

CURRICULUM VITAE

Yordan Kostadinov KYOSEV

Personal information

Address Hochschule Niederrhein, Faculty of Textile and Clothing Technology,
Webschulstr. 31, 41065 - Mönchengladbach, Germany
+49(0)2161-186 6086 yordan.kyosev@hs-niederrhein.de

Home Page www.kyosev.com
<http://www.hs-niederrhein.de/fb07/personen/kyosev/>

Date of birth 26.02.1973

Higher education

- 09.91-07.96 **MSc** (Mechanical Eng.)
Machines and Technologies of the Textiles and Clothing
Dept. of Textile engineering, Technical University of Sofia, Bulgaria
- 09.98-02.00 **MSc**, (Defence 02.2002), Applied Mathematics,
Faculty of Applied Mathematics and Informatics
Technical University of Sofia, Bulgaria
- 09.97-08.01 **Dr.**, (Defence 11.2002), Theme "Investigation of the yarn winding in a centrifuge", Area: Machines and Equipment for the light Industry, The Higher Testimonial Committee, Ministerial Council Republic of Bulgaria

Professional qualifications

2012 CText FTI - Chartered Fellow of the Textile Institute

Languages Bulgarian, German, English, Russian

Professional experience

- 1997-2006 **Technical University of Sofia**, Bulgaria, Dept. of Textiles
1997-1999 PhD student, external assistant professor for:
Design of textile and sewing machines
- 1999-2003 Assistant Professor, Teaching topics:
Design of textile and sewing machines
- 2003-2006 Head Assistant Professor, Teaching topics:
Knitting technology
Design of textile and sewing machines
Numerical Methods (Fac. of Applied Mathematics)
Technical mechanics (Statics, Kinetics, Dynamics, Strength of Materials) in the German Faculty for Engineering Education
- Since 09.2006 **Professor - Hochschule Niederrhein** - University of Applied Sciences, Mönchengladbach, Germany, Teaching topics:
Textile Materials
Textile Technology (narrow woven and braided fabrics)
Textile testing and quality management
Finite element modelling for textiles
Numerical simulation
- Since 2000 Consultant on freelancer basis, part time worker as Software Developer
- Since 2011 Founder, manager of and developer in TexMind UG (haftungsbeschränkt)

Research grants and scholarships

08.05 – 07.06 (1 Year)	Alexander von Humboldt Research Fellow (Post-Doc) (www.avh.de) RWTH Aachen, Inst. für Textiltechnik, Germany, Subject: “Dynamical and Structural Investigation and Modelling of Textile Yarns”
05.05-06.05 (1 Month)	Guest Researcher, Technical University Dresden, Institut für Textil- und Bekleidungstechnik, „Modelling of multi-axial weft knitted Structures“
10.04-10.04 (1 Month)	Guest Researcher, Institut für Technical Mechanics, Karlsruhe University Theme „Yarn mechanics“
07.04-08.04 (2 Months)	Guest Researcher, DAAD Post-Doc Fellowship Institut für Textiltechnik an der RWTH Aachen, Theme „Modelling and simulation of sliver motion“
04.00-07.00 (5 Months)	Hochschule Niederrhein, CDG eV Scholarship; Topics: Spinning, Knitting, CAD, Machine Building, Narrow Textiles
08.00-02.01 (7 Months)	Fa. „W. Schlafhorst AG&Co“, Mönchengladbach, CDG eV – Scholarship; Research and Development Department

Editorial and reviewing work

Member	Editorial Advisory Board of the Textile Research Journal
Reviewer	Textile Research Journal Journal of the Textile Institute Journal of Industrial Textiles Indian Journal of Fibre & Textile Research CRC Press (2 Book proposals) "Shota Rustaveli National Science Foundation", Georgia für 2012 und 2013 Guest Editor for special Issue at Springer with Dr. Majumdar aus IIT Delhi Majumdar, Abhijit; Kyosev, Yordan K. (2015): Modeling and Optimization in Fibrous Materials. In: J. Inst. Eng. India Ser. E. DOI: 10.1007/s40034-015-0067-z

