# Curriculum vitae

# Name: Pavel Pokorny

# Date of birth: 1.2.1961

# Place of birth: Boskovice, Czech Republic

# Adress: Zitavska 3157, Frydlant, Czech Republic

# Phone: +420 776 810 339

E-mail: pavel.pokorny@tul.cz

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| **Education and academic degrees** |

*Doctor, Ph.D*., Technical cybernetics,

Institute of Mechatronics and Computer Engineering, Technical university in Liberec, Czech republic, 2011

*Electrician* Agricultural Training school, Kromeriz, Czech republic, 1995-1996

*Dipl. Ingeneer* graduated at the Brno University of Technolgy, Faculty of Technology, Department of leather technology, Czech republic, 1984

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| **Professional profile** |

*Assistant Professor*

Department of nonwowens, Faculty of textile ingeneering, Technical university of Liberec, Czech republic, 2014 till now

*Researcher*

Department of nonwowens, Faculty of textile ingeneering, Technical university of Liberec, Czech republic, 2012-2014

*Department Technician*

Department of nonwowens, Faculty of textile ingeneering, Technical university of Liberec, Czech republic, 2005 - 2012

*Head of department of crisis management*,

Municipal Authorities Prostejov, Czech republic, 2003 – 2005

*Officer Defense and Protection,*

District Office in Prostejov, Czech republic, 1999 – 2003

*Research specialist*

Gala, a.s., Prostejov, Czech republic, 1994 – 1999

*Head technologist*

GM Vyskovan Vyskov, Czech republic, 1993 – 1994

*Research specialist*

Gala, a.s., Prostějov, Czech republic, 1984 – 1993

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| **Teaching experience and supervised doctoral thesis** |

Recycling (Bachelor's program FT)  
Textile nanomaterials (Master's degree program FM TUL)

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| **Supervised doctoral thesis** |

**Recently supervised Ph.D. students**

Tomas Kalous - Study of the technical possibilities of alternating electric spinning

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| **Selected publications including Impact Factors** |

**2015**

Pokorny P.; Kalous T.; Mikes P.; et al. Preparation of composite nanofibers containing solid particles Book Group Author(s): TANGER Conference: 6th NANOCON International Conference Location: Brno, CZECH REPUBLIC Date: NOV 05-07, 2014, Sponsor(s): TANGER Ltd; Czech Soc New Mat & Technologies; Reg Ctr Adv Technologies & Mat; Mat Res Soc Serbia; Norsk Materialteknisk Selskap NANOCON 2014, 6TH INTERNATIONAL CONFERENCE  Pages: 798-801   Published: 2015

Kalous T.; Pokorny P.; Lukas D.; et al.., Electric wind phenomena during AC colectorless

electrospinning, Book Group Author(s): TANGER Conference: 6th NANOCON International

Conference Location: Brno, CZECH REPUBLIC Date: NOV 05-07, 2014, Sponsor(s):

TANGER Ltd; Czech Soc New Mat & Technologies; Reg Ctr Adv Technologies & Mat; Mat

Res Soc Serbia; Norsk Materialteknisk Selskap NANOCON 2014, 6TH INTERNATIONAL

CONFERENCE  Pages: 798-801   Published: 2015

**2014**

Lukas, D, Pokorny, P.; Kostakova, E.; Sanetrnik, F.; et al., ,Effective AC needleless and collectorless electrospinning for yarn production, PHYSICAL CHEMISTRY CHEMICAL PHYSICS,   **16** (48),  pp. 26816-26822, 2014, IF=4.198.

Kostakova, E.; Seps, M.; Pokorny, P., Lukas, D; et al., [Study of polycaprolactone wet electrospinning process,](http://apps.webofknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=2&SID=4DymQwUFIQnhlbNrVAG&page=1&doc=2) EXPRESS POLYMER LETTERS, **8**(8) pp. 554-564, 2014, IF=2.953.

