**Tanveer**

**Tanveer.317563@2freemail.com**

Research Interest

Synthesis of carbon Fibers, Wood Composites, Wood Furniture, Wood Plastic Composites, Natural Fiber composites, Bio-Adhesives, Biomass, Nano-Cellulose, Lignin Chemistry, Polymer Synthetic Chemistry, Polymer Nano-composites, Advance Materials, Superabsorbent composites, Polymer Materials and Engineering.

Education

Doctor of Philosophy (PhD) in Chemical Engineering (University Malaysia Pahang)

(2012 - 2015)

Thesis Title: Synthesis of carbon material via pyrolysis and hydrothermal carbonization of rubber wood and its effect on thermal and mechanical properties of medium density fibreboard.

Post-Graduation Diploma in Business Administration Human Resource Management (Symbiosis, Pune, India)

(2011)

**Master of Science (M.Sc.) Wood Science and Technology (Forest Research Institute University, India)**

*(2010)*

**Bachelor of Science (B.Sc.) Forestry (College of Forestry, Dapoli; Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth Dapoli Maharashtra, India)**

*(2008)*

**Certificate in Information Technology (Maharashtra State Board of Technical Education, Mumbai, India)**

*(2008)*

Computer Certification Course with 92%

**National Eligibility Test (NET) Eligibility for Lectureship/Assistant Professorship**

*(2012)*

Qualified

Work Experience

Postdoc Researcher, Lab of Adhesion and Bio-Composites, Program in Environemntal Materials Science, College of Agriculture and Life Sciences, Seoul National University, South Korea.

(June 2017 – Till Date)

* Synthesis of Carbon Fibers using Hydrothermal Carbonization and Electro-Spinning of Woody Biomass and their effect on thermal and mechanical properties of wood composites
* Investigation on the behaviour of carbon fibers in composites
* Scale up a nano/micro based composites
* Prepare proposals for research grants
* Assist the PhD and Master’s Degree Students

Quality Assurance Manager, Sujan Art Manufacturer and Supplier of Handicrafted Wooden Furniture, Jodhpur, Rajasthan, India.

(December 2015 – February 2017)

* Determining, negotiating and agreeing on in-house quality procedures, standards and specifications.
* Specifying quality requirements of raw materials with suppliers investigating and setting standards for quality and health and safety.
* Ensuring that manufacturing processes comply with standards at both national and international level.
* Working with operating staff to establish procedures, standards, systems and procedures.
* Writing management and technical reports and customers’ charters determining training needs.
* Acting as a catalyst for change and improvement in performance and quality directing objectives to maximize profitability.
* Recording, analyzing and distributing statistical information.
* Monitoring performance, supervising technical or laboratory staff.

Research Assistant, University Malaysia Pahang, Malaysia.

(July 2015 – September2015)

* Synthesis of functional nano/micro Carbon materials by pyrolysis and hydrothermal methods
* Structural, Morphological and Electrochemical characterization
* Investigation on the behaviour of carbonaceous superabsorbent composites (SPC) in soil environment
* Scale up a nano/micro based wood composites
* Prepare proposals for research grants
* Assist the graduate students

Researcher and Teaching Assistant, University Malaysia Pahang, Malaysia

(May 2012-June 2015)

* The research on carbon material synthesis for the development of wood composites
* To established an understanding on factors behind the properties required for a high performing wood composites such as high internal bonding, high modulus of rupture and low water absorption
* To achieved in low cost and environmental friendly nano/micro carbon materials were synthesized by pyrolysis and hydrothermal methods.
* This achievement opens up a new route to effectively combine different synthesized carbon material for wood composite application
* Conducted theory and practical classes for undergraduate and diploma students
* Organizing committee member ICBBVAP 2012

Achievements

**Patent**

* A. Gupta, Tanveer Ahmed Khan, Rosli Mohd Yunus, Saidatul Shima Jamari, and Rajan Jose, "A Method for Increasing Thermal and Mechanical Properties of Wood Composite"

**Books**

Currently writing two chapters for the Book “Failure analysis in Bio composites, Fibre reinforced composites and Hybrid composites” Publishing in January 2018