Membership in Scientific Associations and professional qualifications

The International Fiber Society
The Textile Institute
German Association for Computational Mechanics (GACM)
Gesellschaft für Angewandte Mathematik und Mechanik eV (GAMM)
Eurographics

Organizer

- 2011 International Summer School "Advances in the textile testing and modelling", Niederrhein University of Applied Sciences, 2011
- 2010, 2012, 2014 Minisimposium "Modelling of fiber based structures"
- IV European Conference on Computational Mechanics, Paris, May 16-21, 2010
 - 6th European Congress on Computational Methods In Applied Sciences And Engineering (ECCOMAS 2012), ECCOMAS 2012, Wien
 - 11th World Congress on Computational Mechanics, WCCM-ECCM-ECFD 2014, Barcelona
- 2013 Session "Braiding for Composites" während:
- 2015
- TexComp-11, 2013, KU Leuven, Leuven
 - TexComp-12, 2015, NCSU, Raleigh, North Carolina, USA
- 2014 Ersten Mönchengladbacher Flechtkolloquium, Mönchengladbach, November 2014
- Kyosev Y.**, (Hg.), *1. Mönchengladbacher Flecht-Kolloquium 2014*, Vorträge, 7 November 2014, Hochschule Niederrhein, Fachbereich Textil- und Bekleidungstechnik, TexMind Verlag, ISBN 978-3-944435-05-3
- 2003,2004 „Textile and clothing - education, research, production – seminar with international participation,
- Kyosev Y.**, Angelova, R. (Editors) (2005): *„Textile and clothing - education, research, production – Proceedings from the 2-nd seminar with international participation“*, Technical University of Sofia, ISBN 954-438-406-5
- Kyosev Y.**, Stoilov T. (Editors) (2003): *„Textile and clothing - education, research, production – Proceedings from the 1-st seminar with international participation“*, Technical University of Sofia, ISBN 945-438-346-8, 80 pages, in Bulgarian)
- Hobbies programming software, playing piano, swimming, mountain walking, gardening

Publications

Books

Kyosev, Yordan K. (2014): Braiding technology for textiles: Principles, design and processes. Woodhead Publishing Series in Textiles No. 158. 1. Aufl.: Woodhead Publishing Limited, 414 Seiten,

Peeva, K., **Kyosev**, Y., (2005) Fuzzy Relational Calculus: Theory, Applications And Software (with Cd-rom). Singapore: World Scientific Publishing

Journal Papers (peer review)

Kyosev, Yordan K. (2015a): Generalized geometric modelling of tubular and flat braided structures with arbitrary floating length and multiple filaments. In: **Textile Research Journal**, 2015, accepted, in print

Kyosev, Yordan K.; Renkens, Wilfried (2015): About the 3D Modelling of Jacquard Warp Knitted Structures. In: **Journal of Fashion Technology and Textile Engineering**, S. S001.

Reiners, P.; **Kyosev**, Yordan K.; Schacher, L.; Adolphe, D.; Kuster, K. (2015): Experimental investigation of the influence of wool structures on the stab resistance of woven body armor panels. In: **Textile Research Journal**. DOI: 10.1177/0040517515596934

Reiners, P.; **Kyosev**, Yordan K. (2013): About the Thermal Conductivity of Multi-Layer Clothing. In: ACC JOURNAL Issue A, **Natural Sciences and Technology** XIX (1), S. 94–100.

N. Thevs; S. Zerbe; **Kyosev**, Yordan K.; A. Rozi; B. Tang; N. Abdusalih; Z. Novitskiy (2012): Apocynum venetum L. and Apocynum pictum Schrenk (Apocynaceae) as multifunctional and multi-service plant species in Central Asia: a review on biology, ecology, and utilization. In: **Journal of Applied Botany and Food Quality** (85), S. 159–167.