**2013**

**2012**

Kostakova E. Gregr J. Meszaros L. Chotebor M. Nagy Z. Pokorny P. Lukas D: Laboratory synthesis of carbon nanostructured materials using natural gas, MATERIALS LETTERS,  **79**, pp. 35-38, 2012,  DOI: 10.1016/j.matlet.2012.03.101, ISSN: 0167-577X, IF = 2.3

**2011**

Lukas D.; Mikes P.; Pokorny P.; Electrospinning as an X-ray source, Conference: 241st National Meeting and Exposition of the American-Chemical society (ACS), Location: Anaheim, CA Date:MAR 27-31, 2011, Sponsor(s): Amer Chem Soc, ABSTRACT OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, Volume: 241, Meeting Abstract: 73-COLL, Published: MAR 27 2011

**Chapter 7.1 in monography**

Lukas, D., Sarkar, A., Martinova, L., Vodsedalková, K., Lubasova, D., Chaloupek, J., Pokorny, P., Mikes, P., Chvojka, J., Komarek, M.: *Physical* *principles of electrospinning*, Textile progress, Vol.41, No. 2, 2009, 59 – 140, ISBN-13:978-0-415-55823-5

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| **H-index and citation index** |

H-index: 3

Number of cites for publication by ISI Web of Knowledge: 85, 2016

SCOPUS

H-index: 4

Number of cites for publication by SCOPUS 125, 2016

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| **Grants received (last 5 years)** |

# TAČR: TA 04,010,237th 2014-2016. Research and development of the use of nanomaterials in the production of balls. Subsidies TUL 2,718 thousand. CZK. Principal investigator GALA Inc. Ing. Ivan Dostal. Investigator: Technical University in Liberec, Ing. Pavel Pokorny, Ph.D.

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| **Participation in projects** |

A member of the research team

TA CR: TA 03,010,609th 2013-2015. Nanofibers and nanoparticles abrasives as the basis for a new

generation of tools for ultra-fine polishing surfaces. Subsidies TUL 3,060 thousand. CZK. Principal investigator: Institute of Plasma Physics ASCR, v.v.i. Investigator: Technical University of Liberec, prof. RNDr. David Lukas, PhD.

<http://www.isvav.cz/projectDetail.do?rowId=TA03010609>

CSF: P208 / 12 / 0105th 2012-2015. Solutions of polymers in external field: molecular understanding

electrospinning. Subsidies TUL 3196 thousand. CZK.

Investigator: J.E.Purkyně University, prof. RNDr. Ivo Nezbeda, Dr.Cs.

Investigator: Technical University of Liberec, prof. RNDr. David Lukas, PhD.

<http://www.isvav.cz/projectDetail.do?rowId=GAP208%2F12%2F0105>

MVO CR: VG20102014049. 2010-2014. Research of possibilities of application of new materials

(with a focus on nanomaterials) and advanced technologies to protect people against the

effects of CBRN materials, with an emphasis on critical infrastructure. Subsidies TUL 7,398 thousand. CZK. Coordinating beneficiary / Coordinator: National Institute for Nuclear, Chemical and Biological Protection v.v.i., Ing. George Slabotinský, PhD. Recipient / Manager: TU Liberec, prof. RNDr. David Lukas, PhD.

<http://www.isvav.cz/projectDetail.do?rowId=VG20102014049>

Ministry of Education: LO1201. 2014-2018. Development of the Institute for Nanomaterials,

Advanced Technology and innovation. Investigator TUL. Subsidies 184,311 thousand. CZK.

Ing. Pavel Pokorny, Ph.D. participates inSpinning activity effect the alternating electric field.

http://www.isvav.cz/projectDetail.do?rowId=LO1201, The program aims at developing

research infrastructure of the Centre for Nanomaterials, Advanced Technology and Innovation.

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| **Patents and industrial collaboration (last 5 years)** |

Patents granted by the World Intellectual Property Organization

Kocis, [Pokorny](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Pavel+Pokorny%22), [Lukas](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22David+Lukas%22), [Mikes](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Petr+Mikes%22), [Chvojka](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Jiri+Chvojka%22), [Kostakova](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Eva+Kostakova%22), [Beran](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Jaroslav+Beran%22), [Bilek](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Martin+BILEK%22), [Valtera](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Jan+Valtera%22), Method for production of polymeric nanofibers by spinning of solution or melt of polymer in electric field, and a linear formation from polymeric nanofibers prepared by this method, WO2014094694 A1.

Lukas D. Ruzickova J. Kostakova E. Novak O. Pokorny P. Briestensky J. Samek L. (2009) Collecting electrode of the device for production of nanofibres through electrostatic spinning of polymer matrices, and device comprising this collecting electrode. **WO2009/049564 A2**. 2009-04-23, International application (PCT), Int. Appl. Num: PCT/CZ2008/000123.