**Publications**

* Tanveer Ahmed Khan, Arun Gupta, Saidatul Shima, Rajan Jose, Mohammed Nasir, Anuj Kumar. “Synthesis and Characterization of Carbon Fibers and their Application in Wood Composites," Bio-Resources 8(3) (2013) 4171-4184.
* Anuj Kumar, Arun Gupta, K V Sharma, Mohammed Nasir, Ahmed Tanveer, Khan. ‘‘Influence of activated charcoal as filler on the properties of wood composites,” International Journal of Adhesion and Adhesives 46 (2013) 34–39.
* Mohammed Nasir, Arun Gupta, M D H Beg, Gek Kee Chua, Mohammad Jawaid, Anuj Kumar, Tanveer Ahmed Khan. “Fabricating Eco-Friendly Binderless Fiberboard from Laccase-Treated Rubber Wood Fiber,’’ Bio-Resources 8(3) (2013) 3599-3608.
* J.S. Saidatul, H.R. Jonathan, K.A. Tanveer, S.M.F. “Sharifah. Solid Biofuels from Hydrothermal Carbonization: A Comparative Study on Woody and Non-woody Biomass Material,” Australian Journal of Basic and Applied Sciences 8(4) (2014) 823-828.
* Sweeta Akbari, Arun Gupta, Tanveer Ahmed Khan, Saidatul Shima Jamari, Norlirabiatuladawiyah Binti Che Ani, Pradeep Poddar. “Synthesis and Characterization of Medium Density Fiber board by using mixture of Natural Rubber Latex and Starch as an Adhesive,” Journal of the Indian Academy of Wood Science DOI 10.1007/s13196-014-0124-0.
* Tanveer Ahmed Khan, Arun Gupta, S. S. Jamari, Pradeep Poddar. “Synthesis of Carbon Nano Fibers: Fabrication and Characterization of Carbon Nano Fibers/urea-formaldehyde resin Asian Journal of Applied Sciences 2(6) 2014.
* Pradeep Kumar Poddar, ,Arun Gupta, Dr Shima Saidatul Jamari, Ng Siew Kim, Tanveer Ahmed Khan, Swati Sharma. "Synthesis of nanocellulose from rubberwood fibers via ultrasonication combined with enzymatic and chemical pretreatments," Asian Journal of Applied Sciences 2(6) 2015.
* Tanveer Ahmed Khan, Arun Gupta, Saidatul Shima, Rajan Jose. "Examination of selected Synthesis parameters for composite adhesive-type Urea-Formaldehyde/activated carbon adhesives," International Journal of Engineering Technology and Sciences (IJETS) 3(1) June 2015 DOI:
* Mohammed Nasir, Arun Gupta, Othman Sulaiman, Rokiah Hashim, Mohammad Jawaid, Tanveer Ahmed Khan, Mohd Asim. “Natural fiber improvement by laccase; optimization, characterization and application in medium density fibreboard,” Journal of Natural Fibers March 2016
* Munirah Ezzah Tuan Zakaria, Norlirabiatuladawiyah Binti Che Ani, Saidatul Shima Binti Jamari, Suriati Ghazali, Tanveer Ahmed Khan, Mohd Faizal Ali. “Effect of Mixing towards the Production of Carbonaceous Kenaf Fiber via Hydrothermal Carbonization Process,” Australian Journal of Basic and Applied Sciences December 2016
* Tanveer Ahmed Khan, Arun Gupta, Saidatul Shima, Rajan Jose, Mohammed Nasir. "Synthesis of carbonaceous material by pyrolysis of rubber wood fiber: Influence of carbonaceous material on thermal and mechanical properties of Particle Board," Journal of Industrial and Engineering Chemistry (Under Review).

