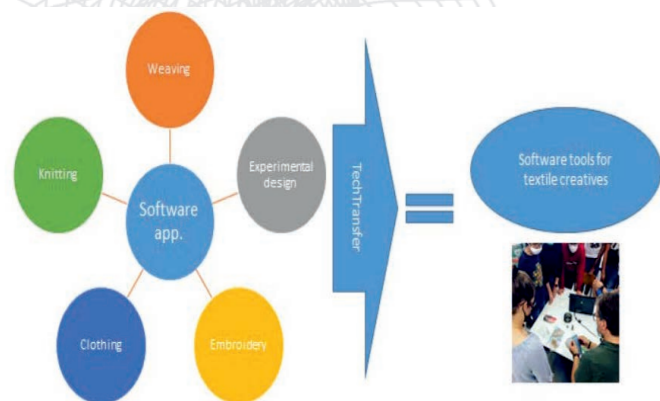


Following the need of textile creatives to master the software in textile design, a partnership of six European research and training providers have joined their expertise in sharing support. Software of key textile technologies for designing e-textiles are envisaged: weaving, knitting, clothing – virtual prototyping, embroidery and experimental design. Moreover, these five learning modules are completed by a sixth module on how to apply the knowledge within the world-of-work, by techtransfer instruments.



The Erasmus+ OptimTex project "Software tools for textile creatives" (2020-1-RO01-KA203-079823) is a strategic partnership project with two years duration: Dec. 2020-Nov. 2022. INCDTP – Bucharest coordinates a prestigious European partnership:

	INCDTP - National Research & Development Institute for Textiles and Leather Bucharest (coordinator)	<a href="http://www.incdtp.ro">www.incdtp.ro</a>
	TecMinho, Interface of the University of Minho, Guimaraes, Portugal	<a href="http://www.tecminho.uminho.pt/">www.tecminho.uminho.pt/</a>
	Ghent University, Faculty of Engineering and Architecture, Department of Materials, Textiles and Chemical Engineering (MaTch), Ghent, Belgium	<a href="http://www.ugent.be/ea/match/en">www.ugent.be/ea/match/en</a>
	University of Maribor, Faculty of Mechanical Engineering, Institute of Engineering Materials and Design, Maribor, Slovenia	<a href="http://www.fs.um.si/en/">www.fs.um.si/en/</a>
	Technical University "Gh. Asachi" Iasi, Faculty of Industrial Design and Business Management, Romania	<a href="http://www.dima.tuiasi.ro">www.dima.tuiasi.ro</a>
	University West Bohemia, Faculty of Electrical Engineering, Department of Materials and Technology, Pilsen, Czech Republic	<a href="http://www.fel.zcu.cz/en/">www.fel.zcu.cz/en/</a>

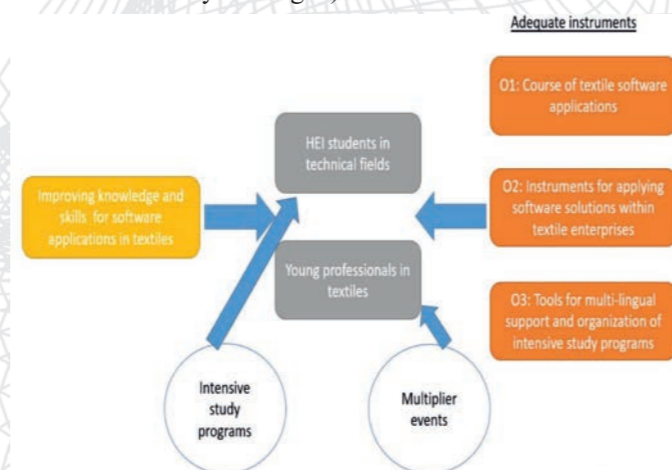
As main sustainable outcome will act the Moodle e-learning platform, hosting on the INCDTP server the educational materials of the OptimTex project, including the educational materials of the previous three Erasmus+ projects Advan2Tex, TexMatrix and Skills4Smartex, at URL [www.advan2tex.eu/portal/](http://www.advan2tex.eu/portal/).

