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DEGLI STUDI
DI PADOVA

Interreg
Italia-Österreich
European Regional Development Fund



AST
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WP3:Relative viscosity measurements

Tested samples (ISO 307:2007):

Indoor weathering: yarns (Innsbruck)

- Phoenix Classic (new and after UV aging : 4 weeks)
 - Purple
- Phoenix Dry (new and after UV aging : 4 weeks)
 - Purple



Phoenix Classic New



Phoenix Classic 4 weeks UV

Solutions:

PA 0.5 %w/v in formic acid,
60°C, 90min



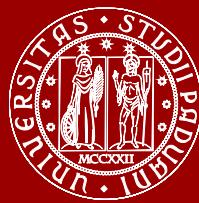
Phoenix Dry New



Phoenix Dry 4 weeks UV

Equipment

- Automatic viscometer unit "iVisc LMV830, with
- LAUDA VISCOCOOL 6- Viscothermostat with Peltier cooling and ECO SILVER control head LCD 0292
- Ubbelohde-viscometer, Schott Geräte type 526 13/Ic: Diameter 0,78 mm



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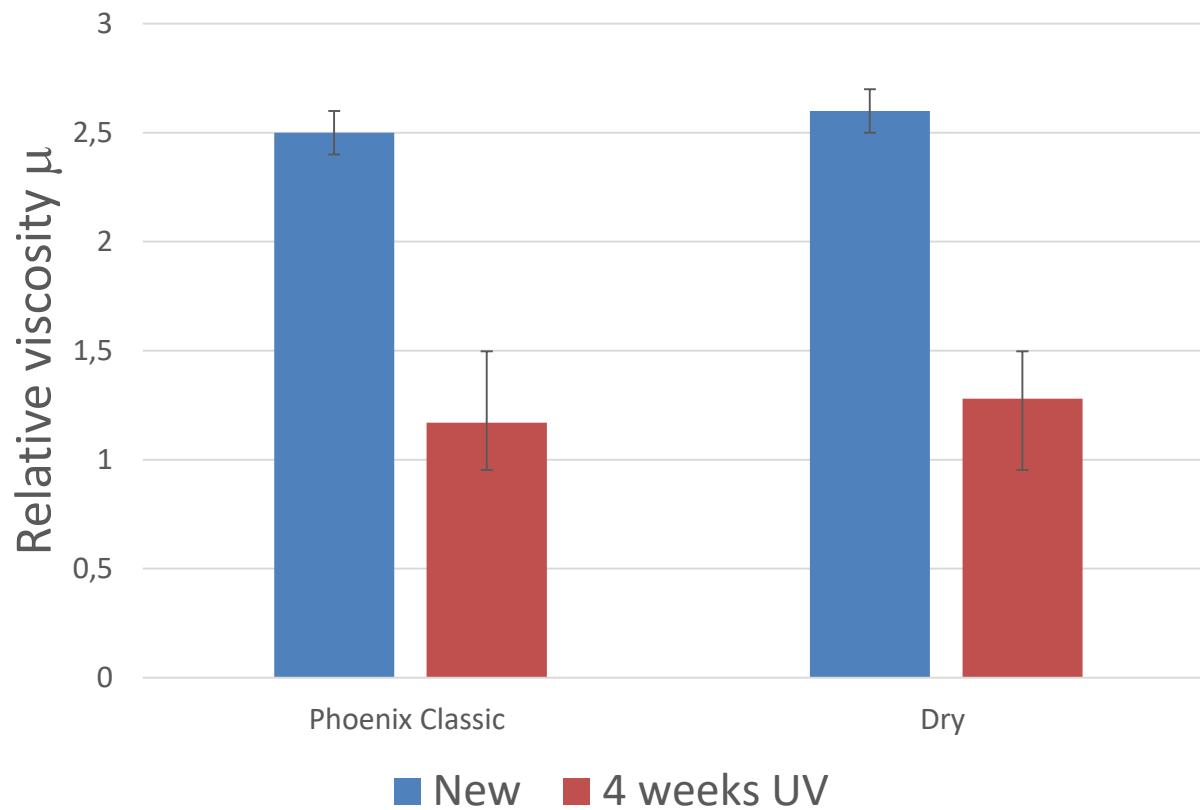


