SEVENTH FRAMEWORK PROGRAMME

Funded by the European Union

FP7-REGPOT-2008-1-229801: Unlocking the Croatian Textile Research Potentials

Project Results

Project acronym: T – Pot

Project logo:

Dissemination Conference

16th February 2012

Croatian Chamber of Trades and Craft

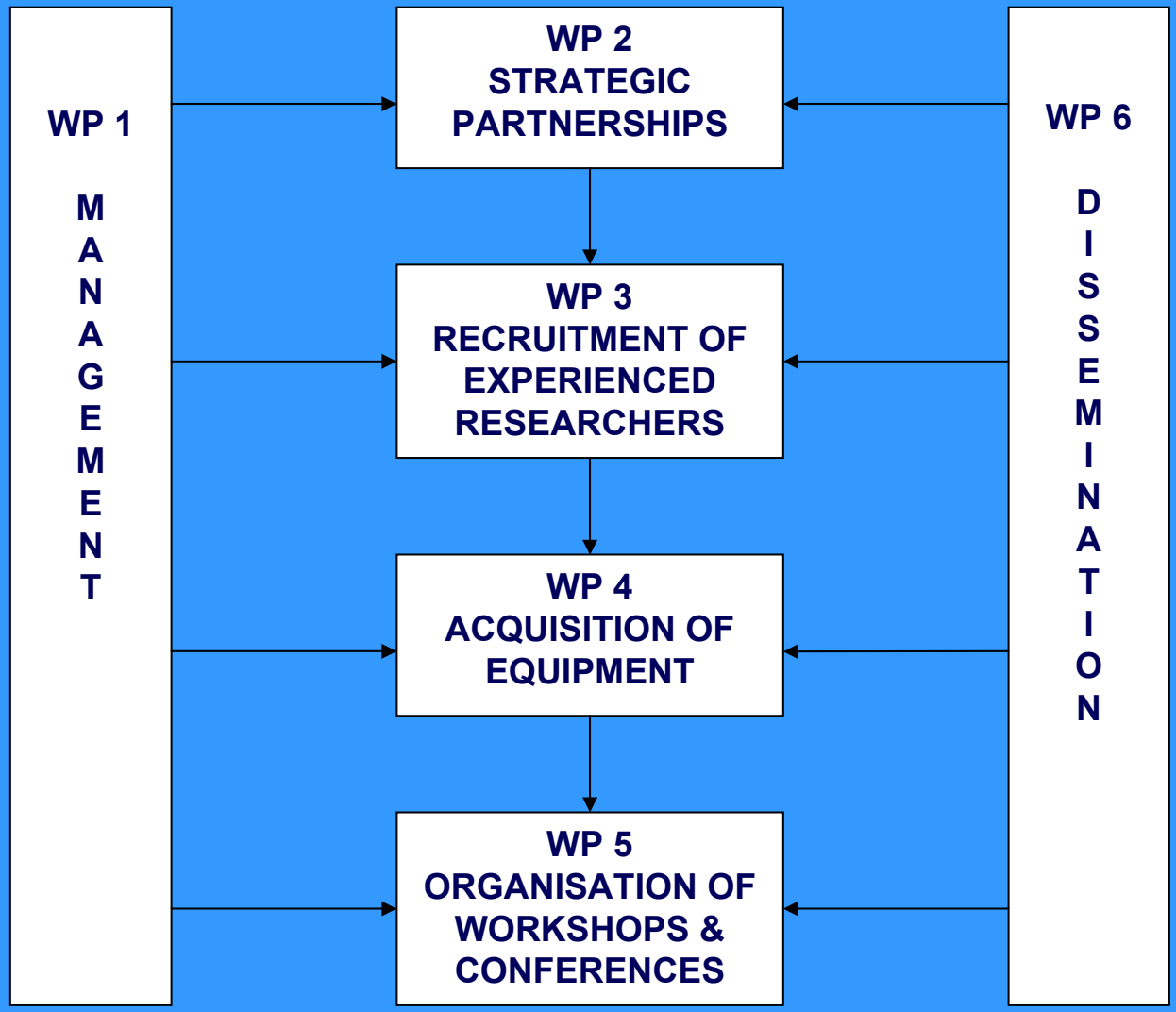
Overall objective of T-Pot

- To unlock and upgrade the research potential of the Faculty of Textile Technology (TTF), particularly its *Textile Science Research Centre*, enabling enhanced participation of Croatian textile organisations in research activities at the European level, in order to support the harmonisation and integration process of Croatian textile entities into the European Research Area.