**Patents granted by the Industrial Properti Office**

Kocis, [Pokorny](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Pavel+Pokorny%22), [Lukas](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22David+Lukas%22), [Mikes](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Petr+Mikes%22), [Chvojka](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Jiri+Chvojka%22), [Kostakova](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Eva+Kostakova%22), [Beran](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Jaroslav+Beran%22), [Bilek](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Martin+BILEK%22), [Valtera](http://www.google.com/search?tbo=p&tbm=pts&hl=en&q=ininventor:%22Jan+Valtera%22), Method for production of

polymeric nanofibers by spinning of solution or melt of polymer in electric field, and a linear

formation from polymeric nanofibers prepared by this method, CZ 304137

Pokorny P.; Lukas D.; Mikes P.; Martinova L;. Zalesakova D;. Vodsedalkova K.; Sanetrnik F. (2011)

Method and device for production of nanofibres weir electrostatic spinning, Awarded:

November 22, 2011, patent CZ 302 876

Lukas D.; Ruzickova J.; Kostakova E.; Novak O.; Pokorny P. ;Briestensky J.; Samek L.; Collecting

electrode of the device for production of nanofibres through electrostatic spinning of polyme

matrices, and device comprising this collecting electrode. CZ 2007-727(2009)

Pokorny P.; Kostakova E.; Lukas D.; Equipment for production of nanofibres through

electrostatic spinning, utility model, registration number 18094,, (2007.)

Pokorny P.; Lukas D.;Mikes P.; The X-ray emitter and / or accelerator of electrically charged

particles, patent CZ 305 429, 2009-424. (2009)

Pokorny P.; Lukas D.; Mikes P.; Vyslouzilova. L.; Chvojka. J.; Hegrova B.; Lukas R.; Amler E.;

Buzgo M.; Louda P.: A method of forming a functional nanofiber layer and a device for

implementing the method, CZ Patent 302 901, 2011- 328 (2011)

Chvojka J. Lukas D. E. Kostakova Mikes P. Pokorny P. Brustmann (2013), the layered material /

fabric for polishing hard surfaces, utility model 27192, 2013-28918.

Lukas D.; Mikes P.; Kuzelova-Kostakova E.; Pokorny P.; Novak O.; Sanetrník F.; Chvojka J.;

Havlicek J.; Jencova V.; Horakova J.; Blazkova L.; Pilarova K.; Erben J.; Kovacicin J.:

Equipment for manufacturing composite textile material comprising polymer nanofibres,

utility model 28190, 2014-30498.(2014)

Chvojka J.; Lukas D.; Kostakova E.; Mikes P.; Pokorny P.; Chaloupek J.; Sanetrnik F: Nanofiber

material incorporating particles, utility model 28410, 2014-29564. (2014)

**Commercially used patents and utility models**

Pokorny P.; Lukas D.; Mikes P.; Martinova L;. Zalesakova D;. Vodsedalkova K.; Sanetrnik F. (2011)

Method and device for production of nanofibres weir electrostatic spinning, Awarded:

November 22, 2011, patent CZ 302 876. In 2013 sold for around 5 million CZK.

**Cooperation with industry**

**Cluster NANOPROGRES**

MIT: OPPI - CZ.1.03 / January 5, 00 / 12.00018. NANOPROGRES. 2011-2014. Ing. Pavel Pokorny, Ph.D., a member of the research team, the technological development of methods of spinning nanofibers. <http://nanoprogres.cz/cs/podnikatelsky-program/zakladni-model-klastru-nanoprogres-podnikatelsky>

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| **Intershops aboroad** |

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| **Membershops in scientific boards and professional memberships** |

**Vědecké rady**

**Odborné společnosti**

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| **Honours and awards** |

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| **Other experience** |

*Institute of Crisis Management,* Economics and crisis management VSE Prague 2000–2001

*Certificate of the National Security Authority of the Czech Republic* to come into contact with

classified information for level "CONFIDENTIAL" 2001 – 2006

*Special certificates of professional competence by decrete.* Czech Ministry of Interior

Republic no. 51/1998 Coll., to perform administrative activities in the area of handling

Dangerous substances and preparations.