

## ***CURRICULUM VITAE***



### **Cecilia SÎRGHIE**

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**Naționality** Romanian

### **Work Experience**

Currently	Associate profesor - University “Aurel Vlaicu” Arad, Engineering, AIITT, and CESTN Research Center - Director
Since 2022	Director, Technological Transfer and Inovation Center of University “Aurel Vlaicu” TTIC/CITT
Since 2014	Scientific Researcher Grade I
Since 2009	Associate profesor

### **Academic experience**

2023	Professional skills attestation certificate - Personal development for inclusive education at the level of academic communities. CC series diploma. No.0016905.
2016	Certificate of completion of the level I and level II psycho-pedagogical training program
2003 -2006	University of Ghent, Belgium - Department Textiles - Various Post-Doc Research works
2001-2003	Marie Curie Belgium Hoogeschool-Institute for Textiles Ghent, PostDoc Fellowship.
1996-2001	Technical University “GH.ASACHI” IAȘI - PhD in Industrial Engineering: “Contributions to diversificatin of cotton based products by blending various contents of flax”– Coordinator: Prof. Dr. Eng. Constantin Preda.
1995-1996	Technical University “GH.ASACHI” IAȘI Master in Textiles–Technologies in Non conventional Flexible Textiles “Contributions to diversificatin of cotton based products by blending various contents of flax”– Coordinator: Prof. dr. eng. Carmen Cuzic Zvonaru.
1994	Technical University “GH.ASACHI” IAȘI Faculty for textiles, Spinning-weaving - BA Engineering Textile-Leader.

### **Research Fields**

Processes and Technologies (cotton, wool, liberien fibers) – Spinning, Weaving, Non-Woven, Finissages, Yarn processing  
Fibers – processing, extraction, cottonization;  
Biotehnologies - various treatments on fabrics -cellulosic, lignocellulosic and proteic;

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Biotehnologii – recycling of food industry waste;

Modelling in Textiles

Finishing- advanced treatments (whitening, funcționalization plasmo-chemical, anti-mosquitos); Wet treatments with POM, ions Ag, Cu, TiO<sub>2</sub>, etc;

Thermal Anaysis;

Technical monitoring of wet textiles;

Ultrasound assisted chemical and enzymatic treatments

Techtex -intelligent, geotex, agotex, etc.

### **Work Experience**

1995 – Engineer at Vastex S.A Vaslui

1995 ÷ 1997 Engineer at Alcatim SRL Iași

1997 - Engineer at Iasitex S.A Iasi

1997÷2001 Researcher, Technical University “GH.ASACHI” IAȘI

2001 ÷ 2003 Marie Curie Belgium Hoogeschool-Institute for Textiles Ghent, PostDoc Fellowship.

2003 ÷ 2006 PostDoc Researcher, University of Ghent – Textiles, Belgium.

2005÷2009 Lecturer - University “Aurel Vlaicu” Arad, Faculty of Engineering

2009÷2014 Associate professor- University “Aurel Vlaicu” Arad, Faculty of Food Engineering, Tourism and Environmental Protection

2008÷-2014 Senior researcher II-degree at Research Institute for RDI in Technical and Life Science, University „Aurel Vlaicu” Arad.

2014÷2017 Senior researcher I degree at Research Institute for RDI in Technical and Life Science, University „Aurel Vlaicu” Arad.

2015-present Associate professor- University “Aurel Vlaicu” Arad, Faculty of Engineering.

Since 2022 Director, Center for Innovation and Technology Transfer, University “Aurel Vlaicu”

2008÷2017 Director, Research Institute for RDI in Technical and Life Science, University „Aurel Vlaicu” Arad.

Since 2004 Founder of Ro Challenges SRL Romania, tex research and consultancy company

Since 2022 Director in the board of CANEPARO Cluser, Romania

### **Research work projects**

EU FP- 4 INCO-COPERNICUS ERBIC 15 CT 960723. “Chemical/cold plasma treatment for optimising nonwoven textile filter materials applied on gaseous and aqueous effluents”. Researcher.

PROGRAM RELANSIN. “Ecological fibres from polypropylene and natural polymers” Researcher , commissioned by S.C I.C.I.T FIBRESIN S.A IASI.

Marie Curie Fellowship FP-5 “Method to obtain the fine flax fibres. Flax-cotton mixtures of yarns”. Textile Institute, Gent, Belgia. Project Director

Bilateral Scientific Collaboration between Flanders and Romania – “Ultrasonic-enzymatic treatment for celluloses fibres”. University of Ghent- Researcher

Bilateral Scientific Collaboration between Flanders and Romania – “Optimising the ultrasonic enzymatic technology for cotonising applications”. University of Ghent- Research Director

NATO Grant : “Biotechnological processing of a European strategic raw material”; Project Director  
NeQuaTex – “Bilateral Networking and Quality Training in Textiles”. Project Director

CEEX- modul III - „nanosciences and nanotehnologies applied in textiles” – PARTEXNET. Project Director.

