# **Curriculum Vitae – TETIANA KYRYCHOK**

Address: 17, Akademichna str., Kyiv, 03027, Ukraine Email: t_kyrychok@ukr.net Mobile: +38 050 331 21 91 Tel: +380442049769 (work) Date Of Birth: December 08, 1963 Nationality: Ukrainian Marital Status: Married	
<b>CURRENT POSITION</b> National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" Institute for Publishing and Printing	37, Prosp. Peremohy, Kyiv, Ukraine, 03056
<b>EDUCATION</b> Kiev Polytechnic Institute (at present National technical university of Ukraine the "Igor Sikorsky Kyiv Polytechnic Institute" (KPI)), 37, Peremohy ave., Kyiv, 03056, Ukraine Engineer, major – electronics, specialisation – Dielectrics and Semiconductors, average grade – 4.9 (on 5-numerical scale)	1980 – 1986
Defence of PhD dissertation Dissertation description: Title – Thin film semiconducting sensor of oxygen partial pressure Objectives – investigation of Ta2O5 and Ag doping Ta2O5 thin films properties and their sensitivity and selectivity to low oxygen partial pressure (vacuum range). Simulation of conductivity changing for Ta2O5 and Ag doping Ta2O5 polycrystalline thin films due to oxygen chemisorption.	1991
RESEARCH EXPERIENCE National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine, UA Participated in the creation of multimedia projects, is the author of reference books, monographs, textbooks, in particular on the technology of creating multimedia publications. Also a field of interest: the theory of banknotes deterioration, deterioration factors and damages, hierarchy for estimation of deterioration for different lines of inspection, durability index. Penetration inks into paper	2014-Present

during intaglio printing, the influence of different technology factors (banknote paper and inks properties, pressure during intaglio printing nip, one- or double-side intaglio printing, and protective varnishing) on deterioration indices, intaglio ink relief height deviation and durability.

#### **RECEARCH INTERESTS**

Modern technologies for creating electronic, multimedia books and applications. Banknote production, banknote durability, printing electronics, system analysis of printing production, multi-criteria estimation of quality.

WORK EXPERIENCE	
Institute of Analytical Equipment.	March 1986 – Oct
- Position – Engineer	1986
Kiev Polytechnic Institute (at present National technical university of Ukraine the "Igor Sikorsky Kyiv Polytechnic Institute" (KPI)),	
Position	Nov 1986 – Oct
<ul> <li>postgraduate student</li> </ul>	1989
KPI, Technical Lyceum.	Jan 1990 – June
- Vice director.	1998
Private companies - director	June 1998 – Aug 2003
National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	
(Institute for Publishing and Printing)	
- Assistant Professor. Department of Printing Technology	2011 Sep 2003 – Aug
- KPI, Postdoctoral studies	Sep 2011 – Aug 2014
- Professor. Department of Printing Technology	Sep 2014 – at present
- Director Institute for Publishing and Printing	Feb 2015 – Sep 2019
- Professor. Department of Printing Technology	Sep 2019 – at present

**Disciplines that are taught:** Technology of creating electronic publications. Information Technology. Technologies for protection of printed products. System analysis of banknote production. Information protection in printing.

## SCIENTIFIC ACHIEVEMENTS

Defence of Dr.Sc dissertation Dissertation description:

Title – Scientific fundamentals of banknotes durability assurance.

Objectives – The theory of banknotes deterioration has been developed on basis of ascertained process of deterioration, worked out classification of deterioration factors and damages, designed hierarchy for estimation of

Sep 2014

deterioration for different lines of inspection, proposed conceptual model and methodology of complex estimation of banknotes durability using complex durability index. The system and methodology for determination of complex durability index was created for multi-criteria estimation of durability means and choice of optimal technology process for banknote production. The experimental data on the ink penetration into paper durina printing, the influence of different intaglio technology factors (banknote paper and inks properties, pressure during intaglio printing nip, one- or double-side printing, protective and varnishing) intaglio on deterioration indices, intaglio ink relief height deviation and durability were obtained. It will make it possible to modify banknote production process in order to improve the Ukrainian hryvnia durability.

Project achievements – The optimal in terms of benefits/costs durability means for the Ukrainian hryvnia was determined, which will make it possible to cut costs for replacement of deteriorated production banknotes in most rational way. The results of theoretical and experimental investigation have been implemented in banknote and securities production as recommended durable paper and ink which will give the possibility of 1.1–1.4 times raising the Ukrainian hryvnia durability and respective cutting production costs for replacement of deteriorated banknotes.

## SCIENTIFIC SUPERVISING PH.D. STUDENTS

4 Ph.D. students defended a Ph.D. thesis (Sep 2015 – at present). 5 Ph.D. students at the moment.

### SOME SCIENTIFIC PUBLICATIONS

1. Киричок Т. Ю. Зносостійкість банкнотної продукції : монографія / Т. Ю. Киричок. – К. : НТУУ «КПІ», 2014. – 308 с.

