



Bu proje Avrupa Birliđi ve Türkiye Cumhuriyeti tarafından finanse edilmektedir
This project is co-funded by the European Union and the Republic of Türkiye



“Horizon Europe Marie Skłodowska-Curie Actions Bridging Business and Research Opportunities under MSCA Staff Exchanges”

Technical Assistance for Turkey in Horizon 2020 Phase-II
EuropeAid/139098/IH/SER/TR

RETEX

Assoc. Prof. Alper Gürarşlan
gurarşlan@itu.edu.tr

14.11.2022, İstanbul Chamber of Industry

Resume



• 2017-2022 İTÜ Textile Engineering



• 2020-2021 Grade Zero Espace



• 2015-2016 Postdoc, Mechanical & Aerospace Eng



• 2011-2015 PhD, Fiber & Polymer Sci. Co-major in Materials Sci & Eng



• 2009-2011 M.Sc., Textile Chemistry



• 2003-2007, B.Sc., Textile Engineering



In 5 years: 5 EU projects + 5 TÜBİTAK projects

↓
2 Million €

↓
2 Million TL

RETEX

Budget: 814.200 €
Duration: 48 Months



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RETEX
Regenerated Cotton for Electronic Textiles

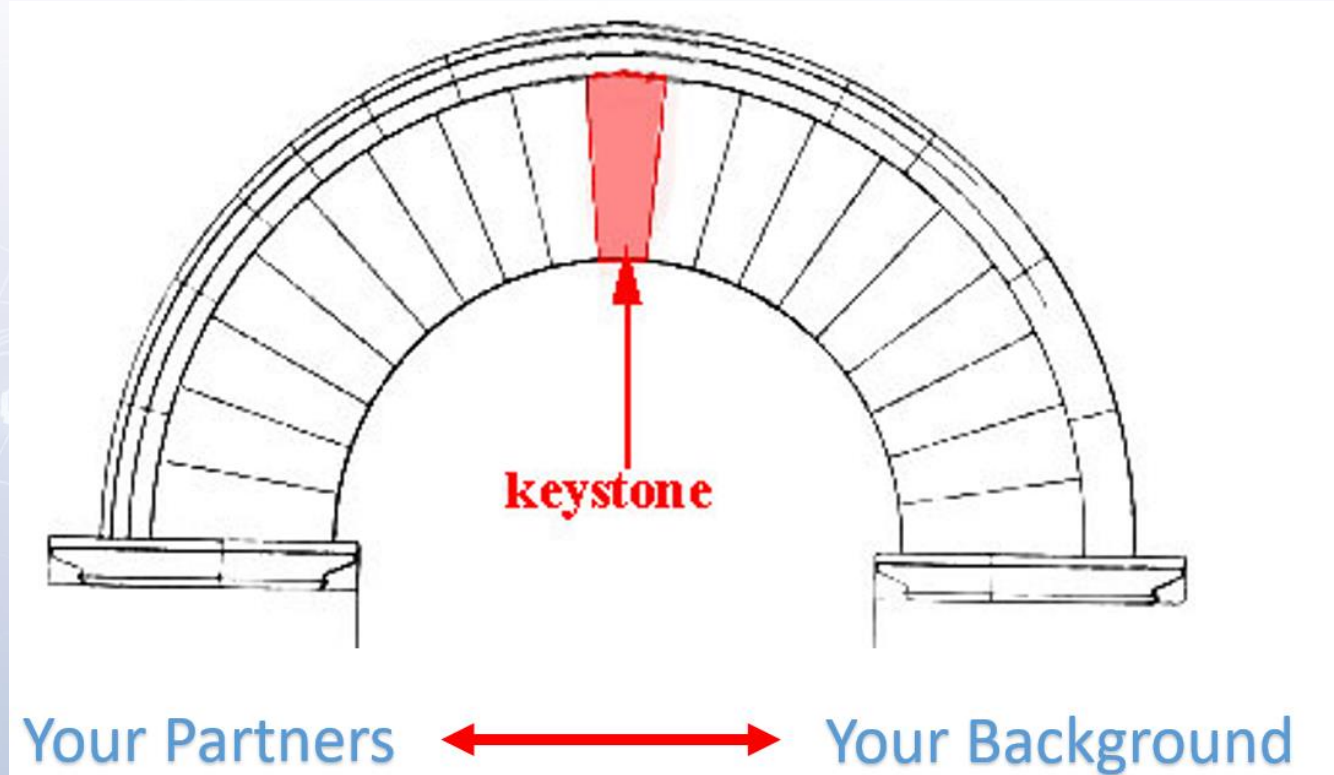


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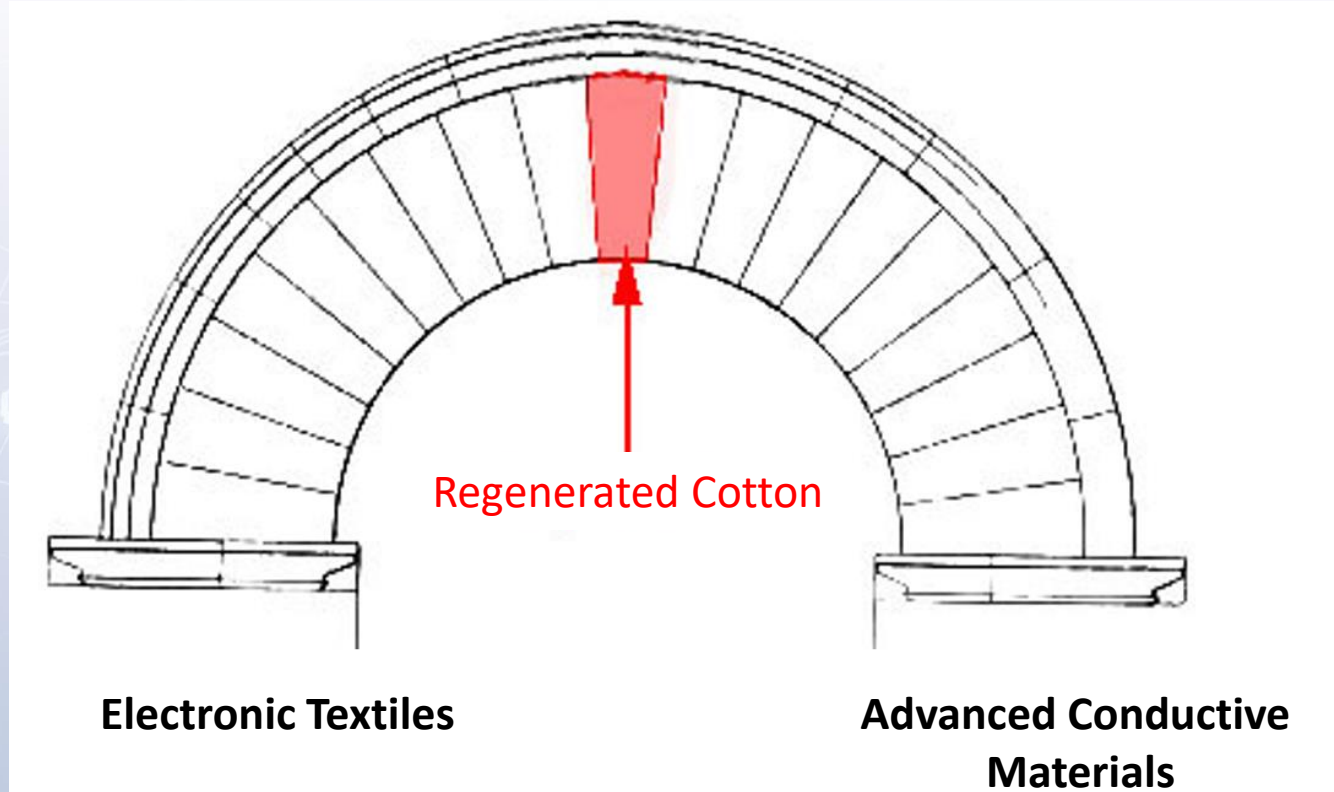