Renkens W, **Kyosev** Y. Geometry Modelling of Warp Knitted Fabrics With 3d Form. Textile Research Journal, March 2011 vol. 81 no. 4 pp. 437-443

K. Peeva, Y. **Kyosev**, Algorithm for Solving Max-product Fuzzy Relational Equations, Soft Computing, Vol. 11, Number 7, May 2007, 593-605

Kyosev, Y., Angelova, Y., Kovar, R. (2005): 3D Modelling of plain weft knitted structures from compressible yarn, Research Journal of Textile and Apparel, Hong Kong, Vol. 9, No. 1, Feb 2005, pp.88-97

Kovar, R., Angelova, R., **Kyosev**, Y. (2005): Evaluation of the elastic behaviour of knitted fabric, Fibres and Textiles (Vlakna a Textile), 12 (1) pp. 13-17

Kovar R., **Kyosev** Y. (2004): Limit packing density of woven fabrics, Romanian Textile Journal, 2004, V.1, pp. 35-42

Peeva, K., **Kyosev**, Y. (2004): Solving Problems in Intuitionistic Fuzzy Relational Calculus, Notes on Intuitionistic fuzzy sets, ISSN 1310-4926, 10, 2004, Nr. 3, 37-43,

Kyosev, Y., Švagerka Tomáš (2004): Experimental study over porosity and liquid transport in viscose knitted fabric, Romanian Textile Journal

Kyosev, Y. (2003): Application of intuitionistic fuzzy logic in expert system for textile engineering, Notes on Intuitionistic fuzzy sets, vol. 9, Nr. 4, 2003, Sofia, 23-24, August 2003, ISSN 1310-4926, pp. 135-139

Industrial Journal Papers

Kyosev, Yordan K. (2015b): Klöppelbesetzung der Flechtmaschinen und Struktur der hergestellten Geflechte. In: **Band und Flechtindustrie** 2015 (1).

Kyosev, Yordan K.; Renkens, Wilfried (2013): Rechnergestützte Mechanik von Maschenwaren - eine kritische Übersicht. Ausgabe 1/2-2013. In: **Textilplus** 1 (1/2).

Kyosev, Y., Rathjens, A., Renkens, W., Wie scharf ist die Grenze zwischen Realität und Modell? - Virtuelle und reelle Gewirke – eine Vergleichsstudie zwischen 3D-Simulation und realen Stoffen, Kettenwirkpraxis, 04, 2009, p. 40

Book chapters

- Kyosev**, Yordan K. (2012a): Simulation of wound packages, woven, braided and knitted structures. In: D. Veit (Hg.): Simulation in textile technology: Woodhead Publishing Limited, S. 266–309.
- Kyosev**, Yordan K. (2012b): The finite element method (FEM) and its application to textile technology;. In: D. Veit (Hg.): Simulation in textile technology: Woodhead Publishing Limited, S. 172–221.
- Kyosev Y. Introduction to Fuzzy Logic and Recent Developments. In: Patanaik A, Anandjiwala RD, eds. Modeling and simulation in fibrous materials: Techniques and applications. Hauppauge, N.Y: Nova Science Publishers; 2011
<http://www.worldcat.org/oclc/748364522>.
- Kyosev, Y., Renkens, W., “Modelling and visualization of knitted fabrics” in: Chen, X. (ed.), Modelling and predicting textile behaviour, Woodhead Publishing Limited, 2009, Serie 94,
- Kyosev, Y., Todorov, M., Computational Model of 1D Continuum Motion. Case of Textile Yarn Unwinding Without Air Resistance. in Lecture notes in computer science. Springer Berlin Heidelberg, 2007, Volume 4310/2007, p. 637-645, DOI: 10.1007/978-3-540-70942-8_77

Conference Proceedings (selection)

