FUNDING PROGRAMME: Erasmus+

SUBPROGRAM: Vocational Education and Training

PROJECT TITLE /ACRONYM:
Smart textiles for STEM training - Skills4Smartex

CONTRACT NO.: 2018-1-RO01-KA202-049110

TOTAL PROJECT BUDGET: 141.348 Euro **INCDTP'S BUDGET:** 38.032 Euro

PROJECT STARTING DATA: 01.10.2018 **PROJECT ENDING DATA:** 31.12.2020

PAGINA WEB: https://skills4smartex.eu/

PARTNERS:

CO: INCDTP - Bucharest

P1: TecMinho / University of Minho - Portugal

P2: Ghent University – Belgium

P3: University Maribor – Slovenia

P4: Technical University "Gh. Asachi" – Iasi

P5: Textile Testing Institute – Czech Republic

GENERAL OBJECTIVE:
Improving knowledge, skills and employability of VET students in STEM related fields by providing adequate training instruments to understand multi-disciplinary approach by means of smart textiles.
(https://skills4smartex.eu/instrument.php).

EXECUTION PHASES:
O1. Guide for smart practices.
O2. Course in smart textiles.
O3. Dedicated e-learning instrument.

SCIENTIFIC CONCEPT:
VET students within technical education acquire basic disciplines, such as mathematics, physics, technical drawing, chemistry, biology, mechanics, but the horizon of the end applications and usefulness of such basic disciplines is often not touchable.

The labour market in STEM fields needs appropriate skilled professional workers, in order to compete on the global market. In this context, the Skills4Smartex's aimed to improve the knowledge, skills and employability of VET students in the fields related to STEM (Science, Technology, Engineering, Mathematics) by providing appropriate training by means of smart textile prototypes.

EXPECTED EXPLOITABLE RESULTS:
Improved knowledge and skills for VET students in STEM fields.

OBTAINED RESULTS:

(O1) A Guide for smart practices with the current and envisaged situation in technical and smart textiles, based on a survey activity with 63 textile enterprises, multiplied within multiplier events for 224 young professionals in textiles.

(O2) A Course in smart textiles with 56, URL: http://skills4smartex.eu/instrument.php.

(O3) A Dedicated e-learning instrument and an e-learning platform, URL: http://www.advan2tex.eu/portal/.

(E1-E6) Organization of 14 multiplier events with 224 participants.

(C1-C6) Organization of 11 courses with 262 VET students in virtual, blended or classroom format.

(C7-C8) Organization of two Joint staff events: creation of smart textile prototypes on three levels of complexity for educational purposes and a methodology for VET students.

DISSEMINATION, PATENT APPLICATIONS, AWARDS:

- **WoS published papers: 1**

1. Ion Răzvan Rădulescu, Carmen Ghițuleasa, Emilia Visileanu, Lilioara Surdu, Ana Dias, Zoran Stjepanovic, Roberto Vannucci, Mirela Blaga, Logical and sequential e-learning content for supporting specialists in textile enterprises, Proceedings of The 15th International Scientific Conference eLearning and Software for Education Bucharest, April 11-12, 2019, 10.12753/2066-026X-19-000

- **Scopus published papers: 3**

1. Ion Răzvan Rădulescu, Carmen Ghițuleasa, Emilia Visileanu, Luis Almeida, Benny Malengier, Andreja Rudolf, Mirela Blaga, Petra Dufkova, Dedicated e-learning instrument to support STEM knowledge by means of smart textiles, Proceedings of The 16th International Scientific Conference eLearning and Software for Education Bucharest, April 23-24, 2020, 10.12753/2066-026X-20-000

2. Benny Malengier, **Ion Răzvan Rădulescu**, Mirela Blaga, Radek Polanský, Zoran Stjepanović, Design-based learning in textiles for higher education, MCCSIS – IADIS 2021 international conference, ISBN: 978-989-8704-29-0

3. Ion Razvan Radulescu, Luis Almeida, Benny Malengier, Zoran Stjepanovic, Mirela Blaga, Petra Dufkova, E-learning course in smart textiles, Proceedings International Conference e-Learning 2020. ISBN: 978-989-8704-17-7

- **BDI published papers: 4**

1. IonRazvan Radulescu, Carmen Ghituleasa, Emilia Visileanu, Razvan Scarlat, Lilioara Surdu, Ana Dias, Luis Almeida, Instrumente de e-learning destinate imbunatatirii deprinderilor in domeniul textil, Buletinul AGIR 3/2019, https://www.buletinulagir.agir.ro/articol.php?id=3103

2. Mirela Blaga, **Ion Răzvan Rădulescu,** Benny Malangier, Andreja Rudolf, Luis Almeida, Petra Dufkova, The need for STEM education in the context of smart textiles, Proceedings AUTEX 2020 - 20th WORLD TEXTILE CONFERENCE.

3. Ion Razvan Radulescu, Carmen Ghituleasa, Emilia Visileanu, Lilioara Surdu, Razvan Scarlat, Ana Dias, Lieva Van Langenhove, Zoran Stjepanovic, Mirela Blaga, Petra Dufkova, Smart textiles to promote multidisciplinary STEM training, Proceedings of the TEXTEH 9 International conference, 2019

4. Ion Razvan Radulescu, Luis Almeida, Benny Malengier, Zoran Stjepanovic, Mirela Blaga, Jitka Jerabkova, Skills improvement of VET students by means of smart textiles, Proceedings ICAMS 2020 international conference

- **Scientific communications: 2**

1. Ion Razvan Radulescu, Luis Almeida, Lieva Van Langenhove, Zoran Stjepanovic, Mirela Blaga, Roberto Vannucci, Petra Dufkova, E-learning instruments to support textile fields, AUTEX 2019 international conference

2. Ion Razvan Radulescu, Dana Gurau, INCDTP București - promotor al formării profesionale în domeniul textile-pielărie, Market Watch 5/2020

CONTACT PERSON:

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