known physician and a good friend, and her son Daniel, engineer, with his wife Grace, economist.

On the occasion of her 60th Birthday, the members of the Department of Mathematics and Computer Science from North University of Baia Mare, all colleagues from our university, congratulate Lidia Elena Kozma, wishing much health and happiness.

A SELECTIVE LIST OF THE PAPERS OF PROFESSOR LIDIA ELENA KOZMA

a) TEXT BOOKS AND BOOKS

1. *Matematici generale*, part III (in co-operation), Institute of High Education, Baia Mare, 1986
2. *Matematica. Teme de sinteză și teste în sprijinul candidaților la admitere în învățământul superior* (in co-operation), North University of Baia Mare, 1991
3. *Analiză matematică - funcții complexe*, Universitatea de Nord Baia Mare, 1994 (reedited in 2005)
4. *Fluid Plane Movements with Applications in Mining Ventilation*, monograph published by Monographical Booklets in Applied and Computer Mathematics, edited by PAMM-Center and BUTE Budapest, 2003

b) ARTICLES

1. *Problema lui Watson în cazul difuziei*, Studia Universitatis Babeș-Bolyai, Cluj, Mathematica, Tom 12 (1969), 75-79
2. *Profilul concentrației în cazul mișcării peste o placă în mișcare transversală*, Studia Univ. Babeș-Bolyai, Cluj, Mathematica, Tom 13 (1970), 83-87
3. *Concentration Profile for the Unsteady Flow Near a Rotating Disk* (in co-operation with I. Stan), Studia Univ. Babeș-Bolyai, Cluj, Series Physica, Fasc. 2 (1973), 51-55
4. *Mișcarea fluidului în tuburi de aeraj*, Lucrările Colocviului Național de Mecanica Fluidelor, Galați, 1978
5. *Mișcarea transversală a unui fluid pe suprafața unei plăci de lungime finită în cazul fluidului limitat*, Lucrările Colocviului Național de Mecanica Fluidelor, Cluj-Napoca, 1977
6. *Studiul problemei mișcării fluidului incompresibil cu suprafețe libere prin adoptarea ca domeniu canonic semicercul lui Levi-Civita*, Bul. Științ. Inst. de Înv. Sup. Baia Mare, Ser. B, Matematica, 1981
7. *Corecții de compresibilitate folosind metoda Imai-Lamla-Jacob pentru mișcarea fluidului în galerii de tip "fund de sac"*, Bul. Științ. Inst. de Înv. Sup. Baia Mare, Ser. B, Matematica, (1983), 22-25

8. *Corecții de compresibilitate folosind metoda hodografică aproximativă a lui Cia-plighin-Falcovici-Iacob în cazul mișcării cu desprindere*, Lucrările Colocviului Național de Mecanica Fluidelor, Oradea, 1984
9. *Fluid movements with mass and temperature transfer*, Ph.D Thesis, University of Bucharest, 1985
10. *Distribuția presiunii fluidului pe punctele unei lucrări miniere*, Lucrările Colocviului Național de Mecanica Fluidelor, Mediaș, 1987
11. *Studiul proceselor de difuzie turbulentă în cazul apelor marine poluate*, Lucrările Sesiunii Științifice ale Institutului de Fizică Nucleară, București, 1991
12. *Dirac distributions in case of holomorphic functions*, Bul. Științ. Univ. Baia Mare, Ser. B, Mat.-Inf., **XI** (1995), 65-70
13. *On the mathematical modelling of a pollution problem*, Bul. Științ. Univ. Baia Mare, Mat.-Inf., **XIII** (1997), 85-94
14. *On an analytical prolonging problem*, Bul. Științ. Univ. Baia Mare, Ser. B, Mat.-Inf., **XIII** (1997), 79-84
15. *The modelling of a lubrication problem*, Proceed. of Pannonian Applied Math. Meeting, Jubilee Meeting of PAMM's 30-th working year, October, 14, 1999, Budapest
16. *The Modelling of incompressible fluid movement using Helmholtz's diagram*, Bul. Științ. Univ. Baia Mare, Ser. B, Mat.-Inf., **XV** (1999), 67-74
17. *An example of monogenous function on associative and non-commutative algebras, without division*, Bul. Științ. Univ. Baia Mare, Ser. B, Mat.-Inf., **XVI** (2000), No. 2, 213-218
18. *Compressibility corrections using Imai-Lamla-Iacob method for a particular uncompressible movement problem*, Proceed. of PAMM's 31-st working year, January 18-20, 2001, Göd-Budapest, 77-83
19. *Mathematical modelling of some pollution problems in channels and rivers*, Proceedings of the First International Conference on ecological protection of the planet. Earth and environmental innovation exhibition, June 5, 2001, Xanthi, Greece, pp. 955-961
20. *Examples of surfaces generated by holomorph functions*, Proceedings of PAMM 139, Balatonalmadi Hungary, May 23-26, 2002, pp. 185-188
21. *A possible visual image of the extended monogenous function*, Proceedings of PAMM's, Balatonalmadi, Hungary, May 2003, Bulletins for Applied and Computer Mathematics, pp. 83-88
22. *About visual image of extended monogenous functions*, Applications SISOM, Budapest, May 15-16, 2003, pp. 197-202
23. *About the Dirichlet and Neumann boundary value problems expressed by means of monogenous quaternions*, Carpathian J. Math., **20** (2004), No. 2, 193-196
24. *About the use of monogenous surfaces in solving boundary value problems*, International Conference on Complex Analysis and related Topics, The 10-th Romanian Finnish Seminar, Cluj-Napoca, August 14-19, 2005 (to appear in Proceedings of the Conference)

c) PARTICIPATION AT SCIENTIFIC CONFERENCES

Professor Lidia Elena Kozma has over 50 participations at local, national or international scientific conferences.

d) RESEARCH AGREEMENTS

Over 25 research agreements (in co-operation) with applications in mining and pollution of the Danube River and Black Sea were an important achievement of the activity of professor L. E. Kozma.

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