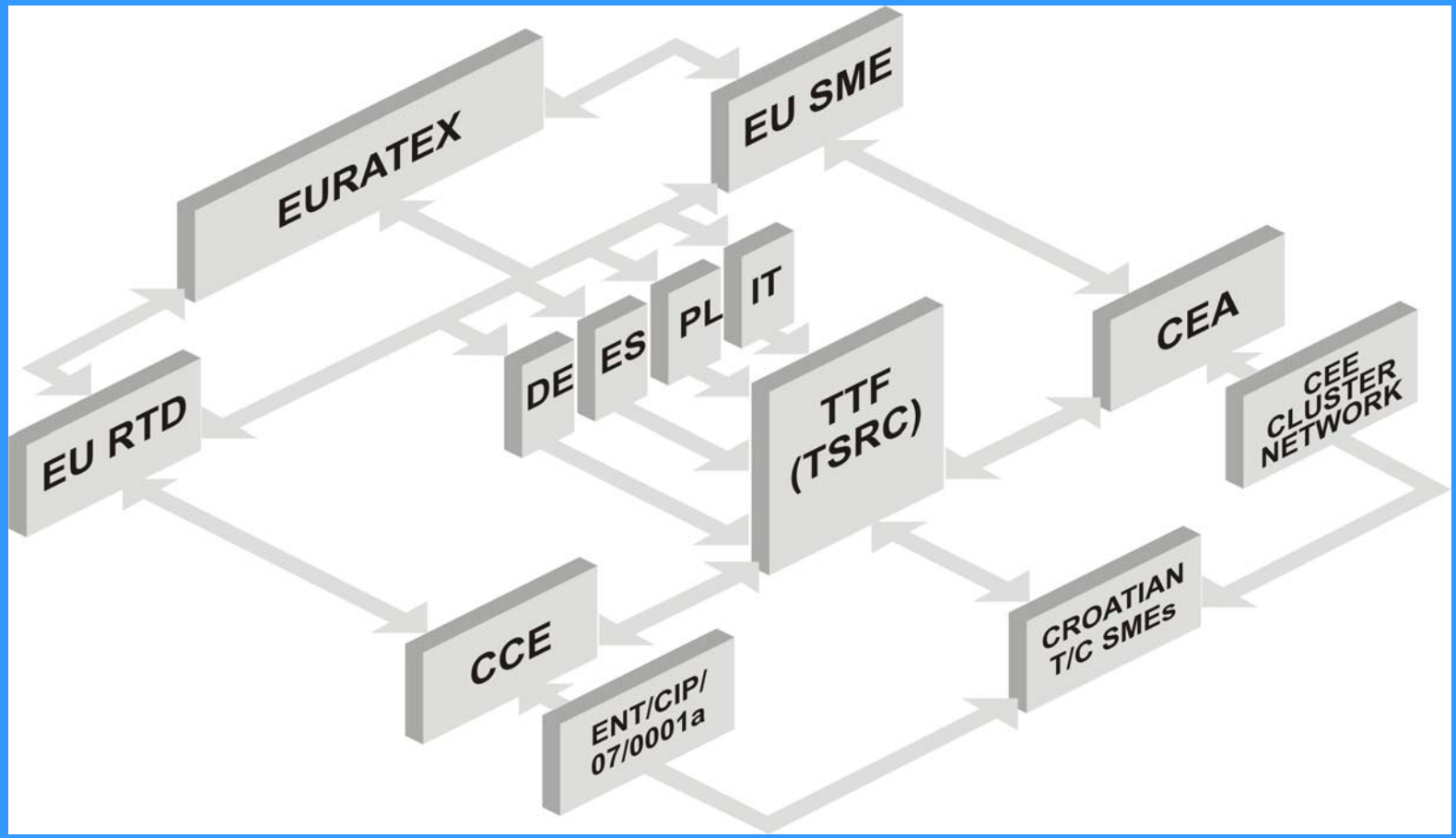
Specific objectives of T-Pot

1. Reinforcement of S&T potential
2. Developing strategic partnerships with well established research groups
3. Supporting and mobilising the human & material resources
4. Facilitating communication between the centres having similar scientific interest
5. Disseminating scientific information and research results
6. Improving the responses to socio-economic needs of Croatia

