Noureddine ABIDI, Ph.D.
Associate Dean for Research, Davis College of Agricultural Sciences & Natural Resources
Leidigh Endowed Professor, Department of Plant and Soil Science
Director, Fiber and Biopolymer Research Institute
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Summary

Education and professional experience:

Dr. Abidi holds a "Habilitation à Diriger les Recherches" from the University of Haute Alsace in France (a degree necessary to become a full professor in Europe) and a Ph.D. from the University of Montpellier II in France. He is the Leidigh-endowed Professor in Biopolymers in the Department of Plant and Soil Science, Managing Director of the Fiber and Biopolymer Research Institute, and Associate Dean for Research, Davis College of Agricultural Sciences and Natural Resources at Texas Tech University.

Research objective:

The overarching goal of Dr. Abidi's research is to create bio-based materials from renewable resources. He uses biodegradable cotton cellulose and chitin for various industrial applications that address important societal challenges, such as climate change and environmental sustainability, and spur the transition towards a bioeconomy and highly desired microplastics-free world.

Publications:

Dr. Abidi has generated 153 refereed journal publications, 4 books, 20 book chapters, more than 183 presentations, and 11 patents/patent applications. His h-index is 45, his i10-index is 128, and his total citations are 8314 (Source: Google Scholar as of 1/28/2025).

Awards/Honors:

Dr. Abidi received several awards: Fulbright Award, American Chemical Society Cellulose Division Fellow award, TTU Chancellor's Council Distinguished Research Award, TTU President's Excellence in Commercialization Award, TTU Integrated Scholar Award, TTU Outstanding Research Award, TTU President's mid-career Award, Discover Natural Fibers International Innovation Award, CASNR Research Award, CASNR Student Advising Award, and TTU Chancellor's Award of Excellence. Dr. Abidi has been TTU's nominee for the last 3 years for the O'Donnell Award in Sciences - The Academy of Medicine, Engineering, & Science of Texas (2021, 2022, 2023, 2024). He was recently inducted as a Senior Member of the National Academy of Inventors (June 2024).

Grants:

Dr. Abidi served as PI or co-PI on funded research grants totaling more than $22 million (amount credited more than $8.9 million). In addition, he supervises research and testing services at the FBRI laboratories, which generate about $1.4 million/year.

Teaching and Students Advising:

Dr. Abidi developed and teaches two graduate courses: PSS5371 "Structure and Functionalization of Cotton Fibers" and PSS5373 "Biopolymers and Bioproducts." He also participates in team teaching of PSS5370 "U.S. & Global Cotton Fiber-Textiles Industries." He is/was an advisor to 24 Masters, 12 PhD.s, and 10 postdoctoral fellows.

Leadership:

Dr. Abidi has been Director of the FBI since January 1, 2017. FBRI has four major research laboratories: Ginning, Fiber testing, Processing/spinning, and Biopolymers Research. His responsibilities include managing and overseeing the facility, human resources budget, and research and testing services for researchers and outside clientele. FBRI has 16 staff members, six faculty members, and four postdoctoral scientists. In addition, about 20 graduate students are involved in the research regularly. FBRI has an operating budget of $1.5 million/year. It generates about $1.4 million/year in research grants and service contracts.

Dr. Abidi is the Associate Dean for Research for Davis College of Agricultural Sciences and Natural Resources. The college has over 135 tenure-track faculty, 2,747 undergraduate and 519 graduate students, and numerous other staff employees. It has generated approximately $19 million in extramural research funding.

Professional and Institutional Service:

Dr. Abidi serves as Associate Editor of the J. of Cotton Science. He served as a Secretary and Alternate Counselor of the Division of Cellulose & Renewable Materials/American Chemical Society. He represents the American Chemical Society Cellulose & Renewable Materials Division to the International Carbohydrate Organization. He is a member of the American Chemical Society, the Fiber Society, the ASTM International, the American Association of Textile Chemists and Colorists, and the American Association for the Advancement of Science. Dr. Abidi served as the Graduate Program Leader for the Plant and Soil Science Department. He chairs or serves on several third-year faculty review committees. He chaired the International Activities Committee at the college level and served on the College Tenure & Promotion Committee. At the institutional level, he served as a co-chair of the Strategic Enrollment Planning 2.0 for Interdisciplinary Studies, and he is serving as a member of the Strategic Enrollment Planning Council. He is a member of the TTU Intellectual Property Review Committee.

Education

- **Education**

1990:	**DEUG A (Diploma of Higher Education). Physics and Chemistry.** University of Med. I, Faculty of Sciences Oujda (Morocco).
1991:	**B.S. Chemistry.** University of Med I, Faculty of Sciences Oujda (Morocco).
1992:	**M.S. Chemistry (Physical Chemistry, Organic Chemistry).** University of Med I, Faculty of Sciences Oujda (Morocco).
1993:	**D.E.A. (Diploma of Applied Advanced Studies). Polymers, Interfaces, and Amorphous States.** University of Montpellier II (France).
1996:	**Ph.D. Theoretical, Physical, and Analytical Chemistry.** University of Montpellier II (France).
2007:	**H.D.R Habilitation à Diriger les Recherches** (*accreditation to supervise research*, *French Diploma required to be Full Professor in French Universities)*. **Engineering Science.** University of Haute Alsace, Mulhouse (France).

- **Languages**

Arabic: Native Language
French: Fluent
English: Fluent

Professional Experience

1/2024-present:	Associate Dean for Research, Davis College of Agricultural Sciences and Natural Resources.
6/2020-present:	U.S. National Representative for the International Carbohydrate Organization.
9/2018-present:	Leidigh Endowed Professor, Department of Plant and Soil Science, Texas Tech University, Lubbock, TX.
1/2017-present:	Managing Director, Fiber and Biopolymer Research Institute, Texas Tech University, Lubbock, TX.
1/2017-8/2018:	Leidigh Endowed Associate Professor, Department of Plant and Soil Science, Texas Tech University, Lubbock, TX.
1/2016-12/2020:	Alternate Councilor for the Cellulose & Renewable Materials Division, American Chemical Society.
1/2016-6/2016:	Fulbright US. Scholar, Ghent University, Belgium.
9/2014-9/2015:	Graduate Program Leader, Department of Plant and Soil Science, Texas Tech University, Lubbock, TX.
9/2014-12/2016:	Associate Director, Fiber and Biopolymer Research Institute, Texas Tech University, Lubbock, TX.

9/2012-8/2018:	Associate Professor, Department of Plant and Soil Science, Texas Tech University, Lubbock, TX.
1/2010-12/2012:	Secretary of the Cellulose & Renewable Materials Division, American Chemical Society.
2/2010-12/2013:	Anselme Payen Award Judging Committee of the Division of Cellulose and Renewable Materials, American Chemical Society.
9/2009-8/2012:	Assistant Professor, Department of Plant and Soil Science, Texas Tech University, Lubbock, TX.
9/2006-8/2009:	Research Assistant Professor, Department of Plant and Soil Science, Texas Tech University, Lubbock, TX.
9/2000-8/2008:	Head of Biopolymer Research, Fiber and Biopolymer Research Institute (formerly International Textile Center), Texas Tech University, Lubbock, TX.
12/2007-Present:	Member Graduate Faculty, University of Haute-Alsace, France.
9/2000-8/2008:	Head of Finishes/Chemical Research, International Textile Center, Texas Tech University, Lubbock, TX.
9/2006-Present:	Member Graduate Faculty, Department of Plant and Soil Science Texas Tech University, Lubbock, TX.
9/2000-8/2004:	Adjunct Graduate Faculty, Department of Plant and Soil Science, Texas Tech University, Lubbock, TX.
9/1999-8/2000:	Research Associate, International Textile Center, Texas Tech University, Lubbock, TX.
4/1998-7/1999:	Postdoctoral Research Fellow, Materials and Membrane Processes Laboratory, National School of Chemical Engineering of Montpellier, Montpellier (France).
1/1997-3/1998:	Postdoctoral Research Fellow, Laboratory of Physical Chemistry of Condensed Matter, University of Montpellier II, Montpellier (France).
10/1993-10/1996:	Research Assistant, Laboratory of Physical Chemistry of Condensed Matter, University of Montpellier II, Montpellier (France).
1/1993-7/1993:	Research Assistant, Laboratory of RAMAN Spectroscopy, University of Montpellier II, Montpellier (France).

Professional Development

1. Attend the American Chemical Society Leadership Institute, Dallas, January 2012.
2. Attend the Texas Tech University President's Leadership Institute, October 2016 – March 2017.

Innovation and Entrepreneurship

1. Participated in the National Science Foundation I-Corps Regional Program – Team: Fiber for Construction Industry (M. Hettiwatte, S. Senadheera, P. Jayawickrama, N. Abidi). February 19th – March 9th, 2018.
2. Participated in the National Science Foundation I-Corps Regional Program – Team CellMat- Low-grade cotton-based materials (S. Acharya, Y. Hu, N. Abidi). February 11th – March 8th, 2019.
3. Participated in the National Science Foundation I-Corps National Program - The New England Regional Innovation Node – Team: Cell-Mat-High performance sustainable solution to plastic-based materials (S. Acharya, P. Parajuli, N. Abidi). April 1st - May 15th, 2020.
4. Participated in the National Science Foundation I-Corps Regional Program – Team: NanoChitSolutions (S. Rumi, J. Shamshina, N. Abidi). February 11th – March 4th, 2022.
5. Participated in the National Science Foundation I-Corps Regional Program – Team: New American Fabric (P. Tran, N. Bergfeld, T. Reid, N. Abidi). February 11th – March 4th, 2022.
   A startup company was created: New American Fabric.
   Received the Prototype Fund ($25,000) from Texas Tech University Innovation Hub. Accelerator Fund (25K), Presidents' Innovation Startup Award ($25K).
6. Participated in the National Science Foundation I-Corps National Program - Upstate New Work Winter – Team: NanoChit: Next generation of green and sustainable biofilers (S. Rumi, N. Uddin, J. Shamshina, N. Abidi). January 17th - March 3rd, 2023.
7. Participated in the TTU Accelerator Program Team: New American Fabric (P. Tran, N. Bergfeld, T. Reid, N. Abidi). 2023 - 2024.

Leadership Experience at Texas Tech University

Fiber and Biopolymer Research Institute (FBRI): In addition to his function as a professor in Plant and Soil Science, Dr. Abidi has been serving as a Director of the FBRI since January 1, 2017. He served as associate director of the FBRI between September 2014 and December 2016. FBRI is located on a dedicated campus with almost 30 acres of land and a building with 100,000 square feet of conditioned space. FBRI has four major Laboratories: Ginning, Fiber testing, Processing/spinning, and Biopolymers Research. His responsibilities include management oversight of the facility, human resources (Sixteen staff members, six faculty members, and four postdoctoral scientists), budget, research, and testing services for researchers and outside clientele. In addition, at least 20 graduate students/year are involved in the research regularly. FBRI has an operating budget of ~ $1.5 million. It generates about $1.4 million in research grants and service contracts.

Dr. Abidi is leading a strategic research initiative funded by Texas Tech University to develop sustainable bioproduct research at the Fiber and Biopolymer Research Institute. This initiative includes hiring three faculty members and graduate students and building a research laboratory to transform biopolymers into advanced bioproducts.

Davis College of Agricultural Sciences and Natural Resources: Dr. Abidi is Associate Dean for Research. The college has over 135 tenure-track faculty, 2,747 undergraduate and 519 graduate students, and numerous other staff employees. Davis College has generated approximately $19 million in extramural research funding and has about $26 million in research expenditure.

Honors and Awards

- **Honors:**
  1. CASNR Research Award nominee, 2011.
  2. CASNR Chancellor's Council Distinguished Research Award nominee, 2012.
  3. CASNR Barnie E. Rushing, Jr. Faculty Distinguished Research Award nominee, 2012.
  4. Finalist for AAAS-Lemelson Ambassadors, 2017.
  5. President's Excellence in Commercialization Award nominee, 2018.
  6. Texas Tech University nominee for the O'Donnell Award in Sciences (The Academy of Medicine, Engineering, & Science of Texas), 2020.
  7. President's Excellence in Commercialization Award nominee, 2021.
  8. Texas Tech University nominee for the O'Donnell Award in Sciences (The Academy of Medicine, Engineering, & Science of Texas), 2022.
  9. President's Excellence in Commercialization Award nominee, 2023.
  10. Texas Tech University nominee for the O'Donnell Award in Sciences (The Academy of Medicine, Engineering, & Science of Texas), 2024.
  11. Texas Tech University nominee for the O'Donnell Award in Sciences (The Academy of Medicine, Engineering, & Science of Texas), 2025.
  12. Texas Tech University nominee for Senior Member of the National Academy of Inventors, 2024.
- **Awards:**
  1. Texas Tech University Chancellor's Award of Excellence, 2002.
  2. CASNR Research Award, 2012.
  3. Texas Tech University Chancellor's Council Distinguished Research Award (Texas Tech University's highest faculty honors), 2012.
  4. Texas Tech University Outstanding Research Award, 2013.
  5. Texas Tech University President's Mid-Career Award, 2015.
  6. The Association for Women in Communications Award, Lubbock Chapter, 2015.
  7. Fulbright US Scholar Award, 2016.
  8. Texas Tech University Integrated Scholar Award, 2017.
  9. Leidigh Endowed Associate Professor, 2017.
  10. Discover Natural Fibers Initiative Innovation Award (International Award), 2020.
  11. CASNR Student Advising Award, 2020.
  12. American Chemical Society Cellulose and Renewable Materials Division Fellow (International Award), 2020.
  13. Texas Tech University President's Excellence in Commercialization Award, 2021.
  14. National Academy of Inventors Senior Member, 2024.