2. Kyrychok T. Determing special features in the topography of paper with water marks at the micro- and nanolevels //T. Kyrychok, T. Klymenko, N. Talimonova, S. Svezhentsova // Eastern-European Journal of Enterprise Technologies, – 2019. – N 2/12 (98). – P. 28–35 (http://journals.uran.ua/eejet/article/view/164071/165034)

3. Kyrychok Tetiana. Badania electrofizycznych wlasciwosci papieru banknotowego i banknotow=Research of electrophysical parameters of banknote paper and banknotes / Kyrychok Tetiana, Svitlana Havenko, Petro Kyrychok, Yelyzaveta Sukhina and Zhomart Kazhmuratov // Przegland 2016. – N 1. Ρ. 50-54 (http://www.przeglpapierniczy. — \_ pap.com.pl/artykuly/Strony%20od%20PP01 2016-11.pdf)

4. Kyrychok Tetiana. Banknote Paper Deterioration Factors: Circulation Simulator Method / Tetiana Kyrychok, Anatolii Shevchuk, Victor Nesterenko, Petro Kyrychok // BioResources. – 2014. – Vol. 9 (1). – P. 710–724.

5. Kyrychok T. Badanie szorstkosci powierzchni papierow ze znakami

wodnynmi = The Investigation of Roughness for Paper with Watermarks / T. Kyrychok, T. Klymenko, N. Malkush // Przegland papierniczy – 2012. – N 7. – P. 414–417.

6. Kyrychok T. Yu. Image Evaluation Procedure Based on the Average Color Deviation / T. Yu. Kyrychok, P. A. Kyrychok, A. V. Parkhomenko // Radioelectronics and Communications Systems. – 2014. – Vol. 57 (4). – P. 175–179. – Переклад вид.: Киричек Т. Ю. Метод оценки изображения по отклонению среднего цвета / Т. Ю. Киричек, П. А. Киричек, А. В. Пархоменко // Известия ВУЗов. Радиоэлектроника. – 2014. – Вып. 4 (57). – С. 41–47.

7. Kyrychok T. The influence of pressure during intaglio printing on banknotes durability / T. Kyrychok, P. Kyrychok, S. Havenko, E. Kibirkstis, V. Miliunas // Mechanika. – 2014. – Vol. 20 (3). – P. 327–331.

8. Kyrychok T. The possibilities of printed electronics for making banknotes' anti-counterfeiting features active = Застосування друкованої електроніки для створення активних захисних елементів банкнот / Т. Kyrychok // Зб. наук. праць «Технологія і техніка друкарства». – К., 2012. – № 1 (35). – С. 4–11.

9. Sarapulova Olga. Modern Printing Technologies in Micro- and Nanoelectronics / Olga Sarapulova, Tetiana Kyrychok, Valentyn Sherstiuk, Anatolii Orlov // Proceedings of the 2013 IEEE XXXIII International Scientific Conference Electronics and Nanotechnology (ELNANO), (Kyiv, April 16–19, 2013). – IEEE, 2013. – P. 151–155.

10. Kyrychok Tetiana. Research of paper structure with watermarks / Tetiana Kyrychok, Tetiana Klymenko, Nadya Malkush // Proceedings of the 42th Conference of International Circle of Educational Institutes for Graphic Arts, Technology and Management IC 2010 (Moscow, 19–20 October, 2010). – M. : ΜΓΥΠ, 2010. – P. 75–79.

11. Kyrychok Tetiana. Possibilities of the lasers use for plastic package production / Tetiana Kyrychok, Kateryna Diptan // Proceedings of the 43rd Conference of International Circle of Educational Institutes for Graphic Arts, Technology and Management IC 2011 (Norrkoping, Sweden, 19–23 September, 2011) – Norrkoping : IC, 2011. – P. 119–127.

## SKILLS

**Teamwork:** Conflict resolution. Decision-making. Problem-solving. Organizational and planning skills. Persuasion and influencing skills. Reliability. Responsibility. With the entire team functioning properly by taking responsibility for their own work, I can work together towards a common goal. Honesty. Without transparency, it can be difficult for a team to develop trust and therefore work together efficiently. Active listening. Much like communication, active listening skills help me in a team to understand and trust each other.

**Communication:** The ability to communicate in a clear.

**Problem solving:** I have the ability to problem solve, to active listening, to collaboration, flexibility to try new approaches

**Computer skills:** Knowledge and experience of Windows, Microsoft Office, Adobe Creative Suite.

English Language knowledge: Reading, writing, speaking - fluently

### **HOBBIES & INTERESTS**

Gardening, home design.