Work Packages (WPs)



T-Pot Partnering institutions



WP2: Strategic partnerships

- **STFI**, Saxon Textile Research Centre (Chemnitz, Germany) - RTD

- **INFMP**, Institute for Natural Fibers and Medicinal Plants (Poznan, Poland) - RTD

- **Leitat**, Technological Center Leitat (Terrassa, Spain) - RTD

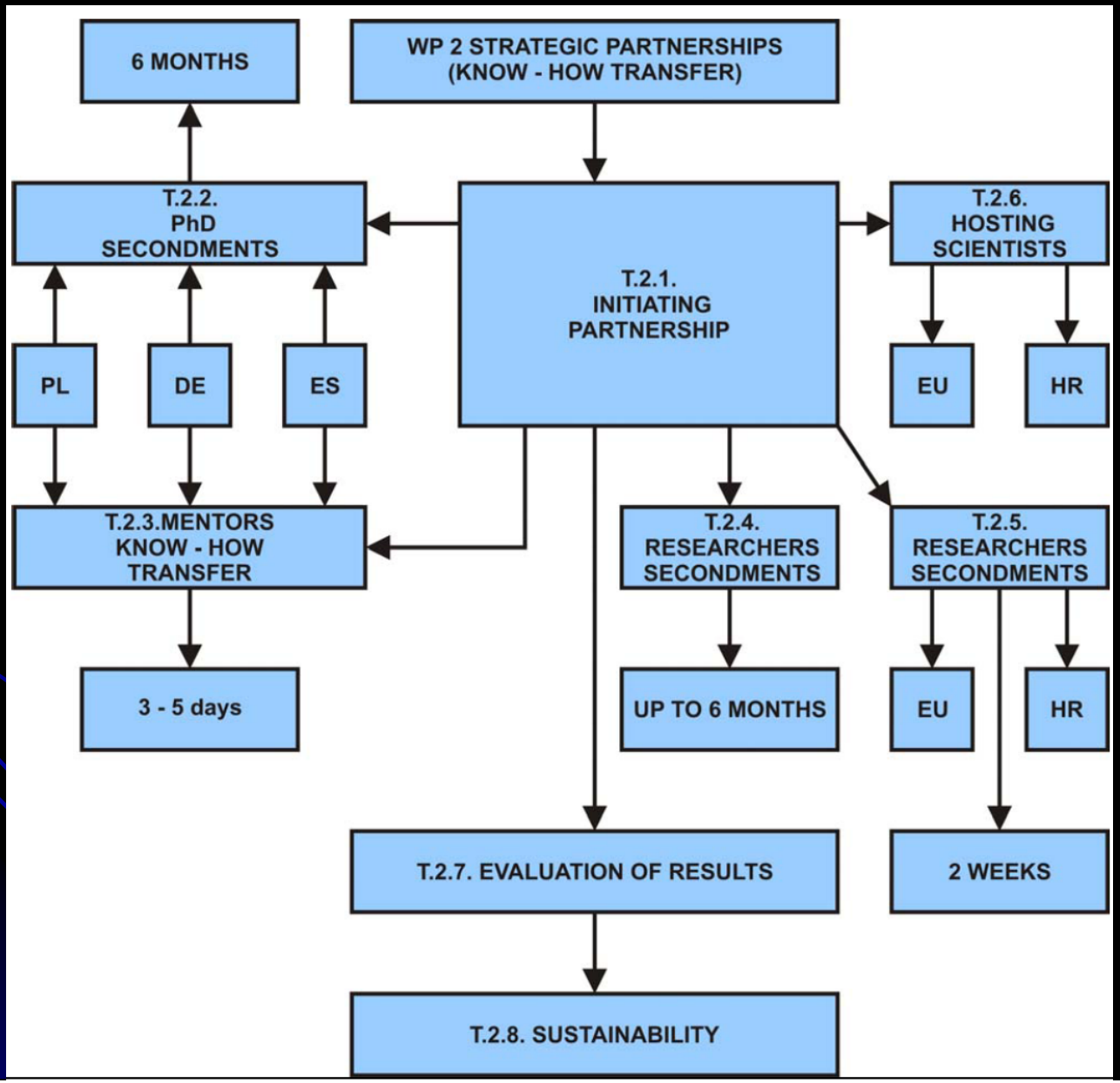
- **GZE**, Grado Zero Espace (Monte Lupo, Italy) - SME