- Kyosev**, Yordan K. (2015): Computational mechanics of braided structures – some case studies. In: Javier LLorca (Hg.): Book of Abstracts. 9th European Solid Mechanics Conference (ESMC 2015). Leganés-Madrid, Spain, July 6 - 10.
- Kyosev**, Yordan K.; Hello, Gaëtan; Reinsch Jana; Aboura, Zoheir; Schneider, Julien (2015): DETERMINATION OF THE MECHANICAL PROPERTIES OF BRAIDED COMPOSITE BEAMS WITH EXPERIMENTAL AND NUMERICAL METHODS. In: Alexander E. Bogdanovich (Hg.): Proceedings. TEXCOMP-12 CONFERENCE. RALEIGH, NC, U.S.A., 26-29 MAY 2015.
- Kyosev**, Yordan K. (2014a): COMPUTATIONAL ASPECTS ABOUT THE MULTISCALE MODELLING OF TEXTILE WOUND STRUCTURES. In: 11th. World Congress on Computational Mechanics (WCCM XI). 5th. European Conference on Computational Mechanics (ECCM V) 6th. European Conference on Computational Fluid Dynamics (ECFD VI). Barcelona, Spain, July 20 - 25,
- Kyosev**, Yordan K. (2014b): Machine configurator for braided composite profiles with arbitrary cross section. In: 16th European conference on composite materials ECCM 16. 16th European conference on composite materials ECCM 16, 22-26.06.2014. Seville-Spain.
- Kyosev**, Yordan K. (2014c): Simulationstechnik für Flechttechnologie - Möglichkeiten und Grenzen. In: S. Hoffmann und S. Möckel (Hg.): Mehrwert durch Textiltechnik. Tagungsband 14. Chemnitzer Textil-Tagung. 14. Chemnitzer Textil-Tagung. Chemnitz, 13-14.05.2014, S. 206–2013.
- Kyosev**, Yordan K. (2014d): Über die Computersimulation des Flechtprozesses und ihre Anwendbarkeit für Seilberechnungen. In: Markus Michael (Hg.): 6. Fachkolloquium InnoZug. 6. Fachkolloquium InnoZug. Chemnitz, September.
- Aurich, M.; **Kyosev** Yordan K.; Renkens, W.; Günther, K. (2013): PREDICTION OF THE MECHANICAL PROPERTIES OF WARP KNITTED PREFORMS FOR COMPOSITES. In: S. Lomov (Hg.): Proceedings, Composites Week@Leuven and TexComp-11 conference. TexComp-11. Leuven, 16-20.09. Leuven.
- Grave, G.; Zimmermann, K.; Drechsler, K.; Rathjens, A.; **Kyosev**, Yordan K. (2009): Simulation of 3D overbraiding – solutions and challenges. In: X. Chen (Hg.): Second World Conference on 3d Fabrics and their Applications. Second World Conference on 3d Fabrics and their Applications. Greenville, South Carolina, USA, April 6-7,
- Kyosev**, Yordan K. (2013): Some computational and modelling aspects about the multifilament modeling of braided preforms. In: S. Lomov (Hg.): Proceedings, Composites Week@Leuven and TexComp-11 conference. TexComp-11. Leuven, 16-20.09. Leuven.

Presentations, Posters, Abstracts of supervised Bachelor and Master Students

Askani, A.; Kyosev, Yordan K.; Mahltig, B. (2014): Röntgenschutz mit speziellen Geflechten aus anorganischen/organischen Kompositfasergarnen. In: Yordan K. Kyosev (Hg.): Vorträge. 1. Mönchengladbacher Flecht-Kolloquium 2014., 7 November. Hochschule Niederrhein, Fachbereich Textil- und Bekleidungstechnik: TexMind Verlag.

Aurich, M.; Kyosev Yordan K.; Renkens, W.; **Günther, K.** (2013): Prediction Of The Mechanical Properties Of Warp Knitted Preforms For Composites. In: S. Lomov (Hg.): Proceedings, Composites Week@Leuven and TexComp-11 conference. TexComp-11. Leuven, 16-20.09. Leuven.