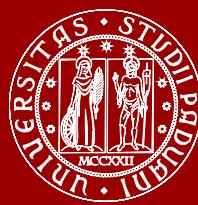
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WP3: Relative viscosity measurements: Results





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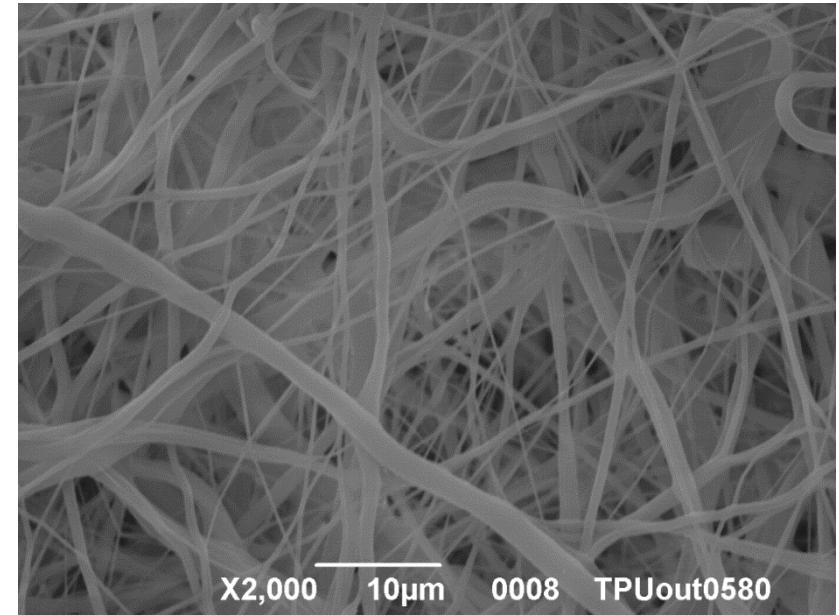
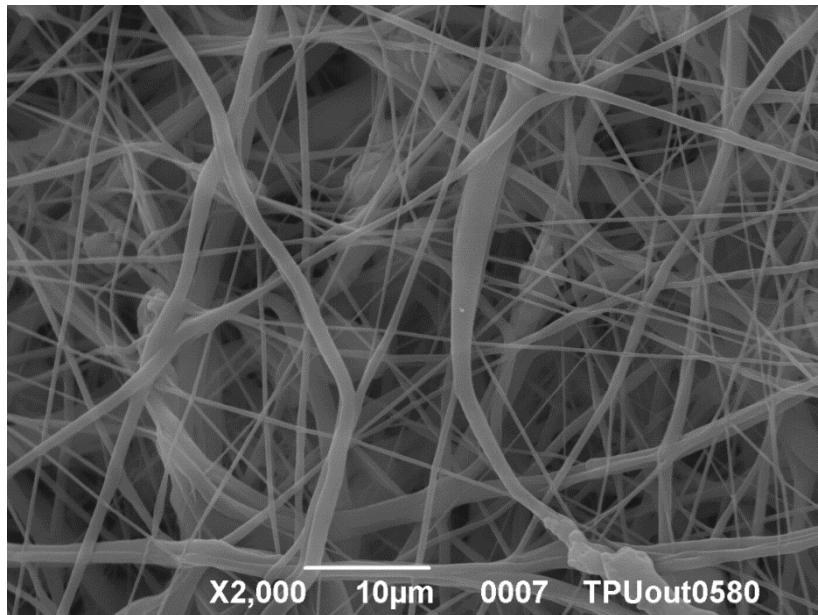


