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Interview

STEAM Journey: "Can you share your journey and what inspired you to pursue a career in STEAM? Were there any key moments or influential figures that directed you towards this path?"

All my life I wanted to be a teacher. Sins early years in school, during summer holydays my game was being the teacher and my dolls were the students. In the fourth grade I wrote a eulogy to mathematics, which was my favourite subject. The math, chemistry and physics teachers in high school inspired my love for these subjects, being recruited in the chemistry group. The teachers in the University also were mentors for my development. But I am the most grateful to my parents who inspired me to learn, to work and to never give up. I want to thank to my spouse and to my daughter who supported and encouraged me in all the good and in all not so good moments of my life.

STEAM Achievement: "What do you consider your most significant achievement or contribution to your field? How do you hope your work will impact the future of STEAM?"

The first three years after graduation I worked in a factory, where, along with my supervisor, eng. Rodica Deatcu, conducted research regarding copolymerization of methyl methacrylate with styrene, which was rewarded with my first invention patent (1989). Later, the results performed for my PhD degree (1999 – supervised by the late





Prof.dr. Vasile Jâșcanu from The University Lucian Blaga of Sibiu), regarding copolymerization in bubble column reactors, were rewarded with my second invention patent. By using bubbling columns, environmentally friendly materials were obtained, polymers that no longer contain residual monomer.

A special part of my research was colour and the study of colour by using the CIEL*a*b* colour space in UV-VIS spectroscopy of various new organic dyes synthesized by the collaboration teams, as well as various anthocyanine extracts and food oils. As shown above, colour is a general feature in assessing the quality of food, its analysis being an important and objective tool, having the advantage of obtaining results in seconds. This advantage may be used to quickly assess various trade practices regarding edible oils.

The storage conditions greatly influence the quality of the oils. If the products are stored in the dark, the quality of the food is kept for a longer time than if they are stored in the yard in daylight. Solar radiation greatly influences the colour and properties of products, which can lead to oxidation of food components, such as unsaturated fatty acids in food oils.

At the end of my Habilitation Thesis (2021 - supervised by Prof.dr. Ileana Rău from The University Politechnica of Bucharest), an original colour study is presented for the removal of dyes from wastewater in an adsorption process on activated carbon, under various working conditions.

As Associated Professor at Politehnica University of Timişoara, Faculty of Industrial Chemistry and Environmental Engineering, I coordinated research student groups for their Licence and Dissertation degrees, elaborated student books for the courses I taught. As I said before, I love being a teacher and I love my students. I think they can feel it. Their appreciation of my efforts to teach them represents the highest level in the student teacher's evaluation process.

Challenges and Overcoming Them: "Throughout your career in STEAM, what were some of the significant challenges you faced both in your personal and professional life? How did you overcome them? How did these challenges shape your professional journey?"

Although they say that women are equal to men, it's not easy for a woman to achieve high performance and to be promoted when most of the teaching staff are men, but as my mother used to say, there is nothing a woman cannot do better than a man.

I always applied the saying that it is not important how many times you fall, but how many times you rise up again.





And there is another saying: "Attitude is the thing that makes the difference" that motivated me in my career.

Advice for Young Women: "What advice would you give to young girls who are interested in STEAM but might be hesitant to pursue it due to stereotypes or the fear of failure?"

My advice for young women is to love to learn in any field, to work hard to achieve the desired results and to believe in God because He is helping them.

Future of Women in STEAM: "Looking towards the future, how do you see the role of women evolving in STEAM fields? What changes do you think are necessary to create a more inclusive and supportive environment for women in STEAM?"

Women may play an important role, because they think not only with their brain, but also with their heart, which is the thing that will improve humankind.

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