Patents

1. E. Hequet and **N. Abidi**, 2003. Cotton Stickiness Evaluation by Means of Multi-Temperature Testing. US 6,520,007 B2, issued February 18, 2003.

2. R. Salghi, H. Othman, Y. Hu, **N. Abidi**, S. Jodeh, 2018. Cellulose à partir des déchets agricoles d'Argan "tourteaux d'argan". MA 38579 B1 (CI International D21C 3/20), issued October 30, 2018.
3. **N. Abidi** and Y. Hu, 2019. Cotton fiber dissolution and regeneration and 3D printing of cellulose-based conductive composites. US 10,311,993 B2, issued June 4, 2019.
4. **N. Abidi**, 2021. Method of making cellulose bioplastics. PCT Application # PCT/US2021/033301, filed May 20, 2021. International publication number WO 2021/247245 A1, December 9, 2021.
5. **N. Abidi**, E. Quitevis, V. Thalangamaarachchige, N. Dissanayake, 2020. Dissolution of cellulose in ionic liquids. Provisional patent # 16/961,996 filed July 14, 2020, publication # US 2021/0079593 A1, March 18, 2021.
6. J.L. Shamshina, **N. Abidi**, 2022. Preparation of chitin nanocrystals from crustacean biomass using ionic liquids. PCT Application # PCT/US2022/045177, filed September 29, 2022. International publication # WO 2023/059499 A. US application # 18/626,439.
7. T. Reid, **N. Abidi**, N. Bergfeld, P. Tran, 2022. Selenium-containing antimicrobial compound as a reactive dye and cross-linking treatment for textile applications. PCT Application # PCT/US2022/045507, filed October 3, 2022, published April 13, 2023, WO2023/059540 A1. US application #18/697,938.
8. **N. Abidi**, S. Liyanage. Guar and guar-cellulose composite materials. Provisional Patent 63/478,273 (TECH2022-037) filed 01-03-2023. PCT/US2024/010036.
9. J.L. Shamshina, **N. Abidi**. A process for a complete delignification of hemp bast fibers using microwave heating in deep eutectic solvents. Provisional Patent 63/456,184 (TECH2022-080) filed 03-31-2023.
10. **N. Abidi.** Method of making cellulose bioplastics. CN 116249614 A. Publication date June 09, 2023.
11. T. Reid, **N. Abidi**, N. Bergfeld, P. Tran. Organo-selenium compounds that confer antimicrobial properties and can attach to cellulose-based fibers and textiles. Provisional Patent 63/519,578 filed August 15, 2023.

Publications

- **Books: Total career: 4**
  1. E. Hequet, **N. Abidi**. 2006. Sticky Cotton Measurements and Fiber Processing, Texas Tech University Press, ISBN 10: 0-89672-590-1.
  2. S. Gordon, **N. Abidi**. 2017. Cotton Fibers, Characteristics, Uses, and Performance (ISBN 978-1-53610-913-9, LCCN 2017006949 (ebook) Nova Publisher.
  3. **N. Abidi**. 2021. FTIR Microspectroscopy – Selected Emerging Applications. ISBN 978-3-030-84424-0, ISBN 978-3-030-84424-4 (eBook), Springer Nature.
  4. **N. Abidi,** J.L. Shamshina. 2023. Properties and applications of ionic liquids. Nova Science Publishers, ISBN: 979-8-88697-635-9.

- **Book chapters: Total career: 20**
  1. E. Hequet, **N. Abidi**, G. Gamble, M. Watson. **2007**. Chapter 13: Measurement of Stickiness. *In:* Sticky Cotton- Causes, Impacts, and Prevention. Eds. E. Hequet, T.J.

Hennebery, and R.L. Nichols. United States Department of Agriculture, Agricultural Research Service. Technical Bulletin 1915 (invited). pp. 166-178.

2. E. Hequet, **N. Abidi**, M. Watson, D. McAlister. **2007**. Chapter 14: Fiber Processing. *In:* Sticky Cotton- Causes, Impacts, and Prevention. Eds. E. Hequet, T.J. Hennebery, and R.L. Nichols. United States Department of Agriculture, Agricultural Research Service. Technical Bulletin 1915. June 2007. (invited)pp. 179-193.
3. **N. Abidi**. **2009**. Chapter 4: Surface Grafting. *In:* Surface Modification of Textiles. Ed. Qufu Wei. Woodhead Publishing, ISBN: 978-1-84569-7 (invited). pp. 91-107.
4. **N. Abidi**. **2011**. Chapter 6: Fourier Transform Infrared Spectroscopy: Developments, Techniques and Applications. *In:* Fourier Transform Infrared Spectroscopy. Ed. Oliver J. Rees. Nova Science Publishers, ISBN: 978-1-61668-835-6 (invited). pp. 139-158.
5. **N. Abidi**, E. Hequet, L. Cabrales*. **2011**. Chapter 5: Applications of Fourier Transform Infrared Spectroscopy to Study Cotton Fibers. *In:* Fourier Transforms – New Analytical Approaches and FTIR Strategies Practical skills. Ed. G.S. Nikolic, INTECH Open Access Publisher, ISBN: 978-953-308-207-3 (invited). pp. 89-114.
6. **N. Abidi,** P. Aminayi*, L. Cabrales*, E. Hequet. **2012**. Chapter 8: Super-hydrophobic cotton fabric prepared using Nanoparticles and Molecular Vapor Deposition Methods. *In:* Functional Materials from Renewable Sources. Eds. F. Leibner and T. Rosenau, *American Chemical Society Book Series,* ISBN: 978-0-8412-2788-0 (invited). pp. 149-165.
7. **N. Abidi,** S. Liyanage*, D. Auld, L. Norman, K. Grover, S. Augadi, S. Singla, C. Trostle. **2015**. Chapter 12: Challenges and Opportunities for Increasing Guar Production in the United States to Support Unconventional Oil and Gas Production. *In:* Hydraulic Fracturing Impacts and Technologies: A Multidisciplinary Perspectives. Eds. V. Uddameri, A. Morse, and K. Tindle. CRC Press. ISBN: 9781498721172 (invited). pp. 207-225.
8. **N. Abidi,** S. Liyanage*. **2015**. Chapter 13: Characterization of the Properties of Guar Gum to Improve Hydraulic Fracturing Efficiencies. *In:* Hydraulic Fracturing Impacts and Technologies: A Multidisciplinary Perspectives. Eds. V. Uddameri, A. Morse, and K. Tindle. CRC Press. ISBN: 9781498721172 (invited). pp. 227-250.
9. B. Kelly, **N. Abidi**, D. Ethridge, E. Hequet. **2015**. Fiber to Fabric. *In:* Cotton 2nd Edition. Eds. David D. Fang and Richard G. Percy. American Society of Agronomy, ISBN: 978-0-89118-626-7. (invited) Pp. 665-744.
10. **N. Abidi. 2015**. Textile Chemistry. Dictionary of Cotton. *In:* International Cotton Researchers Association and International Cotton Advisory Committee. ISBN: 9780970491817 (invited).
11. **N. Abidi**. 2017. Chapter 14: Dyeing of Cotton Fibers. *In:* Cotton Fibers, Uses and Performances. Eds. Stuart Gordon and Noureddine Abidi, Nova Publisher. (ISBN 978-1-53610-913-9, LCCN 2017006949 (ebook) (invited) Nova Publisher, pp 303-322.
12. R. Dassanayake¥, **N. Abidi**. **2017**. Chapter 10: Cellulose derived aerogels. *In:* Cotton Fibers, Uses and Performances. Eds. Stuart Gordon and Noureddine Abidi, Nova Publisher. ISBN 978-1-53610-913-9, LCCN 2017006949 (ebook) Nova Publisher, (invited) pp 207-230.
13. **N. Abidi**. **2018**. Chapter 5: Chemical properties of cotton fiber and chemical modification. *In*: Cotton Fiber: Physics, Chemistry, and Biology. Ed. David D. Fang, Springer-Nature. ISBN 978-3-030-00871-0 (invited). pp 95-115.

14. Y. Hu, R. Dassanayake[¥], S. Acharya[¥], **N. Abidi**. **2019**. Chapter 11: Cotton cellulose-derived hydrogels with tunable absorbability: Research advances and properties. *In*. Polymers and Polymeric Composites: A Reference Series. Volume 1 - Cellulose-based Superabsorbent Hydrogels. Md. Ibrahim H. Mondal (Ed.) Springer, ISBN 978-3-319-77829-7 (invited). pp 331-356.
15. R. Dassanayake[¥], S. Acharya[¥], **N. Abidi**. **2019**. Biopolymer-based materials from polysaccharides: Properties, processing, characterization and sorption applications. *In:* Advanced Sorption Process Applications. Serpil Edebali (Ed.) IntechOpen. ISBN: 978-1-78984-819-9 (invited). DOI: 10.5772/intechopen.80898**.**
16. S. Acharya[¥], P. Prakash*, R. Shaida*, **N. Abidi**. **2019.** Chapter 1: Cellulose Nanocrystals – Sources, Preparation, and Applications: Research Advances. *In:* Cellulose Nanocrystals: Advances in Research and Applications. Orlene Croteau (Ed.). Nova Publisher (invited), ISBN: 978-1-53616-747-4**.**
17. S. Liyanage[¥], P. Parajuli*, Md.T. Hossain*, H. Chaudhari*, **N. Abidi. 2021.** Chapter 11: Antimicrobials for protective clothing. *In:* Antimicrobial Textiles from Natural Resources. Md. Ibrahim H. Mondal (Ed.) Elsevier. ISBN: 978-0-12-821485-5 (print), ISBN: 978-0-12-821486-2 (online). pp. 349-376.
18. P. Parajuli*, S. Acharya[¥], S.R. Sultana*, Md.T. Hossain*, **N. Abidi. 2021.** Chapter 4: Regenerated cellulose in textiles: rayon, lyocell, modal, and other fibers. *In:* Fundamentals of Natural Fibers and Textiles. Md. Ibrahim H. Mondal (Ed.) Elsevier. ISBN: 978-0-12-821483-1 (print), ISBN: 978-0-12-821484-4 (online). pp 87-110.
19. V. Thalangamaarachchige, **N. Abidi**. **2023.** Chapter 11: Insight into cellulose dissolution mechanism in ionic liquids/cosolvent mixed systems. *In*: Properties and applications of ionic liquids. Nova Publisher. ISBN: 979-8-88697-635-9. pp 283-302.
20. P. Berton, **N. Abidi**, J.L. Shamshina. **2023**. Chapter 1: What are ionic liquids? Embracing the immensity. *In*: Properties and applications of ionic liquids. Nova Publisher. ISBN: 979-8-88697-635-9. pp 1-9.