Proiect CEEX- modul I- „New Tehnologies applied to performing tex using chemical and enzimatical treatments\_ TENZINUS”. Project Director

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Proiect CEEX- modul III- EUROTExMED- „Regional Network for Micro-Nano-Bio Tech for medical tex” Project director

CEEX Modul I “Pomalb – Polyoxometalated compounds with oxidative catalytic activity for high-end applications”

CEEX Modul I “Filsoftus - Computerized ultrasound-activated and biosensor-controlled filtration and separation systems for textile processes” ”

PNCDII Modulul IV “Texdef – Integrated optical system for managing defects in the textile industry”.

PC6 – “INTELTEX” –

ANCS national project. Scientific Manifestations. Project competition 2007. Value 10,000 lei. Project Director

PC7. „No-BUG”, Project partner director from the consulting/research firm-project subcontractor S.C Ro Challenges S.R.L-RomaniaPOS-CCE axa 2.1.2

PC 7 NATENZ – Subcontractor, Program PN II ERA NET CROSSTExNET "Improving natural dying enzymatically - NATENZ", Contract UEFISCDI No.: 7-068/2012, 7-069/2012, 7-070/2012

POS-CCE Center for Research in Technical and Natural Sciences, Project POSCCE- O.2.2.1, 2014-2015.

POS CCE High-level scientific research in which specialists from abroad participate., Contract 210/2010.

POS CCE operation 1.1.4. project financial manager. NanoArt-Biocell

Project PNIII-P2-2.1-PTE 2016-0218, Grant 28PTE/06.10.2016 Demonstration plant for an innovative hemp melting technology (iTOP)

UEFISCDI Project, Project Type: Innovation Check, Project code PN-III-P2-2.1-CI-2018-1392, Financing contract no. 240CI/2018, Title: Functional food ingredients obtained by valorizing hemp leaf mass.

UEFISCDI project, - Innovation Check, Project code: PN-III-P2-2.1-CI-2017-0505, Financing contract no. 12CI/2017, Title: Innovative ecological bread packaging solution without additives/preservatives to increase shelf life and preserve freshness.

Bilateral France –BM46, Adding value to winery subproducts – waste water treatment (PN-III-P3-3.1-PM-RO-FR-2016-0030).

Various other locally funded research projects

### **Scientific Activity**

6 speciality books as individual author and contribution to other published works

8 patents, 3 patent applications, 3 EPO patent applications

23 Articles/studies published in ISI publications.

15 Publications in extenso, appearing in papers of the main international specialized conferences.

77 other works

Over 30 research projects&contracts

visiting profesor –University Ghent- Belgium – lecturing Applied biotech to bast fibers

visiting profesor –ARTES –Italia workshop in Applied biotech to bast fibers

visiting profesor – Ukraine, workshop in biotech applied to bast fibers.

### **Coordination of study programs, organization and coordination of continuous training programs**

Director from the Romanian side of the continuous training program within the cooperation programs between Flanders and the candidate countries from Central and Eastern Europe, the project: NeQuaTex - "Bilateral Networking and Quality Training in Textiles". 2005 UGhent Belgium

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Director from the Romanian side of the continuous training program within the cooperation programs between Flanders and the candidate countries from Central and Eastern Europe, the project: NeQuaTex - "Bilateral Networking and Quality Training in Textiles". 2006 UTI Iasi and UAV Arad

Continuing education program - University of Ghent - Belgium - Biotechnologies course applied to bast fibers 2008 course responsible.

Continuous training program - Seminar of biotechnologies applied to bast fibers 2009 Ukraine within the NETTEX program.

### **Memberships**

Marie Curie Association

European COST 847, Grupul WG2.

FAO/SCORENA

Deputy coordinator FAO/SCORENA European Cooperative Research Network on Flax and other Bast Plants.

AGIR - General Association of Engineers from Romania

### **Others**

- International conference FAO-SCORENA, Editor „Scientific Bulletin of SCORENA”
- Member in the Science Committee of “Textile for Future” 2008 Belgia;
- Research consultancy - ARTES- Italia, Deslee Claime- Belgia, UCO-Textile Belgia, Febeltex – Federația de Textile din Belgia, CREAMODA - Federația de Modă din Belgia, Klasikine tekstile – Lituania, Filartex – Italia, etc.;
- cooperation with University of Twente, Nederland, Belgia- University of Ghent, Germany – DWI; Poland- INF;  
conference -Prof. Dr. Ryszard KOZŁOWSKI\*, Maria Mackiewicz Talarczyk- Institute of Natural Fibres, Poznan, Poland „Natural Renewable Fibrous Raw Materials, Production and Application”;
- workshop- Senior Lecturer in biotech Dr.Ing. Vincent Nierstrasz – University of Twente
- Reviewer for :  
Cellulose Chemistry and Technology  
Textile Research Journal  
Journal of Thermal Analysis and Calorimetry  
Journal of Natural Fibers.