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The envisaged outcomes are:

1. The Course of textile software applications with 5 modules on design software for weaving, knitting, virtual prototyping of clothing, embroidery and experimental design of e-textiles;
2. The Guide for techtransfer and for applying software solutions within textile enterprises;
3. The free web e-learning instrument for quick access on the project's educational materials;
4. The project's website with digital & multimedia content on techtransfer ([www.optimtex.eu](http://www.optimtex.eu));
5. The Moodle e-learning platform with implemented courses in national languages;
6. The 3 Intensive Study Programs - ISP (60 HEI students envisaged);
7. The Glossary with 100 modern textile terms for supporting students during ISP;
8. The 6 workshops / multiplier events (115 professionals from the textile industry envisaged)



## BOOK PRESENTATION APPLIED SUPRAMOLECULAR CHEMISTRY - MEMBRANES (BIOTECHNOLOGY)

The book "Applied Supramolecular Chemistry - Membranes (Biotechnology)" by Mariana Bezdadea and Sabina Olaru, is a continuation of the book "Matrix Polymerization (TEMPLATE) Biotechnology", Scientific and Encyclopaedic Publishing House, Bucharest, 1987, prefaced and scientifically supervised by Academician A.T. Balaban of the Romanian Academy and recommended as a valuable work at international fairs.

The present book is the result of 40 years of experience of the first author in the field of Supramolecular Chemistry and refers to the preparation mechanism of PVAc (polyvinyl acetate) and PU (polyurethane) membranes, their characterization and application. The book was prefaced and scientifically supervised by Constantin Cașcaval, Senior Researcher and PhD in Chemistry within "Petru Poni" Institute of Macromolecular Chemistry, Iasi.

The first author Mariana Bezdadea dedicated her first 10 years of scientific research to the matrix polymerization field, materialized through obtaining of the PhD degree in 1982, under coordination of Academician Cristofor Simionescu and by publishing of the first book "Matrix Polymerization (TEMPLATE) Biotechnology" 1987, Bucharest and other relevant scientific papers.

The next 30 years were dedicated to scientific research in the field of membranology, confirmed by the scientific authority of Dr. Nicolae Simionescu, Director of the Institute of Cell Biology and Pathology Bucharest (collaborator of the great scientist George Emil Palade), for the preparation and the matrix mechanism of obtaining the membranes of PVAc and of Academician Valeriu Cotea for the use of PU membranes, obtained by the matrix mechanism.

The mechanism for obtaining PVAc membranes (chemical method) is the same matrix mechanism (template type) from the PU, PS membranes.

The term "TEMPLATE" (REPLICA in Romanian) can be for instance explained as a copy of an art work executed by the author of the original or under his/her direct supervision. It is actually a French word "réplique". Also, the same word "TEMPLATE" in physics, would explain a mold of the surface of a body, made in the form of a film that is planar on one side, and the other reproduces the superficial structure of that body. The term MATRICIAL MECHANISM (TEMPLATE) refers to the entire edifice of the matrix reactions.

Hosts (Templates or Matrix) can be classified according to the main criteria: chemical structure, molecular mass, the nature of host-guest connections.

"Host-guest" supramolecular compounds are known under different names: clathrates, inclusion compounds, addition compounds, occlusion compounds, complexes, membranes, and they constitute an intermediate state of the template reaction model, both by including the guest molecules in a channel or cavity, and on a surface (oriented surface) or crystalline network, for instance the PVAc membrane (with template or host: cyclodextrins or amodine), PU and PS membrane (with polysaccharide template or host: cellulose acetate).

Matrix theory (template) also served as a basis for the manufacture of the drug "Cicatroil", used in the recovery and healing of skin burns (inventor Colonel Nicolae Oita, Pharmacist Doctor at the Iasi Military Hospital).

SC Antibiotice S.A. Iasi was the main beneficiary for the period 1989-1998, with a potential economic effect of approximately \$ 14000/year, from the use of PU membranes for injection and infusion solutions filtration.

The book has a scientific value but also a didactic scientific value and is recommended both to chemists, biochemists, scientists, engineers, teachers and students in the field of chemistry, biochemistry, medicine, pharmacy, food and textiles.