- **Refereed Journals: Total career: 151**

**: indicates graduate student, [¥]: indicates Postdoc*

IF: Clarivate 2023 Journal Impact Factor

1996

1. **N. Abidi**, B. Deroide, J.V. Zanchetta, D. Bourret, H. Elmkami, P. Rumori. EPR study of Mn^{2+} doped silica glasses prepared by the sol-gel process. *Physics and Chemistry of Glasses 37(4) (**1996**) 149-154.*
2. H. Elmkami, B. Deroide, J.V. Zanchetta, P. Rumori, **N. Abidi**. Electron Paramagnetic Resonance Study of Mn^{2+} and Cu^{2+} spin probes in $(Ag_2S)_x(GeS_2)_{1-x}$ glasses. *J. Non-Crystalline Solids 208(1-2) (**1996**) 21-28. https://doi.org/10.1016/S0022-3093(96)00509-1. IF: 3.2.*
3. **N. Abidi**, B. Deroide, J.V. Zanchetta. Water complexed Mn^{2+} as a probe in the ESR study of silica glasses obtained by the sol-gel process. *Nukleonika 42(2) (**1997**) 505-514. IF: 0.7.*

1997

4. **N. Abidi**, B. Deroide, J.V. Zanchetta. The interaction of Mn^{2+} with porous silica xerogels and the hydration-dehydration processes in the xerogels. *J. Non-Crystalline Solids 221 (**1997**) 59-69. https://doi.org/10.1016/S0022-3093(97)00315-3. IF: 3.2.*
5. H. Elmkami, B. Deroide, **N. Abidi**, P. Rumori, J.V. Zanchetta. ESR study and dc conductivity of binary glasses of the system $(V_2O_5)_x(B_2O_3)_{1-x}$. *Physics and Chemistry of Glasses 38(3) (**1997**) 137-143. IF: 0.599*

1998

6. P. Rumori, B. Deroide, **N. Abidi**, H. Elmkami, J.V. Zanchetta. Mn^{2+} Electron Paramagnetic Resonance study of a sodium borosilicate glass prepared by the sol-gel method. *J. Physics & Chemistry of Solids 59(6-7) (**1998**) 959-967. https://doi.org/10.1016/S0022-3697(98)00003-1. IF: 4.3*
7. **N. Abidi**, B. Deroide, J.V. Zanchetta, LC. de Menorval, J.B. d'Espinose. ^{29}Si and ^{129}Xe NMR of Mn^{2+} doped silica xerogels. *J. Non-Crystalline Solids 231 (**1998**) 49-57. https://doi.org/10.1016/S0022-3093(98)00377-9. IF: 3.2.*
8. C. Kaewprasit, E. Hequet, **N. Abidi**, J-P. Gourlot. Application of methylene blue adsorption to cotton fiber surface area measurement: Part I methodology. *J. Cotton Science 2 (**1998**) 164-173. IF: 0.7*

1999

9. **N. Abidi,** B. Deroide, J.V. Zanchetta, M. Haddad. Interaction of manganese with interface sites in silica aerogels and partially densified aerogels. *Physics and Chemistry of Glasses 40(4) (**1999**) 193-198. IF: 0.599*

2002

10. E. Hequet, **N. Abidi**. Processing Sticky Cotton: Implication of Trehalulose in Residue Build up. *J. Cotton Science 6(1) (**2002**) 77-90. IF: 0.7*
11. E. Hequet, **N. Abidi**. High-Speed Stickiness Detector Measurement: Effect of Temperature Settings and Relative Humidity. *J. Cotton Science 6(1) (**2002**) 68-76. IF: 0.7*
12. H. Sari-Sarraf, E. Hequet, **N. Abidi**, Y. Dai, H.Y Chan. Automatic Measurement of Fabric Shrinkage. *American Association of Textile Chemists and Colorists Review 2(10) (**2002**) 20-23.*
13. H. Sari-Sarraf, E. Hequet, **N. Abidi**, Y. Dai, H.Y Chan, M.R. Jasso, B. Morris. Image processing algorithm for automatic assessment of fabric shrinkage. *Machine Vision Applications in Industrial Inspection X 4664 (**2002**) 89-96.*

2003

14. **N. Abidi**, E. Hequet. Analysis of sticky cotton defects by Scanning Electron Microscopy. *The Americas Microscopy and Analysis*, *7-8 (**2003**).*

2004

15. C. Turner, H. Sari-Sarraf, E. Hequet, **N. Abidi,** S. Lee. Preliminary Validation of a Fabric Smoothness Assessment System. *J. Electronic Imaging 13(3) (**2004**) 418-427. IF: 1.0*
16. **N. Abidi,** E. Hequet. Cotton Fabric Graft Copolymerization Using Microwave Plasma. I. Universal Attenuated Total Reflectance-FTIR Study. *J. Applied Polymer Science 93(1) (**2004**) 145-154. https://doi.org/10.1002/app.20442. IF: 2.7*

2005

17. **N. Abidi**, C. Turner, E. Hequet, H. Sari-Sarraf. Objective Evaluation of Durable Press Treatment and Fabric Smoothness Rating. *Textile Research J. 75(1) (**2005**) 19-29. https://doi.org/10.1177/004051750507500105. IF: 1.6*
18. **N. Abidi**, E. Hequet. HPLC of Insect Honeydew Deposits Collected from the High-Speed Stickiness Detector. *Textile Research J. 75(4) (**2005**) 362-370. https://doi.org/10.1177/0040517505053806. IF: 1.6*
19. **N. Abidi**, E. Hequet, C. Turner, H. Sari-Sarraf. FTIR Analysis of Crosslinked Cotton Using a ZnSe-Universal Attenuated Total Reflectance. *J. Applied Polymer Science 96(2) (**2005**) 392-399. https://doi.org/10.1002/app.21449. IF: 2.7*
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130. S. Acharya*, Y. Hu¥, **N. Abidi**. Insight into mild condition dissolution of high molecular weight cellulose in ionic liquid based solvent system. 253rd American Chemical Society Meeting and Exposition, April 2-6, 2017, San Francisco, CA.
131. P. Wansapura*, **N. Abidi**, R. Dassanayake¥, A. Hamood, P. Tran. Preparation of cellulose and chitin-CdTe quantum dots films and antibacterial effect on Staphylococcus aureus and Pseudomonas aeruginosa. 253rd American Chemical Society Meeting and Exposition, April 2-6, 2017, San Francisco, CA.

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133. S. Liyanage*, A. Bouyanfif*, L. Ramalingam, N. Moustaid-Moussa, **N. Abidi**. FTIR applications to study obesity-associated biochemical changes in adipose and liver tissues. 73rd Annual Southwest Regional Meeting American Chemical Society, October 29-November 1, 2017, Lubbock, TX.
134. A. Bouyanfif*, S. Liyanage*, J.E. Hewitt, S.A. Vanapalli, N. Moustaid-Moussa, E. Hequet, **N. Abidi**. FTIR imaging detects diet and genotype-dependent changes in chemical composition in wild type and mutant *C. elegans* strains. 73rd Annual Southwest Regional Meeting American Chemical Society, October 29-November 1, 2017, Lubbock, TX.
135. P. Parajuli*, S. Liyanage*, H. Rajakaruna, L. Ramalingam, N. Moustaid-Moussa, **N. Abidi.** Application of FTIR microspectroscopy imaging to study oxidative damage occurring in mouse white adipose tissue. 73rd Annual Southwest Regional Meeting American Chemical Society, October 29-November 1, 2017, Lubbock, TX.
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139. Y. Hu¥, S. Acharya*, **N. Abidi.** Promoting the dissolution of high molecular weight cellulose using low-concentration acetic acid. 73rd Annual Southwest Regional Meeting American Chemical Society, October 29-November 1, 2017, Lubbock, TX.
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141. N. Dissanayake*, V.D. Thalangamaarachchige¥, T. Jackson*, S. Troxell, Y. Zhang, E. Quitevis, **N. Abidi**. Cellulose dissolution in imidazolium-based ionic liquids: substituent effects. 73rd Annual Southwest Regional Meeting American Chemical Society, October 29-November 1, 2017, Lubbock, TX.
142. R.S. Dassanayake¥, C. Gunathilake, A.C. Dassanayake, M. Jaroniec, **N. Abidi**, Aerocellulose-derived activated carbon monoliths and Amidoxime-Functionalized Nanocrystalline Cellulose-Mesoporous Silica Composites for Carbon Dioxide Sorption at Low and Elevated Temperatures. 73rd Annual Southwest Regional Meeting American Chemical Society, October 29-November 1, 2017, Lubbock, TX.
143. S. Liyanage*, A. Bouyanfif*, L. Ramalingam, N. Moustaid-Moussa, **N. Abidi**. FTIR microspectroscopy imaging shows obesity-induced biochemical changes in white adipose tissues. 73rd Annual Southwest Regional Meeting American Chemical Society, October 29-November 1, 2017, Lubbock, TX (poster).

144. A. Bouyanfif*, S. Liyanage*, J.E. Hewitt, S.A. Vanapalli, N. Moustaid-Moussa, E. Hequet, **N. Abidi**. FTIR imaging detects diet and genotype-dependent changes in chemical composition in wild type and mutant *C. elegans* strains. 255th American Chemical Society National Meeting and Exposition, March 18-22, 2018, New Orleans, LA.
145. R.S. Dassanayake¥, C. Gunathilake, A.C. Dassanayake, M. Jaroniec, **N. Abidi.** Cellulose and cellulose composites for carbon dioxide soprtion at low and elevated temperatures. 255th American Chemical Society National Meeting and Exposition, March 18-22, 2018, New Orleans, LA.
146. P. Gonzales-Crus, S.V. Lale, Md. Jasim Uddin, S. Atwe, **N. Abidi**, H.S. Gill. Repurposing pollen grains for oral delivery of biologics. AICHE Annual Meeting, October 28-November 2, 2018, Pittsburgh, PA.
147. A. Bouyanfif*, S. Liyanage*, E. Hequet, N. Moustaid-Moussa, **N. Abidi**. Fourier Transform Infrared microspectroscopy imaging to study *C. elegans*. 257th American Chemical Society National Meeting and Exposition, March 30-April 4th, 2019, Orlando, FL.
148. N. Dissanayake*, V.D. Thalangamaarachchige¥, S. Troxell, E. Quitevis, **N. Abidi.** Cellulose dissolution in imidazolium-based ionic liquids: Effect of size and shape of cations. 257th American Chemical Society National Meeting and Exposition, March 30-April 4th, 2019, Orlando, FL.
149. T. Md Hossain*, S. Liyanage¥, **N. Abidi**. Composition and biomolecule distribution in cotton seed coats investigated by Fourier Transform Infrared microspectroscopy. Beltwide Cotton Conferences, National Cotton Council, January 8-10, 2020, Austin, TX.
150. **N. Abidi**. Cellulose macromolecule as a source for Advanced Materials Preparation. 4th International Conference on Materials & Environmental Science Virtual Conference, November 18-27, 2020, Oujda Morocco.
151. **N. Abidi.** From cellulose to bioplastics. International Cotton Conference Bremen – 2021 Hybrid Edition, March 17-18, 2021.
152. **N. Abidi**. Preparation and functionalization of cellulose films from cotton fibers. TAPPI (Technical Association of the Pulp and Paper Industry) Virtual Conference. May 4-5, 2021 (invited).
153. S. Rumi*, S. Liyanage¥, **N. Abidi.** Preparation and characterization of transparent and flexible cellulose film produced from low-quality cotton fibers. Virtual American Chemical Society National Meeting and Exposition, April 5 – May 1, 2021.
154. P. Parajuli*, S. Acharya¥, **N. Abidi**. Inorganic salts mediated manipulation of physicochemical properties of cellulose aerogels. Virtual American Chemical Society National Meeting and Exposition, April 5 – May 1, 2021.
155. S. Acharya¥, Y. Hu¥, **N. Abidi**. Dissolution of cotton fibers in ionic liquid based solvent system: Effects of hydrolysis, cryogenic grinding and temperature. Virtual American Chemical Society National Meeting and Exposition, April 5 – May 1, 2021.
156. P. Tran, U. Jacob, **N. Abidi**, N. Bergfeld, T. Reid. A Study on the Ability of an Organo-Selenium, Attached to a Cellulose Polymer Dressing, to Inhibit *Candida albicans* Biofilm. Joint Symposium Society of Biomaterials (USA) and the Japanese Society of Biomaterials, January 8-10, 2022, Honolulu, Hawaii.
157. Md. Nur Uddin*, J. Shamshina, **N. Abidi**. Transformation of hemp bast into usable fiber

for hemp-based textiles. 261st American Chemical Society National Meeting and Exposition, San Diego, CA, March 20-24, 2022 (Hyprid).