WP2: Strategic partnerships

Objectives of WP2:

- formation of strategic partnerships focused on capacity building through know-how transfer
- sharing of research resources
- joint initiatives for developing services in support of business and innovation

WP2: Strategic partnerships



WP3: Recruitment of experienced researchers

Objectives of WP3:

- reinforcing human capacities by recruiting experienced researchers
- knowledge of unique technologies transferred to TTF
- setting up new research directions leading to competitive advantage
- raising the international competitiveness of TTF
- forming a strong regional centre

WP3: Recruitment of experienced researchers

T-Pot research team

- Employment procedure for stable position at TTF for 2 T-Pot researchers is in the process

Prof. Andrea Katović, University of Calabria, Department of Chemical Engineering and Materials

Dissemination of obtained results in scientific papers

1.	**Original scientific papers published in periodical cited by tertiary Current Content (CC) and secondary (SCI and Sci-Expanded) publications**
1.1.	D. Katović, S. Flinčec Grgac, S. Bischof Vukušić, A. Katović: Formaldehyde Free Binding System for Flame Retardant Finishing of Cotton Fabrics, Fibres & Textiles in Eastern Europe 20 1(90) (2012) 94-98.
1.2	D. Katović, **A. Katović**, A. Antonović: Extraction Methods of Spanish Broom (Spartium Junceum L.), Drvna Industrija, 62 (4) (2011) 255-261.
1.3.	D. Katović, **A. Katović**, Marija Krnčević: Spanish Broom (Spartiium junceum L.) - History and Perspective, Journal of Natural Fibers 8 (2) (2011) 81-98.
1.4.	Z. Kovačević, M. Krnčević, **A. Katović**, D. Katović: Brnistra – zaboravljena tekstilna sirovina, Tekstil 59 (9) (2010) 410-42.
1.5	D. Katović, A. Katović, M. Krnčević: Spanish Broom (Spartium Junceum L.), Annual 2010 of the Croatian Academy of Engineering ISSN 1332-3482, in press
1.6	S. Bischof Vukušić, S. Flinčec Grgac, D. Katović; **A. Katović**: SEM Characterisation of the Cellulose Material treated with Polycarboxylic Acid and Zeolite Nanoparticles, Materials Science Forum Vol. 700 (2012); 203-206

WP4 *Acquisition and upgrade of equipment*

Objectives of WP4:

- upgrading of research equipment for in-depth scientific investigations
- purchase and installation of equipment
- education of personnel in use of equipment
- creating flexible scientific research laboratories with modern equipment where groups of researches can work on specific projects
- create conditions for cooperation with industry and joint projects

WP4 Acquisition and upgrade of equipment

Textile Science Research Laboratory

FTIR spectrometer, TG-IR interface and TGA (Perkin Elmer)

SEM Laboratory

Field Emission Scanning Electron Microscopy,

Myra II LMU (Tescan)

EDX detector (Bruker)

WP5 Organisation of workshops & conferences

LEITAT (ES) 17-19.06.09	STFI (DE) 02-05.12.09	INFMP (PL) 5 mj. 2010
Innovative smart materials New surface treatments Coating & Laminating Ecodesign	Innovation in technical textiles area Recycling of textiles Life Cyclus Analysis Quality Management	CELLUBAST-Center of excellence for natural bast fibers and materials Multifunctional eco-froendly textiles of new generation New recycling methods of textile waste

