

CURRICULUM VITAE

M.Sc. Muhammad Tayyab Noman, Ph.D.

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EDUCATION AND ACADEMIC DEGREES

Ph.D., Textile Technics and Materials Engineering

Faculty of Textile Engineering, Technical university of Liberec (TUL), Czech Republic, 2019.

M.Sc., Fibre Technology

University of Agriculture, Faisalabad, Pakistan, 2009

PROFESSIONAL PROFILE

2019 – present Researcher, Centre for nanomaterials, advanced technologies and innovation, TU of Liberec

2014 – 2018 Assistant, Department of Material Engineering, TU of Liberec

PROFESSIONAL AND SCIENTIFIC ORIENTATION

Pedagogical, scientific research and professional focus on research and complex development in the field of nanomaterials, composites, polymers, simulations and modelling innovations, etc. for different industry. An enthusiastic, adaptive and fast-learning individual with a broad and acute interest in nano science, surface science, materials chemistry, hybrid materials, photocatalysis, photonics, polymers, recycling, modelling and optimization of new materials and composites. I particularly enjoy my collaboration with scientists to gain knowledge, experience, to solve new challenges and develop robust strategies for composite product. He is the author or co-author of 15 publications in journals with IF > 1,5 indexed on the Web of Science and Scopus, 3 book chapters and 7 conference papers.

SELECTED PUBLICATIONS (2020, 2019, 2018, 2017, 2016)

M.T. NOMAN, M. PETRU, N. AMOR, T. YANG, T. MANSOOR, "Thermophysiological comfort of sonochemically synthesized nano TiO₂ coated woven fabrics". NATURE - Scientific Reports, 10(1), (2020), 17204. <https://doi.org/10.1038/s41598-020-74357-6>. [IF: 3.998. Q1].

M.T. NOMAN, M. PETRU, "Functional Properties of Sonochemically Synthesized Zinc Oxide Nanoparticles and Cotton Composites". Nanomaterials, 10, (2020), 1661. doi:10.3390/nano10091661. [IF: 4.324. Q2].

M.T. NOMAN, J. WIENER, J. SASKOVA, M.A. ASHRAF, M. VIKOVA, H. JAMSHAD, P. KEJZLAR, "In-situ development of highly photocatalytic multifunctional nanocomposites by ultrasonic acoustic method". Ultrasonics Sonochemistry, 40, (2018), 41-56. [IF: 6.513. Q1].

M.T. NOMAN, M. PETRU, J. MILITKY, M. AZEEM, M.A. ASHRAF, "One-Pot Sonochemical Synthesis of ZnO Nanoparticles for Photocatalytic Applications, Modelling and Optimization". *Materials*, 13(1), 14 (2020). [IF: 3.057. Q2].

M.T. NOMAN, M. PETRU, "Effect of Sonication and Nano TiO₂ on Thermophysiological Comfort Properties of Woven Fabrics". *ACS OMEGA*, 5, (2020), 11481-11490. [IF: 2.870. Q2].

T. YANG, L. HU, X. XIONG, M. PETRU, M.T. NOMAN, R. MISHRA, J. MILITKY, "A review of sound absorption properties of natural fibers". *Sustainability*, 12, (2020), 8477, <https://doi.org/10.3390/su12208477>. [IF: 2.576. Q2].

M.T. NOMAN, M.A. ASHRAF, H. JAMSHAD, A. ALI, "A novel green stabilization of TiO₂ nanoparticles onto cotton". *Fibers and Polymers*, 19(11), (2018), 2268-2277. [IF: 1.797. Q1].

M.T. NOMAN, J. MILITKY, J. WIENER, J. SASKOVA, M.A. ASHRAF, H. JAMSHAD, M. AZEEM, "Sonochemical synthesis of highly crystalline photocatalyst for industrial applications". *Ultrasonics*, 83, (2018), 203-213. [IF: 3.065. Q2].

M.T. NOMAN, M.A. ASHRAF, A. ALI, "Synthesis and Applications of Nano TiO₂: A Review". *Environmental Science and Pollution Research*, 26, (2019), 3262-3291. [IF: 3.056. Q2].

T. MANSOOR, L. HES, V. BAJZIK, M.T. NOMAN, "Novel Method on Thermal Resistance Prediction and Thermo-Physiological Comfort of Socks in Wet State". *Textile Research Journal*, 90, (17-18), 1987-2006. [IF: 1.926. Q1].

M. AZEEM, M.T. NOMAN, J. WIENER, J. MILITKY, "Designing and Efficiency of Fog Collectors: A Review". *Environmental Technology and Innovation*, 20, (2020), 101169. <https://doi.org/10.1016/j.eti.2020.101169>. [IF: 3.356. Q2].

M.A. ASHRAF, J. WIENER, A. FAROOQ, J. SASKOVA, M.T. NOMAN, "Development of Maghemite Glass Fibre Nanocomposite for Adsorptive Removal of Methylene Blue". *Fibers and Polymers*, 19(8), (2018), 1735-1746. [IF: 1.797. Q1].

M. AZEEM, L. HES, J. WIENER, M.T. NOMAN, A. ALI, T. MANSOOR, "Comfort Properties of Nano-Filament Polyester Fabrics: Thermo-Physiological Evaluation". *Industria Textila*, 69(4), (2018), 315-321. [IF: 0.504. Q3].

H. JAMSHAD, R. MISHRA, J. MILITKY, M.T. NOMAN, "Interfacial Performance and Durability of Textile Reinforced Concrete". *Journal of the Textile Institute*, 109, (2017), 879-890. [IF: 1.239. Q2].

A. ALI, N.H.A. NGUYEN, V. BAHETI, M. ASHRAF, J. MILITKY, T. MANSOOR, M.T. NOMAN, S. AHMAD, "Electrical conductivity and physiological comfort of silver coated cotton fabrics". *Journal of the Textile Institute*, 109, (2017), 620-628. [IF: 1.239. Q2].

H. JAMSHAD, R. MISHRA, J. MILITKY, M.T. NOMAN, M. VENKATARAMAN, V. ARUMUGAM, T. YANG, X. XIONG, "Performance characterization of basalt hybrid woven fabric reinforced concrete". *Vlákna a Textil*, 24(1), (2017), 46-52.

H. JAMSHAD, R. MISHRA, J. MILITKY, M. PECHOCIKOVA, M.T. NOMAN, "Mechanical, thermal and interfacial properties of green composites from basalt and hybrid woven fabrics". *Fibers and Polymers*, 17, (2016), 1675-1686. [IF: 1.797. Q1].

GRANTS AND PROJECTS

Electromobility: Ministry of Education, Youth and Sports of the Czech Republic and the European Union (European Structural and Investment Funds - Operational Programme Research, Development and Education) in the frames of the project "Modular platform for autonomous chassis of specialized electric vehicles for freight and equipment transportation", Reg. No. CZ.02.1.01/0.0/0.0/16_025/0007293. Principal investigator TUL: Assoc. prof. Dr. Ing. Michal Petru.

TACR GAMA 2: Functional sample anti-viral combined air purifier for community and health tents and shelters. Keynote member TUL: MSc. Tayyab Noman, Ph.D.

MPO TRIO FV40207: Modularity of agricultural machinery with the support of advanced production technologies, 2019-2022, Reg. No. FV40207. Principal investigator TUL: Assoc. prof. Dr. Ing. Michal Petru.

INTERNSHIPS/MOBILITY

2020 USA, UC Davis, UC Santa Cruz

2018 Sweden, University of Borås

2016 Pakistan, University of Agriculture, Faisalabad, Pakistan.