158. S. Rumi*, S. Liyanage¥, J. Shamshina, **N. Abidi**. Effect of microwave plasma pre-treatment on cotton cellulose dissolution. 261st American Chemical Society National Meeting and Exposition, San Diego, CA, March 20-24, 2022 (Hyprid).
159. J. Shamshina, R. Stein, S. Acharya¥, **N. Abidi**. Is cryogrinding of biopolymers a proper substitute for conventional ball milling? 261st American Chemical Society National Meeting and Exposition, San Diego, CA, March 20-24, 2022 (Hyprid).
160. **N. Abid**i, S.S. Rumi*, P. Parajuli*, S. Liyanage¥, J.L. Shamshina. Cellulose and Chitin Biopolymers for Sustainable Bioproducts Preparation. 5th International Conference on Materials & Environmental Science Conference, June 9-12, 2022, Saidia, Oujda, Morocco.
161. **N. Abidi**, S.S. Rumi*, S. Liyanage¥. Preparation of cotton cellulose-based bioplastic films. Plastic Waste Free World & Greener Manufacturing Conference & Exposition North America. June 8-9, 2022. Atlanta, Georgia.
162. J.L. Shamshina, **N. Abidi**. Production of Sustainable Chitin-Based Materials. Plastic Waste Free World & Greener Manufacturing Conference & Exposition North America. June 8-9, 2022. Atlanta, Georgia.
163. J. L. Shamshina, **N. Abidi**. Facile Preparation of Chitin Nanocrystals Directly from Crustacean Biomass. 26th Annual Green Chemistry & Engineering Conference, Session "Application of Chemicals, Novel Chemistries, Synthetic Pathways, and Processes that Enable a Circular, more Sustainable Economy" June 6-8, 2022, Reston, VA (Hybrid).
164. J. L. Shamshina, R. S. Stein, S. Acharya¥, **N. Abidi**. Is Cryogrinding for Biopolymers a Proper Substitute for Conventional Ball Milling? 30th International Carbohydrate Symposium. Brazil, July 10 - 15, 2022 (Hybrid).
165. J.L. Shamshina, **N. Abidi**. Chitin nanocrystals from crustacean biomass in ionic liquid media. Ionic Liquids Gordon Research Conference, Newry, ME, USA, August 7-12, 2022.
166. **N. Abidi**, S. Rumi*, S. Liyanage¥. Biodegradable plastics from cotton cellulose: Potential applications for textile packaging. 8th International Conference on Intelligent Textiles and Mass Customization, Montréal, Quebec, Canada, September 19-20, 2022.
167. J.L. Shamshina, **N. Abidi**. Chitin nanowhiskers derived from crustacean waste using ionic liquids. 265th American Chemical Society National Meeting and Exposition, Indianapolis, IN, March 26-30, 2023.
168. V. Thalangamaarachchige, **N. Abidi**, N. Dissanayake, C. Smith, J. Fierro-Trujillo. The effects of various anions and cations in ionic liquids on cellulose dissolution. 265th American Chemical Society National Meeting and Exposition, Indianapolis, IN, March 26-30, 2023.
169. S. Rumi*, J.L. Shamshina, S.P. Liyanage¥, **N. Abidi**. 3D printing of the cotton linter cellulose solution from ionic liquids. 265th American Chemical Society National Meeting and Exposition, Indianapolis, IN, March 26-30, 2023.
170. S. Liyanage¥, **N. Abid**i. Guar-based composites as alternatives for petroleum-based materials. 6th International Conference on Materials & Environmental Science, June 7-11, 2023, Saidia, Oujda, Morocco.
171. S. Liyanage¥, A. Bouyanfif, **N. Abid**i. FTIR microspectroscopy imaging: a promising tool

to study biomacromolecular distribution in biological samples. 6th International Conference on Materials & Environmental Science, June 7-11, 2023, Saidia, Oujda, Morocco.

172. **N. Abidi.** Valorization des fibers de coton de basses qualite: Applications non-traditionelles (in French). Annual Meeting of The French Cotton Association. Monaco, October 4-5, 2023.
173. N.H.W. Firdaus, J. Shamshina, **N. Abidi**, J. Legako, K. Rajan. Evaluating the casting parameters and sustainability of recycled cellulosic films for food packaging applications. 2024 AIChE Annual Meeting, American Institute of Chemical Engineers, October 27-31, 2024, San Diego, CA.
174. **N. Abidi**. Biopolymer-based composites: the case of cellulose and guar. 6th IEEE International Conference in BioInspired Processing (BIP2024), Liberia, Costa Rica, December 4-6, 2024.
175. C. Turner, M.A. Sayeed, **N. Abidi**. New reference standards for cotton fiber maturity. Beltwide Cotton Conferences, National Cotton Council, January 14-16, 2025, New Orleans, LA.
176. M.H.R. Bhuiyan, C. Turner, M.A. Sayeed, **N. Abidi**. Developing correction methods for new fibrogram-based length measurements. Beltwide Cotton Conferences, National Cotton Council, January 14-16, 2025, New Orleans, LA.
177. C. Turner, M.A. Sayeed, **N. Abidi**. An investigation of cotton fiber strength measurements with High Volume Instrument. Beltwide Cotton Conferences, National Cotton Council, January 14-16, 2025, New Orleans, LA.
178. A.F. Tesema, **N. Abidi**. Exploring an Optical Fiber Diameter Analyzer to evaluate the diameter of hemp fibers. Beltwide Cotton Conferences, National Cotton Council, January 14-16, 2025, New Orleans, LA.
179. S. Saha, C. Turner, S.S. Rumi, M.A. Sayeed, **N. Abidi**. Influence of surface chemistry on cotton fiber-to-fiber friction. Beltwide Cotton Conferences, National Cotton Council, January 14-16, 2025, New Orleans, LA.
180. S. Nam, S.S. Rumi, **N. Abidi**. Assessment of low-quality cotton fibers to enhance in-situ silver nanoparticle production. Beltwide Cotton Conferences, National Cotton Council, January 14-16, 2025, New Orleans, LA.

Graduate Student Committees

Completed

Chaired: 28

M.S.

1. Neha Kothari — Completed in 2007. Title of thesis: Multidisciplinary approach to study cotton fiber development. Plant and Soil Science, Texas Tech University, *Won the 1st place during the 2009 Beltwide Cotton Conferences Student Competition*.

2. Payam Aminayi	Completed in 2011. Title of thesis: Imparting super hydro/oleo phobic properties to cotton fabric by means of Molecular Vapor Deposition. Plant and Soil Science, Texas Tech University.
3. Shail Shah	Completed in 2011. Title of thesis: Cellulose-based aerogels. Plant and Soil Science, Texas Tech University. *Won 2nd place during the 10th Annual Graduate Student Research Poster Competition*.
4. Sanjit Acharya	Completed in 2012. Title of thesis: Dyeing properties of cotton fibers with improved reactivity. Plant and Soil Science, Texas Tech University.
5. Shanshan Li	Completed in 2013. Title of thesis: Preparation and characterization of cellulose-based aerogels. Plant and Soil Science, Texas Tech University.
6. Zhuanzhuan Ma	Completed in 2013. Title of thesis: Investigating the impact of drought stress on cotton fiber properties. Plant and Soil Science, Texas Tech University.
7. Herath Maheshika	Completed in 2013. Title of thesis: Cellulose structural organization during different phases of fiber development investigated by x-rays diffraction. Plant and Soil Science, Texas Tech University.
8. Sumedha Liyanage	Completed in 2013. Title of thesis: Chemical and physical characterization of galactomannans extracted from guar seeds. Plant and Soil Science, Texas Tech University. *Won the PSS outstanding Master Thesis Award.*
9. Benjamin Murphy	Completed in 2014. Crop Science at a Distance. Plant and Soil Science, Texas Tech University.
10. Shayamalee Abeysinghe	Completed in 2014. Title of thesis: Cotton fabric functionalization to impart wrinkle free properties. Plant and Soil Science, Texas Tech University.
11. Tanya Jackson	Completed in 2015. Title of thesis: Organic-Inorganic hybrid aerogels. Plant and Soil Science, Texas Tech University. *Won 1st Place during the 2014 Texas Tech Annual Biological Sciences Symposium, March 28-29, 2014*.
12. Mishon Hopkins	Completed in 2015. Crop Science at a Distance. Plant and Soil Science, Texas Tech University.
13. Prakash Parajuli	Completed in 2017. Title of thesis: FTR microspectroscopy study of compositional changes in biomolecules in biological samples. Plant and Soil Science, Texas Tech University.
14. Moss Cameron	Completed in 2017. Crop Science at a Distance. Plant and Soil Science, Texas Tech University.
15. Shaida Rumi	Completed in 2019. Title of thesis: Conversion of low-quality cotton to bioplastic. Plant and Soil Science, Texas Tech University.

16. Md. Tanjim Hossain — Completed in 2020. Title of thesis: Chemical and structural properties of cotton fiber base and associated seed coat. Plant and Soil Science, Texas Tech University.
17. Harsh Chaudhari — Completed in 2021. Title of thesis: Cellulose-multiwalled carbon nanotubes composite materials. Plant and Soil Science, Texas Tech University.
18. Ejajul Hoque — Completed in 2022. Title of thesis: Application of organo-selenium compounds to cotton textiles to impart antimicrobial properties. Plant and Soil Science, Texas Tech University.
19. Maliha Marzana — Completed in 2022. Title of thesis: FTIR microspectroscopy as a tool to investigate the origin of seed coat fragment generation and its dependency on cotton cultivars. Plant and Soil Science, Texas Tech University.

Ph.D.

1. Luis Cabrales — Completed in 2011. Title of dissertation: Analytical and spectroscopic approaches to study cellulose macromolecules in developing cotton fibers. Plant and Soil Science, Texas Tech University.
2. Rajeev Rajbhandari — Completed in 2013. Title of dissertation: Parameters affecting dye-uptake of cotton fibers. Plant and Soil Science, Texas Tech University.
3. Tharaka Poorna — Completed in 2017. Title of dissertation: Cellulose and chitin-based composites: preparation and characterization. Plant and Soil Science, Texas Tech University.
4. Sanjit Acharya — Completed in 2017. Title of dissertation: Cellulose dissolution in different solvents. Plant and Soil Science, Texas Tech University.
5. Sumedha P. Liyanage — Completed in 2017. Title of dissertation: Potential applications of Fourier Transform Infrared microspectroscopy imaging. Plant and Soil Science, Texas Tech University. *Won the PSS Outstanding Dissertation Award.*
6. Niwanthi Dissanayake — Completed in 2019. Title of dissertation: Cellulose dissolution in ionic liquids. Plant and Soil Science, Texas Tech University.
7. Prakash Parajuli — Completed in 2021. Title of dissertation: Salt and surfactant induced changes in physicochemical properties of cellulose aerogels. Plant and Soil Science, Texas Tech University.
8. Shaida Sultana Rumi — Completed in 2023. Title of dissertation: Cotton cellulose dissolution and transformation to bioproducts. Plant and Soil Science, Texas Tech University.
9. Vikki Martin — Completed in 2024: Title of dissertation: Prioritizing fiber elongation over strength: key to work-to-break and length distribution. Plant and Soil Science, Texas Tech University.

Post-Doctoral Fellows: 10

1. Rajeev Rajbhandari	January 2014 – February 2015.
2. Yang Hu	September 2014 – December 2015. Dr. Hu was recruited as a Research Assistant Professor and continued to work in my Lab until he left in August 2019.
3. Rohan Dassanayake	February 2015 – August 2018.
4. Sanjit Acharya	September 2017 – August 2021.
5. Sumedha P. Liyanage	January 2018 – February 2024.
6. Christopher Turner	January 2023 – January 2024. Dr. Turner was recruited as a Research Assistant Professor
7. Zhen Zhang	January 2022 – present.
8. Abu Sayeed	January 2023 – present.
9. Addisu Ferede Tesema	January 2023 – present.
10. Shaida Sultana Rumi	February 2024 – present.

Co-Chair: 3

M.S.

1. Mohamed Siaj	Completed July 1999. Thesis title: Preparation of hybrid organic-inorganic membranes. Materials and Membrane Processes Laboratory, National School of Chemical Engineering of Montpellier (France).
2. Md Nur Uddin	Completed August 2023. Thesis title: Delignification of industrial hemp fibers using a green solvent. Plant and Soil Science, Texas Tech University.
3. Surendra Gautam	Completed May 2024. Thesis title: Evaluation of OFDA 4000 for cotton fiber ribbon-width (RW) and length measurement. Plant and Soil Science, Texas Tech University.

In Progress:

Chair: 6

M.S.

1. Faisal Rahman	Plant and Soil Science, Texas Tech University (started: 8/2023).
2. Susmita Saha	Plant and Soil Science, Texas Tech University (started: 8/2023).
3. Harunur Rashid	Plant and Soil Science, Texas Tech University (started: 9/2024).

Ph.D.

1. Amir S. Shamsabadi	Plant and Soil Science, Texas Tech University (started: 6/2023).
2. Houra Farkhondehnia	Plant and Soil Science, Texas Tech University (started: 6/2023).
3. Imran Emon	Plant and Soil Science, Texas Tech University (started: 9/2024).

Undergraduates: 4

1. Sami Moussa	August 2015 - May 2017.

2. Maria Hountondji — July - September 2015 (from the University of Paris XIII, France).
3. Britnie Barrett — July - December 2017.
4. Brandon Flores — January - May 2020.

Research Associates: 2

1. Hewa Rajakaruna — May 2012 - June 2019.
2. Tanya Jackson — June 2015 - September 2016.

- **Service on Graduate Committees**

Completed: 37

M.S.