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Project architecture

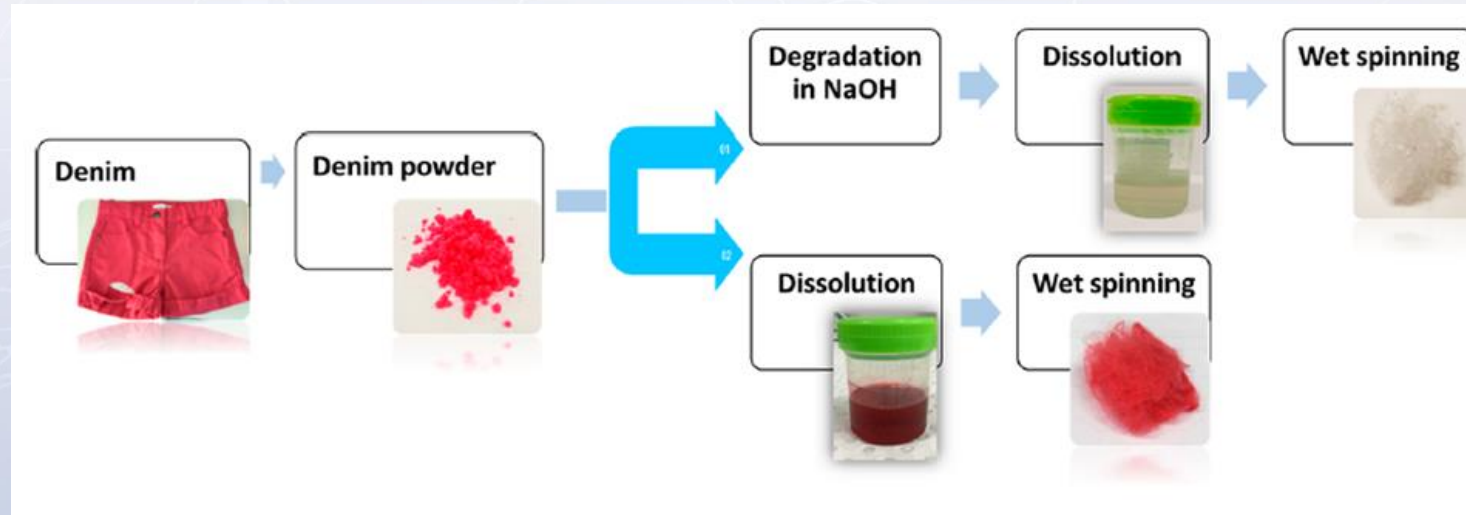


Project architecture



Keystone of the project:

‘The Deakin team has found a solution to the dyeing process, a known stumbling block in recycling fabric’





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Knowledge Transfer



WP1. To develop regenerated fibers from cotton waste

WP2. To combine advanced materials with sustainable textile materials

WP3. To design & develop e-textile prototypes from regenerated cotton

WP4. Sustainability assessment

Emphasize the Interdisciplinary & Multidisciplinary aspects of the project

WP2



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WP2: To combine advanced materials with sustainable textile materials

Research Objective 2: To combine Conyar®, CNT, and AgNW with regenerated fibre from cotton waste

Conyar B.V.



WP3



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WP	Smart textile prototypes made of sustainable textile materials	Lead Partner
3.1	Energy harvesting yarn	GZE
3.2	Flexible electrical interconnections	Delft
3.3	Posture controlling shirt	MU
3.4	Music controller apparel	Spell



grad^o zero space

SPELL

WP4



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WP4: Sustainability assessment of materials and prototypes developed in WP1, 2, and 3

Research Objective 4: To design and implement a sustainability assessment framework model that can be used for RETEX innovations both during and after the RETEX project. (WP4)

CEN
TEX
BEL

WP6-7



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WP6. Exploitation, Communication & Dissemination