**Conference Proceedings**

* Tanveer Ahmed Khan, Y.M. Dubey, and Vimal Kothiyal “Effect of Holes on Bending Strength of Cinnanomum camphora” National seminar on "Advances in wood science and technology research: recent trends, future challenges and opportunities on 9-10 March 2011 (India).
* Tanveer Ahmed Khan, Y.M. Dubey, and Vimal Kothiyal “X-ray Densitometer and its Application in wood science” Ist Indian Forest Congress on 22-25 November 2011 (India).
* Arun Gupta, Mohammad Nasir, M D H Beg, Gek Kee Chua, Anuj Kumar, Tanveer Ahmed Khan “Use of Lignin-Soy protein as an adhesive for making wood composites” 66th International Convention at Washington, DC on June 3-5, 2012.
* Arun Gupta, Anuj Kumar, M D H Beg, Gek Kee Chua, Mohammad Nasir, Tanveer Ahmed Khan “Use of Aluminum Oxide Nano particles to enhance Thermal conductivity of wood composites during hot pressing” 66th International Convention at Washington, DC on June 3-5, 2012.
* Tanveer Ahmed Khan, Arun Gupta, S.S. Jamari and R. Jose “Synthesis and Application of Carbon Fibers in Wood Composite to enhance the thermal and mechanical properties” International Conference on Biomass for Biofuels and Value-Added Products (ICBBVAP 2012) on October 23-24, 2012 (Malaysia)
* Tanveer Ahmed Khan, Arun Gupta, S.S. Jamari and R. Jose “Synthesis of Activated carbon fibers: Influence of thermal conductive activated nano carbon fibers on the physical properties of MDF” The 5th International Conference on Postgraduate education (ICPE-5 2012), Universiti Technology Malaysia, Johor 6-7 December 2012 (Malaysia).
* Tanveer Ahmed Khan, Arun Gupta, S.S. Jamari and Sumit Manohar Yadav “Synthesis of carbon nano fibers: Fabrication and characterization of carbon nano fibers/Urea-Formaldehyde resin” Global Civil Engineering and Applied Science Conference on 21-23 November 2014 (Taiwan).
* Tanveer Ahmed Khan, Arun Gupta, S.S. Jamari and R. Jose “Synthesis of activated carbon particles: Examination of selected Synthesis parameters for composite adhesive-type Urea-Formaldehyde/activated carbon adhesives” National Conference for Postgraduate Research on 24-25 January 2015 (Malaysia).
* Norlirabiatuladawiyah Binti Che Ani, Saidatul Shima Binti Jamari\*, Tanveer Ahmed Khan “Investigation of the Elemental Analysis of Carbonaceous Kenaf Fiber from HTC Process” National Conference for Postgraduate Research on 24-25 January 2015 (Malaysia).

**Awards and Medals**

* "Synthesis and Application of Carbon Fibers in Wood Composite to Enhance the Thermal and Mechanical Properties", **Silver Medal**, Creation, Innovation, Technology and Research Exposition (CITREX) 2013”.
* "Nano Wood Composite using Carbon Fibers" **Silver medal**, Bio Innovation Awards, Malaysia 2013
* "Innovative NR Latex based Bio adhesive for Wood Composite Industry," **Gold Medals**, Malaysian Technology Expo 2014.
* "Nano Particle Boards by using Carbon Nano Fiber as Filler to Enhance its Thermal and Mechanical Properties," **Silver Medal**, Creation, Innovation, Technology and Research Exposition (CITREX) 2014.
* "Nano Particle Boards by using Carbon Nano Fiber as Filler to Enhance its Thermal and Mechanical Properties", **Outstanding Achievement Award and Gold Medal**, International Innovation Festival (INNOFEST), Melaka, Malaysia 2014.
* "Nano Particle Boards by using Carbon Nano Fiber as Filler to Enhance its Thermal and Mechanical Properties", **Gold Medal**, International Youth Invention Contest (IYIC), Korean University Invention Association 2014.
* "Synthesis of Low Cost Carbon Fiber using HTC Method for Multiple Applications," **Silver Medal**, Creation, Innovation, Technology and Research Exposition (CITREX) 2015.
* “Novel Wood Composite with Higher Fire Retardancy by Using Multi-Walled Carbon Nanotubes (MWCNTs)," **Silver Medal**, International Engineering Invention and Innovation Exhibition (i-ENVEX) 2015.

Technical Experience

* Six month Diploma in Computer Application and Statistical Analysis
* Expert in using softwares like Design Expert for optimization, Origin Pro, Match, Microsoft office, MatLab, etc