1. Farzad Hosseinali — Completed in 2012. Title of thesis: Investigations on the tensile properties of individual cotton (*Gossypium hirustum L.*) fibers. Plant and Soil Science, Texas Tech University.
2. Dev Paudel — Completed in 2012. Title of thesis: Evaluating the potential of new testing methods for cotton (*Gossypium hirustum L.*) breeding. Plant and Soil Science, Texas Tech University.
3. James Hodgson — Completed in 2012 (Distance). Plant and Soil Science, Texas Tech University.
4. Mark Schoonover — Completed in 2012 (Distance). Plant and Soil Science, Texas Tech University.
5. Holli Elaine Myers — Completed in 2013 (Distance). Plant and Soil Science, Texas Tech University.
6. Henry Hunter — Completed in 2014 (Distance). Plant and Soil Science, Texas Tech University.
7. Ruvini Mathangadeera — Completed in 2014. Title of thesis: Evaluating the impact of fiber processing on cotton fiber tensile properties. Plant and Soil Science, Texas Tech University.
8. Imel Robert — Completed in 2015. Title of thesis: Agronomic and economic analysis of drought tolerant crops for the Texas High Plains. Plant and Soil Science, Texas Tech University.
9. Kolby McCormick — Completed in 2015. Title of thesis: Improved testing methods for cotton breeders: Calibration of the High-Volume Instrument (HVI) elongation measurement. Plant and Soil Science, Texas Tech University.
10. Charles Langdon — Completed in 2015 (Distance). Plant and Soil Science, Texas Tech University.
11. Suman Lamichhane — Completed in 2016. Title of thesis: An evaluation of cotton fiber cross-section with image analysis software. Plant and Soil Science, Texas Tech University.
12. Jonathan Shockey — Completed in 2016. Title of thesis: Harvest-aid efficiency in guar (*Cyamopsis tetragonoloba L.*) in the Texas Plains. Plant and Soil Science, Texas Tech University.

13. Nicholas Gallington — Completed in 2017 (Distance). Plant and Soil Science, Texas Tech University.
14. Kafil Chowdhury — Completed in 2017. Title of thesis: Dose to the skin of human leg model from monoenergetic beta sources uniformly distributed on soil with surface roughness. Mechanical Engineering, Texas Tech University.
15. Scott Baker — Completed in 2018. Title of thesis: Within-plant variability of Upland cotton varieties in multiple environments. Plant and Soil Science, Texas Tech University.
16. Turna Basak — Completed in 2024. Title of thesis: Investigations of the morphology of chitin-based cell culture matrices and their influence on 3D tissue engineering. Plant and Soil Science, Texas Tech University.

- **Ph.D.**

1. Chih-yuan Wu — Completed in 2009. Title of dissertation: Microrehology and Particle Dynamics at Liquid-Liquid Interface. Chemical Engineering, Texas Tech University.
2. Natalia Castillo — Completed in 2011. Title of dissertation: A hydroponic approach to evaluate responses to salinity stress in cotton, Plant and Soil Science, Texas Tech University.
3. Ruwanti Wettasinghe — Completed in 2012. Title of dissertation: Development of castor (*Ricinus communis*) var. Brigham with ultra-low ricin content by analyzing soluble seed proteins. Plant and Soil Science, Texas Tech University.
4. Manandhar Roji — Completed in 2013. Title of dissertation: Impact of cotton fiber maturity on cotton processing. Plant and Soil Science, Texas Tech University.
5. Swain Shayla — Completed in 2014. Title of dissertation: Fabrication of biodegradable biopolymer composites for orthopedic applications. Industrial Engineering, Texas Tech University.
6. Khalil Azzaoui — Completed in 2014. Title of dissertation: Elaboration et etude de quelques composites a base d'hydroxyapatite phosphorique, distines aux usages industriels et medicaux (in French). Department of Chemistry, University Mohamed Premier (Morocco).
7. Kelly Brendan — Completed in 2014. Title of dissertation: Multivariate analysis of fiber properties and their relation to yarn properties. Plant and Soil Science, Texas Tech University.
8. Monique LeMieux — Completed in 2015 (Dean's Representative). Title of dissertation: Targeting obesity-related inflammation through nutritional genetic approaches, Nutritional Sciences, Texas Tech University.

9. Addissu Ayele	Completed in 2017. Title of dissertation: Impacts of within-plant variability on fiber quality, fiber density and ring spun yarn quality of Upland cotton cultivars. Plant and Soil Science, Texas Tech University.
10. Vimal Balasubramanian	Completed in 2018. Title of dissertation: Understanding the genetic factors involved in cell wall biosynthesis and biomass production. Plant and Soil Science, Texas Tech University.
11. Al M. Rachid	Completed in 2018. Title of dissertation: Estimation of absorbed dose to adipose tissue from full field digital mammogram. Mechanical Engineering, Texas Tech University.
12. Tharanga Dissanayaka	Completed in 2019. Title of dissertation: Evaluation of novel asphalt binder modifiers and additives to improve extreme temperature rheological properties for enhanced performance. Civil, Environmental and Construction Engineering, Texas Tech University.
13. Manil Hettiwatte	Completed in 2019. Title of dissertation: Waste cotton fibers to enhance performance of particulate cementitious composites. Civil, Environmental and Construction Engineering, Texas Tech University.
14. Lihua Lou	Completed in 2019 (Dean's Representative). Title of dissertation: Functional nanofiber webs for environmental protection and human health. Environmental Toxicology, Texas Tech University.
15. Joao P.S. Morais	Completed in 2019. Title of dissertation: Effects of trash and processing on cotton fiber quality measurements. Plant and Soil Science, Texas Tech University.
16. Md. Abu Sayeed	Completed in 2020. Title of dissertation: Improvement of the cotton fiber length measurements using high Volume Instrument (HVI) fibrogram. Plant and Soil Science, Texas Tech University.
17. Ruvini Mathangadeera	Completed in 2021. Title of dissertation: Co-overexpression of OsSIZ1 and LtRCA in Arabidopsis thaliana to further improve heat and drought tolerance. Biological Sciences, Texas Tech University.
18. Olukayode J. Ayodeji	Completed in 2022 (Dean's Representative). Title of dissertation: The effectiveness of face coverings and the development of surface-functional masks against severe acute respiratory syndrome. Environmental Toxicology, Texas Tech University.
19. Christopher Delhom	Completed in 2022. Title of dissertation: High Volume instrument measurement of cotton fiber elongation – history, calibration, and utility. Plant and Soil Science, Texas Tech University.

20. Merimi Chaimae	Completed in 2023. Title of dissertation: Nouveaux nanocomposites pour la photodegradation des polluants organiques, nouveaux inhibiteurs de corrosion d'acier au chrome (In French). University of Med 1, Oujda, Morocco.
21. Souhayla Latifi	Completed in 2023. Title of dissertation: Elaboration des materiaux composites ecologiques pour des eventuelles applications dans le domaine environmental (In French). University of Mohamed V, Rabat, Morocco.

In Progress:

1. Manish Kumar	Civil, Environmental, and Construction Engineering, Texas Tech University.
2. Avinash Shrestha	Plant and Soil Science, Texas Tech University.
3. Derseh Limeneh	Plant and Soil Science, Texas Tech University.

Teaching Responsibilities

PSS 5371: Structure and Functionalization of Cotton Fibers (graduate course, 3 credits, 100%).

PSS 5373: Biopolymers and Bioproducts (graduate course, 3 credits, 100%).

PSS 5370: US and Global Cotton Fiber – Textile Industries (graduate course, 3 credits, 50%).

International Experience/Invited Seminars and Lectures

- **Experience**
  1. Fulbright Visiting Scholar, Ghent University, Belgium (January 2016 – June 2016).
- **Invited Seminars**
  1. **N. Abidi.** *An overview on cellulose chemistry and functionalization of fabric surface for improved and new properties*, University Moulay Ismail, Faculty of Sciences, Meknes, Morocco. July 14, 2004.
  2. **N. Abidi.** *New approaches for the functionalization of cotton fabric*s. University of Haute Alsace, Mulhouse, France, December 19, 2007.
  3. **N. Abidi.** *Cellulose macromolecules: structure, development, and functionalization*, University Med 1 Faculty of Sciences, Oujda, Morocco. July 6, 2009.
  4. **N. Abidi.** *Cellulose macromolecules: structure, development, and functionalization*, University Moulay Ismail, Faculty of Sciences, Meknes, Morocco. July 14, 2009.
  5. **N. Abidi.** *Cellulose is an abundant biopolymer and precursor for the preparation of advanced biomaterials*. Faculty of Sciences, University of Med 1 Oujda, Morocco, June 19-20, 2014.
  6. **N. Abidi.** *Recent developments in FTIR microspectroscopy technique*. Faculty of Sciences, University of Med 1 Oujda, Morocco, July 3, 2014.
  7. **N. Abidi.** *Functionalization of cotton fabric surface and derived bioproducts from cellulose*. Ghent University, Department of Textiles, Ghent, Belgium. March 4, 2016.

8. **N. Abidi.** *Research Activities at the Biopolymer Research Group at Texas Tech University*. Piraeus University of Applied Sciences, Department of Textiles, Piraeus, Athens, Greece, March 10, 2016.
9. **N. Abidi**. Cellulose macromolecule as a source for advanced materials preparation. *Forest Biomaterials Department, North Carolina State University*, February 19, 2022.
10. **N. Abidi**. From biopolymers to bioproducts. International Seminar on the Intelligent use of Plant fibers for biocomposite products. *University Ibn Zohr*, Agadir, Morocco, October 3, 2023.
11. **N. Abidi**. Cellulose and guar-based composites are alternative materials to petroleum-based materials. *Chemical Engineering Department, Texas Tech University*, January 19, 2024.

- **Invited Lectures/Teaching**

1. **N. Abidi**. Teaching *Biopolymers and Bioproducts* course for E-TEAM (European Textile Engineering Advanced Master) organized by the Department of Textile Engineering, Ghent University (Belgium). Delivered at the Department of Textile Engineering, Piraeus University of Applied Sciences, Athens, Greece, March 7-11, 2016.
2. **N. Abidi.** Lecture on *Chemical Modification of Surfaces* for the 3rd Year Bachelor Students in Materials Science Ghent University, Ghent, Belgium. May 13, 2016.
3. **N. Abidi**. 1-week course on *Biopolymers and Bioproducts* for E-TEAM (European Textile Engineering Advanced Master), organized by the Department of Textile Engineering, Ghent University, Belgium. Delivered at Ghent October 15-21, 2016.
4. **N. Abidi**. Teaching *Biopolymers and Bioproducts* course for E-TEAM (European Textile Engineering Advanced Master) organized by the Department of Textile Engineering, Ghent University, Ghent, Belgium. Delivered through Skype September 12-15, 2017 at Ghent.
5. **N. Abidi**. Teaching *Biopolymers and Bioproducts* course for E-TEAM (European Textile Engineering Advanced Master), Department of Textile Engineering, Ghent University, Ghent, Belgium. Delivered through Skype October 1-3, 2018 ENSAIT, Roubaix, France.
6. **N. Abidi**. Teaching *Biopolymers and Bioproducts* course for E-TEAM (European Textile Engineering Advanced Master), Department of Textile Engineering, Ghent University, Ghent, Belgium. Delivered through Skype September 30 October 2, 2019, Ghent, Belgium.
7. **N. Abidi**. Teaching *Biopolymers and Bioproducts* course for E-TEAM (European Textile Engineering Advanced Master), Department of Textile Engineering, Ghent University, Ghent, Belgium. Delivered through Skype October 5-7, 2020, Ghent, Belgium.
8. **N. Abidi**. Teaching *Biopolymers and Bioproducts* course for E-TEAM (European Textile Engineering Advanced Master), Department of Textile Engineering, Ghent University, Ghent, Belgium. Delivered through Teams September 13-17, 2021, Ghent, Belgium.
9. **N. Abidi**. Teaching *Biopolymers and Bioproducts* course for E-TEAM (European Textile Engineering Advanced Master), Department of Textile Engineering, Ghent University, Ghent, Belgium. Delivered through Teams October 3-7, 2022, Ghent, Belgium.
10. **N. Abidi**. Teaching *Biopolymers and Bioproducts* course for E-TEAM (European Textile Engineering Advanced Master), Department of Textile Engineering, Ghent University, Ghent, Belgium. Delivered through Teams September 19-20, 2023, Ghent, Belgium.

11. **N. Abidi**. Teaching *Biopolymers and Bioproducts* course for E-TEAM (European Textile Engineering Advanced Master), Department of Textile Engineering, Ghent University, Ghent, Belgium. Delivered through Teams September 18-19, 2024, Ghent, Belgium.

- **Webinar**
  1. "Guar Production for industrial and food applications" December 11, 2018. American Society of Agronomy.

- **International Seminar**
  1. Organized a seminar on Cotton Fiber Quality for a group of cotton breeders from SCL Agricola, Brazil, January 22-23, 2019.
  2. Organized a seminar on Cotton Fiber Quality for a group of cotton breeders from SCL Agricola, Brazil, March 6-7, 2023.

Grants and Awards

Total funded $22,067,777 (amount credited to Abidi: $8,919,473)

FBRI research, contracts, and testing services ~$1.4 million/year

2000:

1. Co-PI, Investigation of measurement and treatment of stickiness and other cotton contaminant, Texas Food and Fiber Commission, $29,700 (33%).
2. Co-PI, Establish reliable measurement for stickiness and enable improved management of stickiness in cotton fibers, Cotton Incorporated, $95,680 (33%).
3. PI, Development of new products, blends, and fabrics construction which emphasize Texas natural fibers. Texas Food and Fiber Commission, $30,000 (50%).