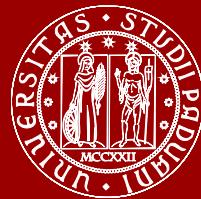
WP5: Coaxial electrospinning TPU/PVDF-PTFE

Best solution:

- shell TPU (20%w/w DMF)
- core PVDF-PTFE 35:65

SEM Micrographs



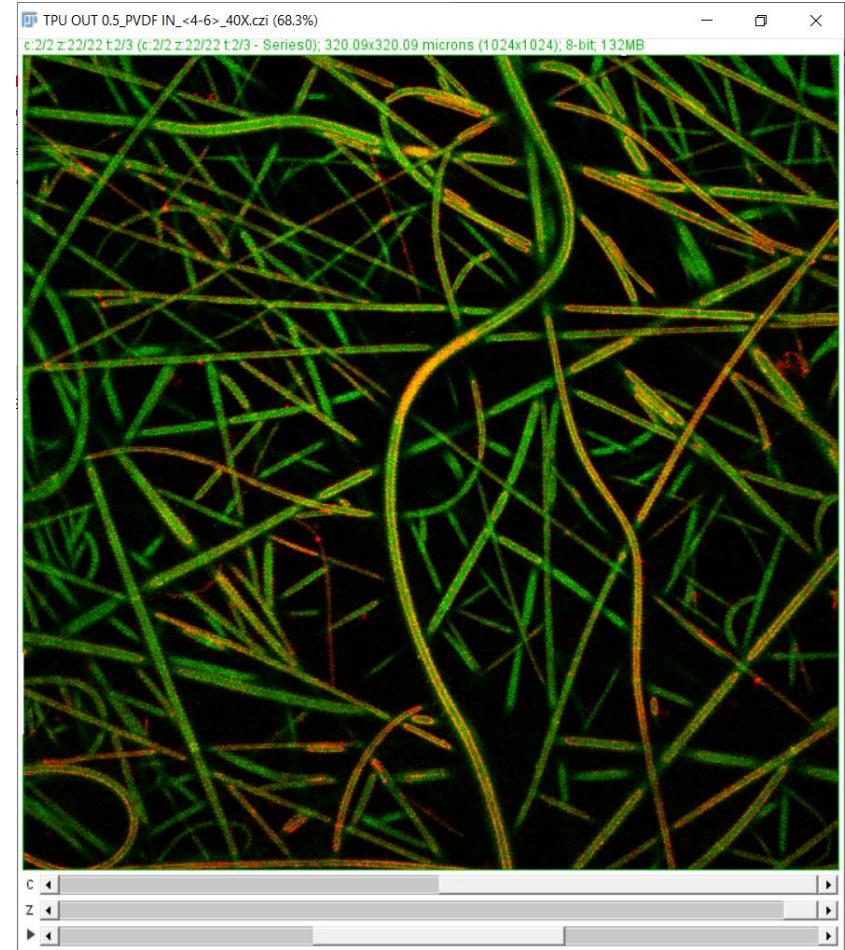


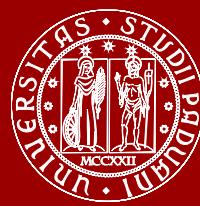
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Confocal microscopy:





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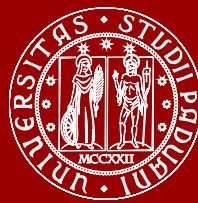


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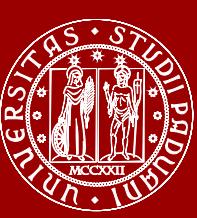
WP5: water column measurements





WP5: water column measurements: Results

Material	Pressure (bar)/m H ₂ O column (m)
No Membrane	0,3/3
PVDF-PTFE	0,15/1,5
PAAm-co-AA/PVAcI	0,8/8
PVDF-PTFE/ TPU simul (2)	0,65/6,5
PVDF-PTFE/ TPU simul (1)	0,15 /1,5



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Sito web dove reperire tutte le informazioni del progetto:

<https://www.facebook.com/AlpSporTeInterreg>