WP5 Workshops held in Croatia

The role of innovation in textile & ICT sector (Septembar 2009 – CCE)	Inovation Management (Septembar 2010 - CCTC)
•Innovation and competitivity • How to innovate in textile sector? • Innovation and IPR • Tools for continuous monitoring	• Mapping of Croatian innovative potential • The role and significance of research results • From science to shares • IMP^{3}rove methodology of innovation potential monitoring

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WP5 Organisation of conferences

- Participation of project members at:
- Textile Science & Economy 2010, Zagreb
- ITC&DC 2010, Dubrovnik
- Recycling for textiles, 1-2.12.2009. Chemnitz, Germany

WP6 **Dissemination**

T.6.1 Textile Science Research Portal: **http://www.ts-rc.eu**
T.6.2 T-Pot site: **http://www.t-pot.eu**
T.6.3 STEP-site: **http://www.ttf.unizg.hr/step**
T.6.4 Postgraduate seminars ⇒ Award for the best student scientific or art research in 2011
T.6.5 Textile forums ⇒ Cotton incorporated (USA), DuPont
T.6.6 Presentation ⇒ TV, radio, papers
T.6.7 Publications ⇒ Flyers, Book of Proceedings of Textile Science & Economy Symposium 2010, TTF monograph, Books:

- Young Scientists in the Protective Textiles Research
- Functional Protective Textiles
- T-Pot Monograph

TEXTILE SCIENCE RESEARCH CENTRE

Established in October 2008 at University of Zagreb Faculty of Textile Technology.

Main goals of TSRC:

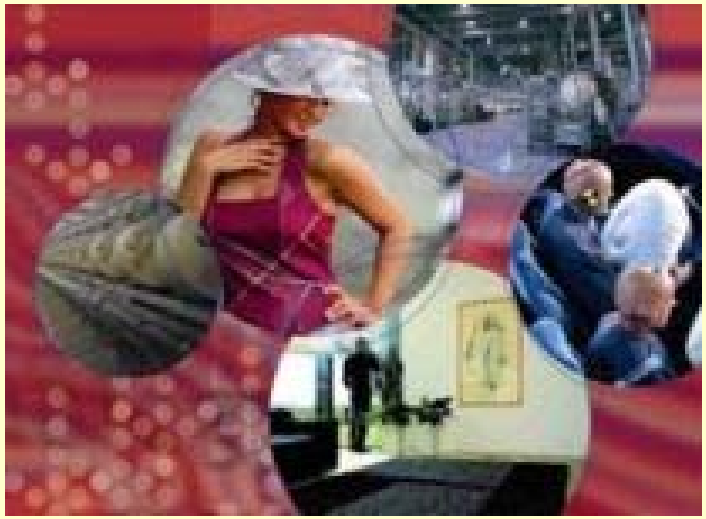
- Coordination and continuous development of scientific research
- Cooperation with other international and national scientific institutions & industry

⇒ *Long term goals of TSRC:*

- ⇒ Increase of Croatian scientific research visibility in:
  - ⇒ textile
  - ⇒ clothing
  - ⇒ related areas
- ⇒ Support for development of SMEs.

TSRC follows the activities of:

⇒ European Technology Platform for the Future of Textiles and Clothing



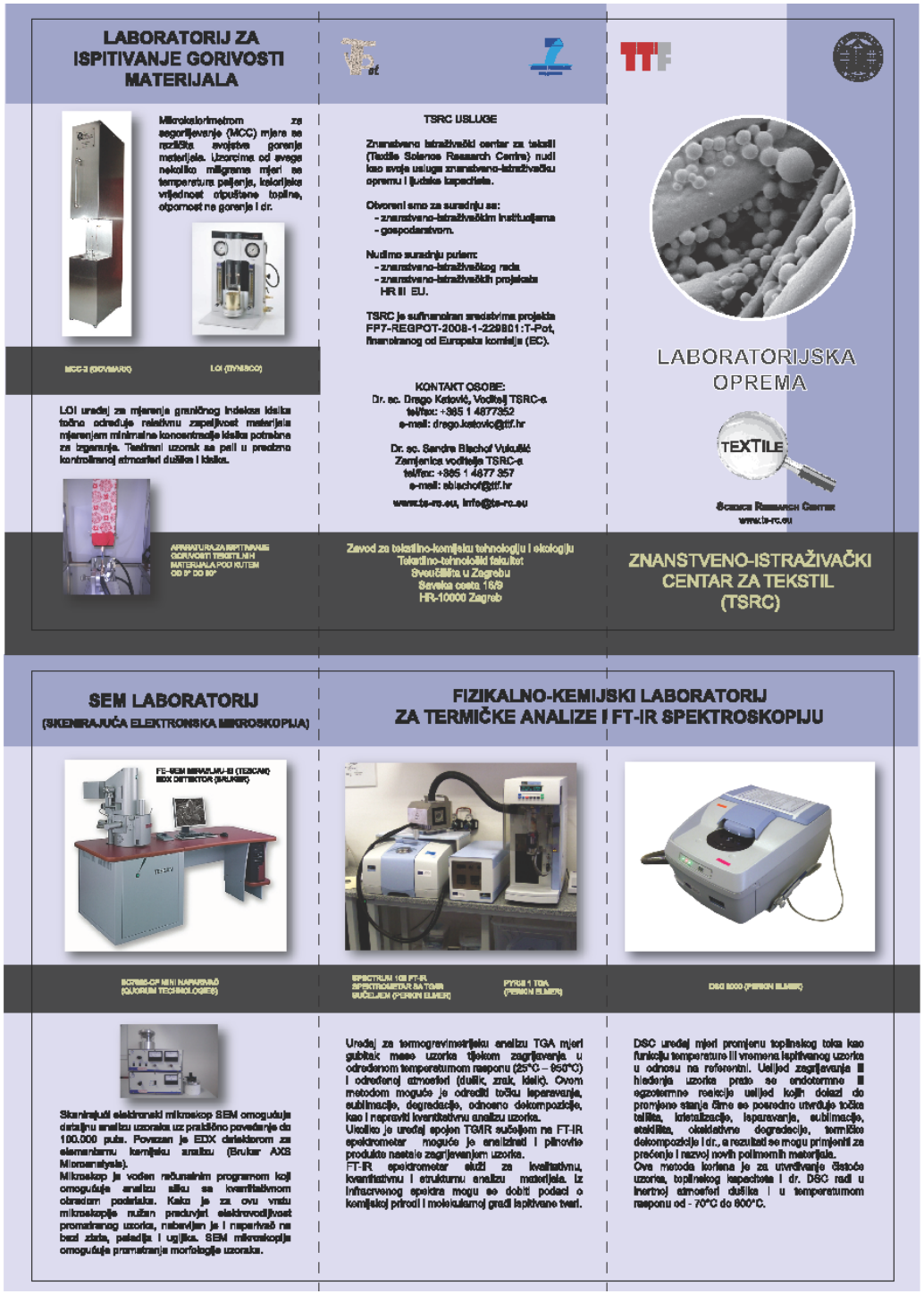
TSRC follows the activities of:

⇒ **Lead Market Initiative (LMI).**

Lead Market Initiative for Europe

Protective textiles *are chosen as on of the 6 most profitable markets in EU*

Textile Science Research Centre (TSRC) Laboratories, funded by the T-Pot project



COOPERATION OF ACADEMY & INDUSTRY
=
NECESSARY

TSRC ACTIVITIES:

- Initiation of applied R&D for the benefit of Croatian SMEs
- Continuous know-how transfer towards the industry and increase of scientific excelence
- Contributing to the increase of the SMEs competitiveness on EU market, through development of innovative products, methods or service
- Regional leadership in particular sectors

TEXTILE SCIENCE RESEARCH CENTRE

PORTAL CONTENT:

- NEWS and breakthroughs in the textile sciences and textile economy (from Croatia and worldwide)
- DATABASE of textile subjects (SMEs) in Croatia and region
- DATABASE of R&D projects performed by TSRC partners
- DATABASE of scientific equipment
- TSRC services (R&D project development, consulting, scientific measurements & expertise)
- Free downloads (freeware and shareware software, manuals, documentation, books and pamphlets in electronic form)
- Forum for textile users, textile companies and all other people that are interested in portal
- Links to TSRC partnering institutions

http://www.ts-rc.eu

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