2001:

1. PI, Imparting multifunctional properties to cotton fabrics using plasma technology, Texas Food and Fiber Commission, $100,240 (100%).
2. PI, Development and evaluation of measurements of properties and contaminants for fibers, yarns, and fabrics. Texas Food and Fiber Commission, $52,500 (25%).
3. Co-PI, Establish reliable measurement for stickiness and enable improved management of stickiness in cotton fibers. Cotton Incorporated, $95,885 (40%).

2002:

1. Co-PI, Establish reliable measurement for stickiness and enable improved management of stickiness in cotton fibers, Cotton Incorporated, $80,076 (50%).
2. PI, Development and evaluation of measurements of properties and contaminants for fibers, yarns, and fabrics. Texas Food and Fiber Commission, $52,500 (20%).

2003:

1. Co-PI, Establish reliable measurement for stickiness and enable improved management of stickiness in cotton fibers, Cotton Incorporated, $35,112 (50%).
2. PI, Development of new products, blends, treatments, and fabric constructions, which emphasize Texas natural fibers, Texas Food and Fiber Commission, $90,000 (90%).
3. Co-PI, Development and evaluation of measurements of properties and contaminants for fibers, yarns, and fabrics, Texas Food and Fiber Commission, $90,000 (20%).

2004:

1. Co-PI, Establish reliable measurement for stickiness and enable improved management of stickiness in cotton fibers, Cotton Incorporated, $36,081 (50%).
2. Co-PI, Evaluation of sensing devices for fabric shrinkage and fabric smoothness measurements, Cotton Incorporated, $60,180. (20%.
3. Co-PI, Evaluation of sensing devices for fabric shrinkage and fabric smoothness measurements, Cotton Incorporated, $6,025. 20%.
4. Co-PI, Using fiber elongation to improve genetic screening in cotton breeding programs, USDA/ICRC, $52,938. 60%.

2005:

1. Co-PI, Establish reliable measurement for stickiness and enable improved management of stickiness in cotton fibers, Cotton Incorporated, $30,333. 50%.
2. Co-PI, Evaluation of sensing devices for fabric shrinkage and fabric smoothness measurements, Cotton Incorporated, $78,973. 20%.
3. Co-PI, Using fiber elongation to improve genetic screening in cotton breeding programs. USDA/ICRC, $56,435. 60%.
4. PI, Cotton fabric functionalization using plasma and sol-gel technologies. Texas Department of Agriculture/Food and Fiber Research Program, $50,000. 80%.
5. Co-PI, Evaluation of testing methods for cotton breeders and biotechnologists, Texas Department of Agriculture/Food and Fiber Research Program, $20,000. 20%.
6. Co-PI, Acquisition of a cryo ultramicrotome, Texas Department of Agriculture/Food and Fiber Research Program, $40,774. 50%.
7. Co-PI, Evaluation of sensing devices for fabric shrinkage and fabric smoothness measurements, Cotton Incorporated, $87,484. 20%.

2006:

1. Co-PI, Establish reliable measurement for stickiness and enable improved management of stickiness in cotton fibers, Cotton Incorporated, $31,292. 60%.
2. Co-PI, The International Center of Excellence in Agricultural Genomics & Biotechnology, Emerging Technology Fund, $1,949,000. 3%.
3. Co-PI, ICRC 2006-International Cotton Research Center Program. USDA ICRC, $69,498. 100%.
4. PI, Multidisciplinary approach to study cotton fiber maturity. Texas Department of Agriculture/Food and Fiber Research program, $35,000. 65%.
5. PI, Functionalization of cotton fabric surface. Texas Department of Agriculture/Food and Fiber Research Program, $35,000. 60%.
6. Co-PI, Incorporating fiber elongation in cotton breeding programs. Texas Department of Agriculture/Food and Fiber Research Program, $30,389. 33%.
7. Co-PI, Evaluation of sensing devices for fabric shrinkage and fabric smoothness, Cotton Incorporated, $87,484. 20%.

2007:

1. Co-PI, Data mining in cotton fiber quality databases, Cotton Incorporated, $35,232. 20%.
2. Co-PI, Spinning limits of high quality Upland cotton, Cotton Incorporated, $51,782. 30%.
3. Co-PI, Evaluation of sensing devices for fabric shrinkage and fabric smoothness, Cotton Incorporated, $77,957. 20%.
4. Co-PI, Evaluation of testing methods for cotton breeders and biotechnologists with emphasis on cotton fiber maturity, Cotton Incorporated, $100,426. 30%.

5. Co-PI, Investigate non-HVI fiber properties and their relationships with fiber quality, Delta&Pine Land, $19,096. 50%.
6. PI, Imparting antibacterial properties to cotton fabrics through functionalization with cyclodextrins, Texas Department of Agriculture/Food and Fiber Research Program, $70,000. 70%.
7. Co-PI, Incorporating fiber elongation in cotton breeding programs, Texas Department of Agriculture/Food and Fiber Research Program, $30,389. 33%.
8. PI, Multidisciplinary approach to study cotton fiber maturity. Texas Department of Agriculture/Food and Fiber Research Program, $35,000. 34%.
9. Co-PI, Single fiber strength, crimp, and linear density measurements using Favimat, Texas Department of Agriculture/Food and Fiber Research Program, $18,133. 50%.

2008:

1. Co-PI, Spinning limits of high-quality Upland cotton, Cotton Incorporated, $81,782. 30%.
2. Co-PI, Data mining in the cotton fiber quality databases, Cotton Incorporated, $35,313. 20%.
3. Co-PI, Evaluation of testing methods for cotton breeders and biotechnologists with special emphasis on fiber maturity, Cotton Incorporated, $110,708. 30%.
4. Co-PI, The International Center of Excellence in Agricultural Genomics & Biotechnology, Emerging Technology Fund, $97,450. 3%.
5. Co-PI, MRI: Acquisition of a nanocoating system for engineering surfaces, National Science Foundation/Major Research Instrumentation, $275,000. 20%.
6. Co-PI, International Cotton Research Center Program – 2008, USDA ICRC, $34,501. 100%.
7. PI, Understanding and improving moisture management properties of cotton fabric, Cotton Incorporated, $8,050. 70%.
8. PI, Fourier Transform Infrared analysis of acramite on corn leaves. Chemtura Crop Protection, $6,000. 100%.
9. Co-PI, Evaluation of testing methods for cotton breeders and biotechnologists with special emphasis on cotton fiber maturity, Cotton Incorporated, $11,510. 30%.
10. PI, Imparting antibacterial property to cotton fabric through functionalization with cyclodextrins, Texas Department of Agriculture/Food and Fiber Research Program, $35,000. 70%.
11. Co-PI, Incorporating fiber elongation in cotton breeding programs, Texas Department of Agriculture/Food and Fiber Research Program, $30,389. 33%.
12. PI, Multidisciplinary approach to study cotton fiber maturity, Texas Department of Agriculture/Food and Fiber Research Program, $35,000. 34%.
13. Co-PI, Single fiber strength, crimp, and linear density measurements using FAVIMAT, Texas Department of Agriculture/Food and Fiber Research Program, $20,573. 50%.

2009:

1. Co-PI, Spinning limits of high-quality Upland cotton, Cotton Incorporated, $100,050. 30%.
2. Co-PI, Evaluation of testing methods for cotton breeders and biotechnologists with special emphasis on fiber maturity, Cotton Incorporated, $100,914. 30%.
3. Co-PI, Data mining in the cotton fiber quality databases, Cotton Incorporated, $35,419. 20%.

4. Co-PI, Improving fiber elongation of U.S. germplasm, Cotton Incorporated-State Support Committee, $22,254. 25%.
5. PI, Multidisciplinary approach to study cotton fiber maturity, Texas Department of Agriculture/Food and Fiber Research Program, $29,280. 80%.
6. PI, New approach to impart super-oleophobic /hydrophobic properties for self-cleaning cotton fabrics, Texas Department of Agriculture/Food and Fiber Research Program, $28,180. 80%.
7. PI, A rapid measurement method for studying cotton fibers secondary cell wall development, Cotton Foundation, $8,000. 70%.
8. Co-PI, Determination of individual fibers tensile properties: relationships with bundle strength maturity, length distribution, and fiber breakage, Texas Department of Agriculture/Food and Fiber Research Program, $30,000. 30%.
9. Co-PI, Optimizing the use of the Advanced Fiber Information System, Texas Department of Agriculture/Food and Fiber Research Program, $30,000. 30%.
10. Co-PI, International Cotton Research Center Program, USDA ICRC, $32,386. 100%.
11. Co-PI, Spinning limits of high-quality upland cotton, Cotton Incorporated. $110,055. 30%.
12. Co-PI, Evaluation of testing methods for cotton breeders and biotechnologists with special emphasis on cotton fiber maturity, Cotton Incorporated, $100,971. 30%.

2010:

1. PI, Cellulose-derived bioproducts: a new generation of smart biomaterials, USDA ICRC, $55,238. 80%.
2. Co-PI, Bringing a portion of Texas plains cotton into premium yarn markets, USDA ICRC $51,517. 30%.
3. Co-PI, Evaluating the tensile properties of cotton fibers and their impact on short fiber content, USDA ICRC, $53,944. 30%.
4. PI, Characterization of cotton fiber with improved reactivity, Bayer Crop Science, $758,359. 80%.
5. Co-PI, Development of a micro-spinning protocol to characterize spinning properties of cotton fibers, Bayer Crop Science, $108,469. 10%.
6. PI, Multidisciplinary approach to study cotton fiber maturity, Texas Department of Agriculture/Food and Fiber Research Program, $34,474. 80%.
7. PI, New approach to impart super-oleophobic /hydrophobic properties for self-cleaning cotton fabrics, Texas Department of Agriculture/Food and Fiber Research Program, $35,574. 80%.
8. Co-PI, Determination of individual fibers tensile properties: relationships with bundle strength maturity, length distribution, and fiber breakage, Texas Department of Agriculture/Food and Fiber Research Program, $18,215. 30%.
9. Co-PI, Optimizing the use of the Advanced Fiber Information System, Texas Department of Agriculture/Food and Fiber Research Program, $27,323. 30%.
10. Co-PI, Spinning limits of high-quality Upland cotton, Cotton Incorporated. $13,000. 10%.

2011:

1. PI, Improving fiber testing methods for cotton breeders, Cotton Incorporated, $182,488. 30%.
2. PI, Spinning limit of high-quality Upland cotton, Cotton Incorporated, $110,400. 30%.

3. Co-PI, Partial funding of purchase of the CottonScope, Plains Cotton Growers Association, $25,000. 50%.
4. Co-PI, Purchase of laboratory instrumentation, Bayer CropScience, $999,695. 44%.
5. PI, Research to enhance the quality and competitiveness of Texas cotton fibers. Texas Department of Agriculture, $180,000. 37%.
6. Co-PI, Supplement: Spinning limits of high-quality Upland cotton. Cotton Incorporated, $20,000. 30%.
7. PI, Setting up cell wall biochemistry laboratory and routine analysis of chitin-producing fibers. Bayer CropScience, $650,530. 100%.
8. PI, Spectroscopic approach to study cotton fiber maturity. Cotton Incorporated Texas State Support Committee, $35,000. 80%.
9. PI, Analyzing the effect of drought stress on traits contributing to cotton fiber quality. USDA, $20,000. 80%
10. PI, Microspinining protocol-Phase II Dye uptake evaluation. Bayer CropScience, $247,507. 50%.

2012:

1. Co-PI, Improving fiber testing methods for cotton breeders, Cotton Incorporated, $160,121. 20%.
2. Co-PI, Improving fiber testing methods for cotton breeders, Cotton Incorporated, $160,365. 20%.
3. Co-PI, Improving fiber testing methods for cotton breeders, Cotton Incorporated, $10,000. 20%.
4. PI, Spectroscopic approach to study cotton fiber maturity, Cotton Incorporated-Texas State Support Committee, $31,500. 100%.
5. Co-PI, Validation of the CottonScope, Cotton Incorporated, $50,386. 20%.
6. Co-PI, Validation of the CottonScope, Cotton Incorporated, $50,548. 20%.
7. Co-PI, Effect of within-plant variability on fiber quality and spinning performances. Cotton Incorporated, $106,294, 20%.
8. Co-PI, Effect of within-plant variability on fiber quality and spinning performances. Cotton Incorporated, $105,217, 20%.
9. PI, Analyzing the effect of drought stress on traits contributing to cotton fiber quality, USDA, $20,000. 100%.

2013:

1. **N. Abidi**, Spectroscopic approach to study cotton fiber maturity, Cotton Incorporated-Texas State Support Committee, $31,500. 100%.
2. E. Hequet, **N. Abidi**, Effect of within-plant variability on fiber quality and spinning performances. Cotton Incorporated, $105,501. 20%.
3. E. Hequet, **N. Abidi**, Improving fiber testing methods for cotton breeders, Cotton Incorporated, $190,499. 20%.
4. **N. Abidi**, Cell wall startup equipment, Texas Research Incentive Program, $250,000. 100%.
5. **N. Abidi**, Evaluation of the feasibility to engineer wrinkle resistance as a new trait in cotton fiber, Texas Research Incentive Program, $511,589. 100%.
6. **N. Abidi**, Cell wall biochemistry, Texas Research Incentive Program, $164,520. 100%.