Bildhauer, B.; **Böhm, J.;** **Schuster, R.;** **Lomkin, H.;** Kyosev, Y.; Janssen, E. et al. (2014): Investigation of the mechanical properties of PES/PES composites from narrow tapes. In: Proceedings of the 8th Aachen-Dresden International Textile Conference. 8th Aachen-Dresden International Textile Conference. Dresden, 27-28 November.

Kyosev, Yordan K.; **Msalilwa, L.** (2012): Prediction of the mechanical properties of braided flax/epoxy 3d shape composite. In: Aachen-Dresden Textile Conference. Dresden, 29-30 November.

Kyosev, Yordan K.; **Nicolau, Aurelie;** Schacher, Laurence; Adolphe, Dominique; Reiners, Priscilla; Heimlich, Frank; Neumann, Eugen (2014): Investigation about the influence of the yarn tension over the mechanical properties of tubular braided fabrics. In: Proceedings CD. STRUTEX - Structure and Structural Mechanics of Textile Fabrics - 20th international conference. Liberec, December. Faculty of Textile Engineering, Technical University of Liberec.

Neumeier, R.; Kyosev, Yordan K. (2014): Erste Erfahrungen mit dem Programm TexMind Braider. In: Yordan K. Kyosev (Hg.): Vorträge. 1. Mönchengladbacher Flecht-Kolloquium 2014, 7 November. Hochschule Niederrhein, Fachbereich Textil- und Bekleidungstechnik: TexMind Verlag.

Nicolau, Aurelie; Kyosev, Yordan K. (2014): Fadenspannungsdifferenzen bei Rundflechten. In: Yordan K. Kyosev (Hg.): Vorträge. 1. Mönchengladbacher Flecht-Kolloquium 2014, 7 November. Hochschule Niederrhein, Fachbereich Textil- und Bekleidungstechnik: TexMind Verlag.

Vitt Philipp; Kyosev, Yordan K. (2014): Vergleich der Eigenschaften zwischen Rund- und Spiralgeflechte. In: Yordan K. Kyosev (Hg.): Vorträge. 1. Mönchengladbacher Flecht-Kolloquium 2014, 7 November. Hochschule Niederrhein, Fachbereich Textil- und Bekleidungstechnik: TexMind Verlag.

Junior Experts - Publisher

Serie "Junior Experts": **Publisher** of selected student Theses within TexMind Verlag verlag.texmind.com

Global Workers Protection: Multi-Stakeholder Initiative - eine methodische Einführung, Autoren: Both, Isabel; Domic, Kristina; Eimers, Jana; Flath, Verena; Keuler, Kathri ; Krings, Caspar; Noltemeyer, Olivia; Reinke, Yvonne; Steckelbruck, Laura; Weidental, Regina; Final edition by Weidental, Regina; , ISBN 978-3-944435-00-8, Published by TexMind UG, Mönchengladbach, 2013, Download (free) Deutsche National Bibliothek: <http://d-nb.info/1044211555>

Anna Rathjens, Analyse von Garnquerschnittsänderungen von umflochtenen Strukturen für Verbundwerkstoffe, ISBN 978-3-944435-03-9, TexMind Verlag, Mönchengladbach, 2014

Frank Heuwinkel, Analyse mechanischer Eigenschaften von Bandgeweben, ISBN 978-3-944435-02-2, TexMind Verlag, Mönchengladbach, 2014

Färber- und Faserpflanzen im textilen Garten der Hochschule Niederrhein, Paulina Borodacz, Monika Brüggemann, Franziska Cremers, Ayse Dizman, Carina Grillo, Laura-Marie Haasch, Canan Keles, Lisa Krämer, Maria Nguyen, Laura Weigel, TexMind UG, Mönchengladbach, 2014