### **Awards**

UAV research award – 2015, 2016, 2017, 2018

2009 - ISI - CNCSIS 2009 paper prize for the article "Comparative study on three ultrasound cottonizing methods used for increasing the cottonized flax percentage in the flax-cotton blended yarns", Authors: Sirghie, Cecilia; Van Langenhove, Lieva; Happy, Mircea Sorin; et al., TEXTILE INDUSTRY, Vol. 59 No. 4 Pg: 154-161, 2008

CNCSIS 2010 - award for RO patent - No. 00122817/02.2010, authors: Sirghie Cecilia, Botar Alexandru, Botar Bogdan, Crăciun Grigore. "Bleaching process of cellulose pulp obtained from natural cellulosic fibers, by catalytic oxidation with polyoxometalates"

2013 – Awards for works ISI-CNCSIS 2013 for the article "Characterization of Ligno-Cellulosic Materials Bleached with Oxo-Diperoxo-Molybdates, Carbohydrate Polymers, DOI

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10.1016/j.carbpol.2013.06.021. Authors: Cecilia Sîrghie, Adina-Maria Bodescu, Alexandru Botar, Cavaco-Paulo, Florentina-Daniela Munteanu,

2013 – Prizes for works ISI-CNCSIS 2013 for the article "Entrapment of flaxseed extract into xanthan-chitosan complex", Cellulose Chemistry and Technology, 47 (3-4), 2013, 231-238. Authors: Dan Drăgănescu, Mihaela Silion, Ioana Ignat, Cecilia Sîrghie, Marcel Ionel Popa

Mention I with the invention patent RO No. 00122817/02.2010. "Bleaching process of cellulose pulp obtained from natural cellulosic fibers or cellulosic materials, by catalytic oxidation with polyoxometalates"

January 2013- "Book of The Month" for "Handbook of natural fibres, Volume 1: Types, properties and factors affecting breeding and cultivation, Chapter 2 - Cotton fibres", authors: M. Dochia, C. Sîrghie, R.M. Kozłowski, Z. Roskwitalski, Woodhead Publishing, Series in Textiles, Editor Ryszard M. Kozłowski, 2012, awarded by The Textile Institute.

2014 - The prize for the work ISI – CNCSIS 2014.

2020 – Gold medal at the Traian Vuia International Exhibition of Inventions and Innovations, 6th edition, Timișoara, for A/00395/04.06.2018, Sustainable method of ecological packaging of traditional bread without additives of 1-4kg. Authors: Radu Dana Gina, Dicu Anca Mihaela, Sirghie Cecilia, Diaconescu Daniela, Popescu-Mitroi Ionel. The official catalog, Class Q, Ed Politehnica Timișoara, p 45, ISBN 978-606-35-0386-3

2020 – Bronze medal at the Traian Vuia International Exhibition of Inventions and Innovations, 6th edition, Timișoara, for Patent no. 128837/30.06.2016, Process for melting Liberian plants such as: flax, hemp, jute. Authors: Sîrghie Cecilia, Radu Dana Gina, Munteanu Florentina Daniela, Pag Andreea, Dochia Mihaela, Tomescu Daniel, 13-15.10.2020, Official Catalog, Class A, Ed Politehnica Timișoara, p 46, ISBN 978-606-35-0386-3.

2020 - Gold medal at the Traian Vuia International Exhibition of Inventions and Innovations, 6th edition, Timișoara, A/00782/08.10.2018, Integrated melting-purification line for the processing of hemp stems". Authors: Radu Dana Gina, Sirghie Cecilia, Komjaty Andrei, Patruț Ionel, Maxi Rodica. The official catalog, Class Q, Ed Politehnica Timișoara, p 45, ISBN 978-606-35-0386-3

2017 – Award of patents PN-III-P1-1.1- PRECBVT2017-0180 PROCEDURE FOR FUNCTIONALIZATION OF CELLULOSIC TEXTILE MATERIALS,

2017 – Award of patents PN-III-P1-1.1- PRECBVT2017-0075 PROCEDURE FOR MELTING BAST PLANTS SUCH AS: FLAX, HEMP, JUTE, ETC

2020 - III Prize in the Inventive section of INOVALIMENT, Bucharest/online 2020, <https://inovaliment.ro/premii-inovaliment2020/> pt A/00395/04.06.2018, Sustainable method of ecological packaging of traditional bread without additives of 1-4 Kg. Authors: Radu Dana Gina, Dicu Anca Mihaela, Sirghie Cecilia, Diaconescu Daniela, Popescu-Mitroi Ionel.

Data: 24.09.2024

CS I, Associate professor, PhD. Eng. Cecilia Sîrghie