2014:

1. **N. Abidi**, Spectroscopic approach to study cotton fiber maturity, Cotton Incorporated, $25,000. 100%.
2. E. Hequet, **N. Abidi**. Effect of within-plant variability on fiber quality and spinning performances. Cotton Incorporated, $111,579, 20%.
3. E. Hequet, N. Abidi, B. Kelly. Improving fiber testing methods for cotton breeders. $160, 254. 20%.
4. D. Ethridge, **N. Abidi**. Foam Indigo dyeing of cotton yarns: Machine design and process control. WalMart Foundation, $472,564. 5%.
5. **N. Abidi**, Assessment of dye uptake of transgenic fibers. Texas Research Incentive Program, $172,416. 100%.
6. **N. Abidi**, Cotton fabric functionalized with PUD. Phase 1: Evaluation of the performance of the treated fabric, Bayer CropScience, $118,900. 100%.

2015:

1. D. Ethridge, **N. Abidi**, Cochran Program USDA Foreign Agricultural Service, $24,465, 5%.
2. N. Abidi, Fulbright: Program development in biopolymers and bioproducts, Fulbright US Scholar Program, $17,859. 100%.
3. **N. Abidi**, Cellulose dissolution and regeneration using ionic liquids, TRIP Bayer CropScience. Year 1: $97,100. 100%.
4. E. Hequet, B. Kelly, **N. Abidi**, Improving tensile properties of cotton, TRIP Bayer CropScience. Year 1: $75,000. 33%.
5. G. Ritchie, E. Hequet, **N. Abidi**, Improving TTU cotton research infrastructures to position TTU as the Tier One research University. Year 1: $160,000. 33%.
6. **N. Abidi**, H. Moussa, L. Ramalingam, Developing FTIR imaging for nutrition and obesity research. Obesity Research Cluster, $7,000. 34%.

2016:

1. **N. Abidi**, Cellulose dissolution and regeneration using ionic liquids, TRIP Bayer CropScience. Year 2: $101,926. 100%.
2. E. Hequet, B. Kelly, **N. Abidi**, Improving tensile properties of cotton, TRIP Bayer CropScience. Year 2: $95,000. 33%.
3. G. Ritchie, E. Hequet, **N. Abidi**, Improving TTU cotton research infrastructures to position TTU as the Tier One Research University. Year 2: $180,000. 33%.
4. N. Abidi, Spectroscopic approach to study cotton fiber maturity, Cotton Incorporated, $25,000. 100%.
5. **N. Abidi**, Spectroscopic approach to study cotton fiber maturity, Cotton Incorporated Texas State Support Committee. $25,000 (100%).
6. E. Hequet, B. Kelly, **N. Abidi**. Maturity and standard fineness: determination, calibration, and use, Cotton Incorporated. $160,032 (33%).

2017:

1. **N. Abidi,** Y. Hu, Developing bioproducts from low maturity cotton and cotton wastes, Cotton Incorporated Texas State Support Committee. $20,000 (50%).
2. D. Ethridge, **N. Abidi,** Foam Indigo dyeing of cotton yarns: Machine design and process control. WalMart Foundation, $474,999 (10%).

3. E. Hequet, B. Kelly, **N. Abidi,** Maturity and standard fineness: determination, calibration, and use, Cotton Incorporated, $160,032 (33%).
4. B. Kelly, **N. Abidi,** Build a yarn quality prediction model from High Volume Instrument (HVI) and Advanced Fiber Information System (AFIS) measurements for implementation into the IMAmt breeding program. Instituto Matogrossense do Algodao. $100,000 (50%).
5. **N. Abidi,** Spectroscopic approach to study cotton fiber maturity, Cotton Incorporated, Texas State Support Committee, $25,000 (100%).
6. B. Kelly, **N. Abidi,** Textile Performance evaluation of selected high plains cotton varieties, Plains Cotton Growers Association, $45,000 (25%).
7. **N. Abidi,** P.W. Jayawickrama, Cotton-derived composite materials for climate resilient transportation infrastructure. $210,525 (5%).

2018:

1. E. Hequet, B. Kelly, **N. Abidi,** Maturity and standard fineness: determination, calibration, and use, Cotton Incorporated, $160,418 (33%).
2. **N. Abidi,** Y. Hu, Developing bioproducts from low maturity cotton and cotton wastes, Cotton Incorporated Texas State Support Committee. $25,000 (50%).
3. B. Kelly, **N. Abidi,** Textile Performance evaluation of selected high plains cotton varieties, Plains Cotton Growers, $45,000 (25%).
4. E. Hequet, **N. Abidi**, Valuation of products and materials for fiber conditioning research. Samuel Jackson, Incorporated. $197,000. (50%).
5. **N. Abidi,** Development of foam Indigo dyeing of cotton yarns-phase 1. Indigo Mill Designs, LLC. $25,000 (100%).
6. **N. Abidi,** Chemical and structural properties of cotton fiber base and associated seed and their impact on fiber quality. Cotton Incorporated Texas State Support Committee. $22,500 (100%)
7. **N. Abidi,** Spectroscopic approach to study cotton fiber maturity, Cotton Incorporated, Texas State Support Committee, $25,000 (100%).

2019:

1. **N. Abidi**, Y. Hu, Developing bioproducts from low maturity cotton and cotton wastes. Cotton Incorporated, Texas State Support Committee, $25,000 (50%)
2. **N. Abidi**, Developing bioproducts from low maturity cotton and cotton wastes. Cotton Incorporated, Texas State Support Committee, $25,000 (100%)
3. B. Kelly, **N. Abidi,** Textile Performance evaluation of selected high plains cotton varieties, Plains Cotton Growers, $56,500 (25%).
4. **N. Abidi,** Chemical and structural properties of cotton fiber base and associated seed and their impact on fiber quality. Cotton Incorporated Texas State Support Committee. $22,500 (100%)
5. **N. Abidi,** Spectroscopic approach to study cotton fiber maturity. Cotton Incorporated, Texas State Support Committee, $25,000 (100%).
6. **N. Abidi**, Developing bioproducts from low maturity cotton and cotton wastes. Cotton Incorporated, $28,272 (100%).

2020:

1. **N. Abidi,** Chemical and structural properties of cotton fiber base and associated seed and their impact on fiber quality. Cotton Incorporated Texas State Support Committee. $1,800 (100%)
2. **N. Abidi**, Exploring the application of Selenium-based compounds on cotton yarns and fabrics. CH Foundation. $30,000 (100%).
3. **N. Abidi,** CellMat: High Performance sustainable solution to plastic-based materials. National Science Foundation. $50,000 (100%).
4. E. Hequet, **N. Abidi**. Exploring alternatives to the current HVI classification system. USDA-AMS. $864,360 (33%).
5. **N. Abidi**, Developing bioproducts from low maturity cotton and cotton wastes. Cotton Incorporated, Texas State Support Committee, $25,000 (100%)
6. **N. Abidi,** Chemical and structural properties of cotton fiber base and associated seed and their impact on fiber quality. Cotton Incorporated Texas State Support Committee. $22,500 (100%).

2021:

1. **N. Abidi**, Developing bioproducts from low maturity cotton and cotton wastes. Cotton Incorporated, $25,000 (100%).
2. B. Kelly, **N. Abidi,** Textile Performance evaluation of selected high plains cotton varieties, Plains Cotton Growers, $56,500 (50%).
3. **N. Abidi,** Chemical and structural properties of cotton fiber base and associated seed and their impact on fiber quality. Cotton Incorporated Texas State Support Committee. $22,500 (100%).
4. **N. Abidi**, Developing bioproducts from low maturity cotton and cotton wastes. Cotton Incorporated, Texas State Support Committee, $25,000 (100%).
5. **N. Abidi,** Converting low-grade cotton to bioproducts, CH Foundation, $37,516 (100%).

2022:

1. B. Kelly, **N. Abidi,** Textile Performance evaluation of selected high plains cotton varieties, Plains Cotton Growers, $56,500 (50%).
2. **N. Abidi**. Chemical and structural properties of cotton fiber base and associated seed and d their impact on fiber quality. Cotton Incorporated Texas State Support Committee. $22,500 (100%)
3. J.L. Shamshina, **N. Abidi**. BastCore-Hemp Processing Innovations. BastCore, $97,612 (50%).
4. J.L. Shamshina, **N. Abidi**. BastCore-Hemp Processing Innovations. BastCore, $35,000 (50%).
5. **N. Abidi**, Developing bioproducts from low maturity cotton and cotton wastes. Cotton Incorporated, Texas State Support Committee, $25,000 (100%).
6. J.L. Shamshina, **N. Abidi**. NSF I-Corps: NanoChit – next generation of green and sustainable biofilers. $50,000 (50%).

2023:

1. **N. Abidi**. Chemical and structural properties of cotton fiber base and associated seed and their impact on fiber quality. Cotton Incorporated Texas State Support Committee. $1,800 (100%).
2. **N. Abidi**. Chemical and structural properties of cotton fiber base and associated seed coat and their impact on fiber quality, Cotton Incorporated, $22,500 (100%)
3. E. Hequet, C. Turner, A. Sayeed, **N. Abidi**. Exploring alternatives to the current HVI classification system. USDA AMS, $989,7001 (33%).
4. **N. Abidi**, C. Turner, A. Sayeed. Development of novel fiber quality characterization methods. USDA ARS, $211,476 (40%).
5. **N. Abidi**. Developing bioproducts from low maturity cotton and cotton wastes, Cotton Incorporated, $15,000 (100%).
6. B. Kelly, **N. Abidi,** Textile Performance evaluation of selected high plains cotton varieties, Plains Cotton Growers, $56,500 (50%).
7. B. Kelly, **N. Abidi,** Textile Performance evaluation of selected high plains cotton varieties, Plains Cotton Growers, $56,500 (50%).
8. **N. Abidi**, Z. Zhang. Exploring cottonseed-derived materials and their potential applications, Cotton Incorporated, $18,800 (50%).
9. **N. Abidi**. Developing Industrial Hemp Fiber Standards, USDA Agricultural Research Services, $704,347 (100%).
10. **N. Abidi**, Z. Zhang. Exploring cottonseed-derived materials and their potential applications, Cotton Incorporated, $20,000 (50%).
11. C.V. Ha, **N. Abidi**, S. Tran. Enhancement of drought tolerance and reduction of fiber detachment force of cotton using co-application of acetic acid and ethanol, Cotton Incorporated, $25,000 (30%).

2024:

1. **N. Abidi.** Exploring cottonseed-derived materials and their potential applications, Cotton Incorporated, $20,000 (100%).
2. **N. Abidi**. Collaborative research and outreach to facilitate cotton production in the thermo-limited regions of the southern Ogallala Aquifer-Phase 2, $48,171 (2%).
3. **N. Abidi**. 2024 Davis College-Bayer Challenge Grant Partnership for Research and Innovation, Bayer, $50,000 (100%).
4. **N. Abidi**. Collaborative research and outreach to facilitate cotton production in the thermo-limited regions of the southern Ogallala Aquifer region dryland and irrigated crop management under limited water availability and drought Phae 3. $82,940 (2%).
5. C. Turner, N. Abidi, Z. Sayeed. Investigate techniques for non-destructive opening of fibers for new measurement methods, $149,557 (33%.
6. **N. Abidi**. Developing bioproducts from low-maturity cotton and cotton wastes, Cotton Incorporated, $10,000 (100%).
7. **N. Abidi**. Developing bioproducts from low-maturity cotton and cotton wastes, Cotton Incorporated, $25,000 (100%).
8. C. Turner, A. Sayeed, **N. Abidi**. Maturity and standard fineness: determination, calibration, and use, Cotton Incorporated, $167,668 (33%).

9. C. Turner, A. Sayeed, **N. Abidi**. Calibration and use of new cotton fiber phenotyping measurements, Cotton Incorporated, $139,869 (33%).
10. C. Turner, A. Sayeed, **N. Abidi**. Calibration and use of new cotton fiber phenotyping measurements, Cotton Incorporated, $169,572 (33%).
11. C. Turner, A. Sayeed, **N. Abidi**. Preliminary investigations of fiber-to-fiber friction, Cotton Incorporated, $106,250 (33%).
12. **N. Abidi.** Exploring cottonseed-derived materials and their potential applications, Cotton Incorporated, $5,766 (100%).
13. **N. Abidi, Z. Zhang.** Exploring cottonseed-derived materials and their potential applications, Cotton Incorporated, $5,766 (50%).
14. **N. Abidi**. Cooperative research for joint projects in basic and applied research. USDA-ARS, $22,148.56 (100%).
15. I. Somayanda, **N. Abidi**, G. Ritchie, K. Jagadish. Quantifying fiber quality traits in diverse cotton varieties with different maturity classes and irrigation levels under field conditions, Cotton Incorporated, $13,298 (25%).
16. I. Somayanda, **N. Abidi**, G. Ritchie, K. Jagadish. Quantifying fiber quality traits in diverse cotton varieties with different maturity classes and irrigation levels under field conditions, Cotton Incorporated, $13,298 (25%).
17. C. Turner, **N. Abidi**, A. Sayeed, S. Hamad. Investigate a new method for measuring fineness and maturity via 2D imaging, $95,173 (25%).