C, DI

CHelix

WP7. Go to market

M, C, T

BEIA



Crowdhelix

COLLABORATION INTELLIGENCE

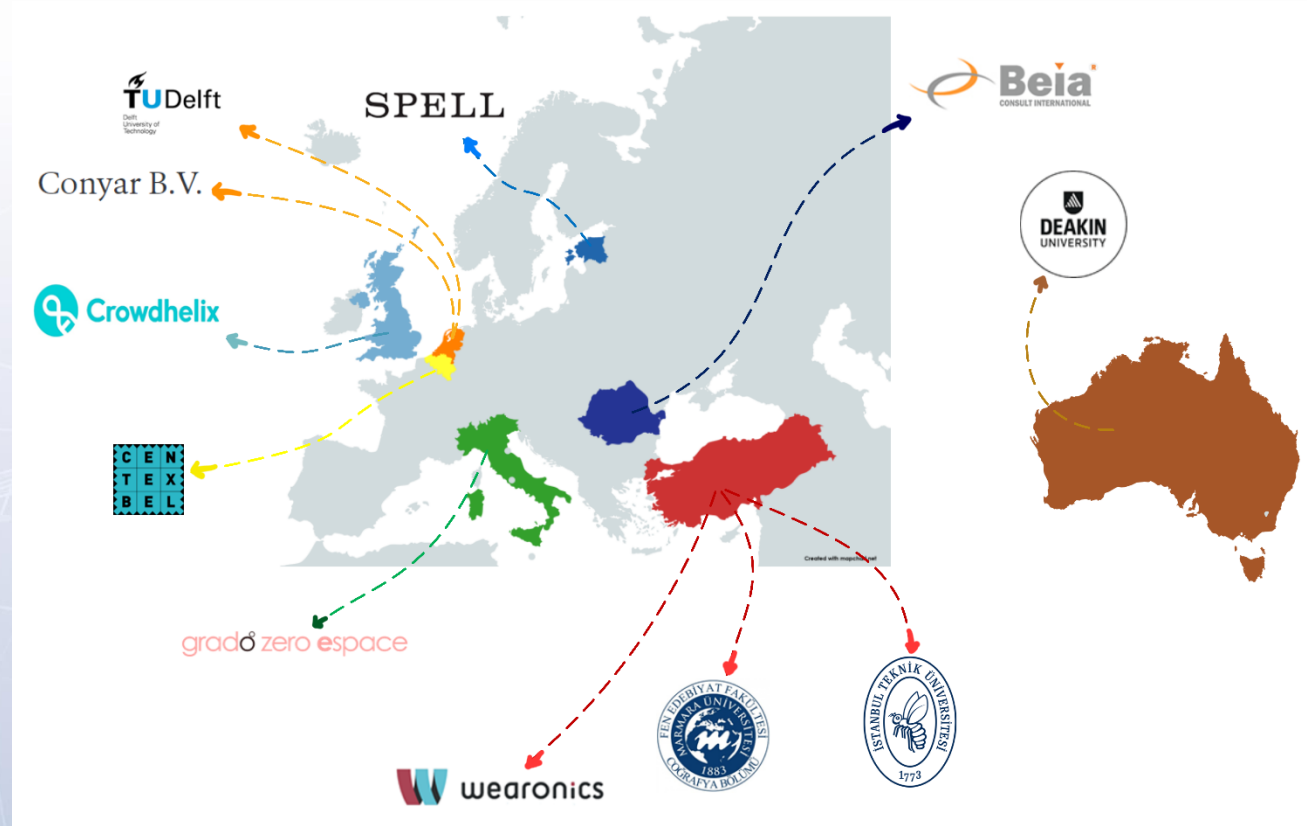


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Consortium



11 partners (4 universities, 1 research org., and 6 SMEs) from 8 countries and 2 continents.



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How to build the consortium



Alper Gurarslan <agurars@ncsu.edu>

to k.m.b.jansen, ozguratalay ▾

Dec 4, 2019, 4:30 PM ☆ ↩

Dear Dr. Jansen,

We, Assoc. Prof. Dr. Atalay and Ass. Prof. Dr. Gurarslan, Marie Curie fellows at Istanbul Technical University, with a vast expertise on wearable electronics and we are looking for expert in electronic textile applications. After examining your profile from <https://www.tudelft.nl/en/ide/research/research-labs/emerging-materials-lab/smart-textiles/meddy/> we are confident that you can be a key partner in our MSCA RISE projects regarding the development electronic textiles made of sustainable materials and their implementations in various fields.

We are confident that the success of this project because;

- Focus of the project is wearable electronics that is a rapidly growing market, (market will be worth over 7,5 billion Euros with in next 3 years)
- EU is paying utmost attention on consumption of sustainable materials rather than hazardous plastic counterparts.
- Multidisciplinary project that combines health, electronics, social behaviors, textiles manufacturing, materials science, fashion industry and sustainable materials.
- We have strong consortium composed of industrial and partners from all over Europe and 3rd country.

We have an extensive experience on Marie Curie projects and other international projects we believe with your experience in this area, will be able to deliver an outstanding project in the area of sustainable electronic textiles.

We would like to discuss the details either on the phone, skype or through emails.

Best Regards,

Özgür Atalay & Alper Gürarslan



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Alignment with the Call



Table 6. Particular scientific objectives and knowledge transfer mechanisms and reintegration action during the secondments

#	Type	From (Home)	To (Host)	Duration (Month)	WP	Scientific objective	Transfer mechanism	Reintegration action
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Alignment with the Call



Table 9. Core research skills (acquired during secondments in individual tasks).

Staff From

Core research skills to be acquired during the secondments and project duration



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Conclusion



- *Partners with different expertises**
- *Everything has to align with the call and organized neatly**
- *Emphasize the Interdisciplinary & Multidisciplinary aspects of the project**
- *Emphasize the knowledge transfer**
- *Impact on the Career Developments of the researchers**
- *Defects determines the strength**



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Acknowledgement



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