Outreach and Engagement

- **International**

  American Chemical Society

  1. International Carbohydrate Organization: Representative of the American Chemical Society Cellulose & Renewable Materials Division (US Advisory Committee), 2020-present.
  2. Alternate Councilor for the Cellulose & Renewable Materials Division, American Chemical Society, 2016-2020.
  3. Secretary of the Cellulose & Renewable Materials Division, American Chemical Society, 2010-2012.
  4. Anselme Payen Award Judging Committee of the Division of Cellulose and Renewable Materials, American Chemical Society, 2010-2013.

  Editorial Duties

  1. Associate Editor, *J. Cotton Science-Textile Technology Section*, 2007-present.
  2. Member of the Editorial Board of the *J. Materials and Environmental Science*, ISSN: 2020-2508, 2011-present.
  3. Member of the Editorial Board of the *Algerian J. Natural Products*, ISSN: 2553-0391, 2014-present.

4. Member of the Editorial Board of the *Moroccan J. of Chemistry*, ISSN: 2351-812X, 9/2014-present.
5. Member of the Editorial Board of *Textiles*, ISSN 2673-7248, 2020-present.
6. Member of the Editorial Board of *Fibers*, ISSN 2079-6439, 2020-present.

Membership in Professional Societies

1. National Academy of Inventors, 2024-present.
2. American Association of Textile Chemists and Colorists, 2000-present.
3. American Chemical Society, 2000-present.
4. Cellulose and Renewable Materials Division of the American Chemical Society, 2000-present.
5. The Fiber Society, 2006-present.
6. North American Thermal Analysis Society, 2009-2013.
7. International Technical Committee for Textile Care, 2000-2010.
8. AATCC RA 43 and the AATCC RA 106 committees, 2000-present.
9. Member of AUTEX (Association of Universities for Textiles), 2016-2017.
10. American Association for the Advancement of Science, 2017-present.

Membership of Scientific International Committees

1. Member of the Organizing Committee of the International Conference and Exhibition on Biopolymers and Bioplastics, August 10-12, 2015, San Francisco, CA, USA.
2. Member of the Organizing Committee of the International Conference and Exhibition on Biopolymers and Bioplastics, September 12-14, 2016, San Antonio, TX, USA.
3. Member of the International Scientific Committee of the 1st International Conference on Materials& Environmental Science, Oujda, Morocco, 1-3 December 2016.
4. Member of the Scientific Committee of the International Conference on Intelligent Textiles and Mass Customization, October 16-18, 2017, Ghent, Belgium.
5. Member of the International Scientific Committee of the 2nd International Conference on Materials & Environmental Science, Oujda, Morocco, 26-28 April 2018.
6. Member of the International Scientific Committee of the 4th International Virtual Conference on Materials & Environmental Science, Oujda, Morocco, 19-21 November 2020.
7. Member of the Scientific Committee of the 8th International Conference on Intelligent Textiles and Mass Customization, Montréal, Quebec, Canada, September 20-21, 2021 (Canceled because of COVID).
8. Member of the Scientific Committee of the 8th International Conference on Intelligent Textiles and Mass Customization, Montréal, Quebec, Canada, September 19-20, 2022.
9. Member of the International Scientific Committee of the 5th International Conference on Materials & Environmental Science, Oujda, Morocco, June 9-12, 2022.
10. Member of the International Scientific Committee of the 6th International Conference on Materials & Environmental Science, Oujda, Morocco, June 9-11, 2023.

Symposia Organized/Moderated

1. Organizer and Chair of the "Fibers and Biopolymers" symposium during the 37th Annual Meeting of the North American Thermal Analysis Society, Lubbock, TX, September 21- 23, 2009.
2. Chair of the symposium "Deconstructing the cell wall structure" during the 239th American Chemical Society Meeting, March 21-25, 2010, San Francisco, CA.
3. Organizer and Chair of the "Biomaterials/Bioinspired Materials" symposium during the 40th Annual Meeting of the North American Thermal Analysis Society, Orlando, FL, August 12-15, 2012.
4. Chair of the session Biofuels, Algal Bioproducts, Conventional and Emerging Bioproducts, during the Global Biofuels and Bioproducts Summit, San Antonio, TX, November 19-21, 2012.
5. Co-organizer and co-chair of the symposium "Current applications of spectroscopic techniques to investigate biopolymer structure and transformation" during the 247th American Chemical Society Meeting & Exposition, March 16-20, 2014, Dallas, TX. USA
6. Organizer and Chair of the symposium "Cellulose dissolution: new solvents and mechanisms" during the 249th American Chemical Society Meeting and Exposition, March 22-26, 2015, Denver, CO, USA.
7. Chair of a session on Biomaterials during the 12th Renewable Resources and Biorefineries Conference, May 30-31, June 1, 2016, Ghent, Belgium.
8. Co-Chair a session on Biomaterials and Biopolymers during the International Conference and Exhibition on Biopolymers and Bioplastics, September 12-14, 2016, San Antonio, TX, USA.
9. Chair of a session on Bio-based gels & porous materials/biopolymer hydrogels during the 253rd American Chemical Society Meeting and Exposition, April 2-6, 2017, San Francisco, CA.
10. Organizer and chair of the symposium "Cellulose" during the 73rd Annual Southwest Regional Meeting of the American Chemical Society, October 29-November 1, 2017, Lubbock, TX, USA.
11. Organizer and Chair of the symposium "Analytical Biochemistry" during the 73rd Annual Southwest Regional Meeting of the American Chemical Society, October 29-November 1, 2017, Lubbock, TX, USA.
12. Co-organizer and co-chair of the "Advances in Renewable Materials" symposium during the 257th American Chemical Society Meeting and Exposition, Orlando, FL, March 31 – April 4, 2019.
13. Co-organizer and co-chair of the "Advances in Renewable Materials" symposium during the 259th American Chemical Society Meeting and Exposition, Orlando, FL, March 22 – 26, 2020 (canceled because of COVID).
14. Co-organizer and co-chair of the "Advances in Renewable Materials" symposium during the 259th American Chemical Society Meeting and Exposition, April 12-15th, 2021 (Virtual conference).

15. Co-organizer and co-chair of the "Advances in Renewable Materials" symposium during the 261st American Chemical Society Meeting and Exposition, March 20-24, 2022 (Hybrid conference).
16. Co-organizer and co-chair of the "Addressing environmental and social challenges with engineered renewable materials" symposium during the 261st American Chemical Society Meeting and Exposition, March 20-24, 2022 (Hybrid conference).
17. Co-organizer and co-chair of the "Advances in Renewable Materials" symposium during the 263rd American Chemical Society National Meeting and Exposition, Indianapolis, IN, March 26-30, 2023.
18. Co-organizer and co-chair of the "Addressing environmental and social challenges with engineered renewable materials" symposium during the 265th American Chemical Society National Meeting and Exposition, Indianapolis, IN, March 26-30, 2023.
19. Co-organizer and co-chair of the "Addressing environmental and social challenges with engineered renewable materials" symposium during the 266th American Chemical Society Meeting and Exposition, San Francisco, CA, August 13-17, 2023.
20. Co-organizer and co-chair of the "Advances in Renewable Materials" symposium during the 266th American Chemical Society Meeting and Exposition, New Orleans, LA, March 17-21, 2024.

Proposals Review for Government Agencies (US)

1. United States Department of Agriculture
2. National Science Foundation, Graduate Fellowship Program (2016, 2018, 2019, 2022, 2023).
3. United States Department of Agriculture – NIFA SBIR (2022).
4. National Science Foundation SBIR (2022).
5. Ohio University-Promotion to full Professor package review (2020)

Proposals Review

1. University of Leuven Research Council (2017) (Belgium).
2. FWO Flanders Research Foundation (2018) (Belgium).
3. British Society for Antimicrobial Chemotherapy (2017) (England).
4. Austrian Academy of Science (Austria).
5. Polish-US Fulbright Commission (Poland).
6. Egypt-US Fulbright Commission (2016, 2018, 2020, 2021, 2022, 2023) (Egypt).
7. Deakin University-External examiner of PhD dissertation (2017, 2019) (Australia).
8. Natural Sciences and Engineering Research Council of Canada (2022) (Canada).
9. National Textile University, Department of Materials-Tenure package review (2020, 2022) (Pakistan).

Service on Proposals Review Panel

1. National Science Foundation, Graduate Fellowship Program (Reviewer and virtual panel member) (2016, 2018, 2019, 2021, 2022, 2023).

2. National Science Foundation SBIR (2022). I served on the review panel and wrote a panel summary.

Articles review for journals

• Journal of Cotton Science • American Association of Textile Chemists and Colorists Review • Journal of Applied Polymer Science • Textile Research Journal • Canadian Journal of Chemical Engineering • Applied Surface Science • Carbohydrate Research • Colloids and Surfaces A: Physicochemical and Engineering Aspects • Journal of Engineered Fibers and Fabrics • Journal of Thermal Analysis and Calorimetry • ACS Applied Materials & Interfaces • Progress in Organic Coatings • Fibers and Polymers • Polymers; Biochemical Engineering Journal • The Journal of Textile Institute • BioResourcses • Journal of Polymer Science Part B: Polymer Physics • Thermochimica Acta • Cellulose • Carbohydrate Polymers.

- **Institutional**

Texas Tech University

1. Member of the Selection Committee for the Chancellor's Council Distinguished Research Award – STEM, 2014.
2. Reviewer for the Office of Research Services limited submissions.
3. Graduate School Scholarships and Fellowships Reviewer, 2014, 2015, 2016.
4. Graduate Dean's Representative for Monique LeMieux Dissertation (Department of Nutritional Sciences, 2015.
5. Member of the Search Committee for the Assistant Professor Position in Soft Matter, Department of Chemistry and Biochemistry, Texas Tech University, 2016.
6. Member of the Texas State Support Committee Board Borad, 20217-present.
7. Member of the Texas International Cotton School Board, 20217-present.
8. Graduate Dean's Representative for Lihua Lou's Dissertation (Department of Environmental Toxicology), 2019.
9. Internal Advisory board member of the NSF TTU-ADVANCE-ADAPT Grant, 2021-2022.
10. Graduate Dean's Representative for Olukayode James Ayodeji's Dissertation (Department of Environmental Toxicology), 2022.
11. Member of the Search Committee for the Dean of Davis College of Agricultural Sciences and Natural Resources, 2022.
12. Co-Chair of the Strategic Enrollment Planning 2.0 - Interdisciplinary Studies, 2024.
13. Member of the Strategic Enrollment Planning Council, 2024.
14. Member of the BASF Project Revolution Steering Committee, 2024-present.
15. Member of the TTU Intellectual Property Review Committee, 2024-present.
16. Member of the 2025 Parents Association Awards selection committee: Barnie E. E. Rushing Jr., Faculty Distinguished Research Awards, 2024.

Davis College of Agricultural Sciences and Natural Resources

1. Member of the CASNR International Activities Committee, 2010-2013.
2. Chair of the CASNR International Activities Committee, 2013-2014.
3. Member of the Search Committee for the Department of Plant and Soil Science Chairperson position, 2013.
4. Member of the CASNR Institutional Effectiveness Committee, 2019-2021.
5. Member of the Davis College Tenure & Promotion Committee, 2020-2024.

Department of Plant and Soil Science

1. Member of the Website Improvement Committee, 2006-2009.
2. Member of the Curriculum and Academic Programs Committee, 2006-2009.
3. Chair of the Ad-hoc Committee on Bioproducts, 2008-2009.
4. Member of the Strategic Planning Committee, 2009.
5. Member of the Search Committee for Assistant Professor position of Crop Physiology, 2010.
6. Chair of the Search Committee for Assistant Professor position of Cell wall biology/biochemistry, 2012.
7. Member of the Search Committee for Assistant Professor position of Bioproducts, 2012.
8. Member of the Search Committee for Associate/Full Professor of Genomics, 2014-2015.
9. Graduate Program Leader, 2014-2015
10. Chair of the Search Committee for Assistant Professor position of Cotton fiber phenomics, 2015.
11. Chair of the graduate research committee, 2014-2020.
12. Member of the recruitment committee, 2014-2016.
13. Chair of the Faculty Mentoring Committee for Dr. Venugopal Mendu, 2014-2016.
14. Chair of the Faculty Mentoring Committee of Dr. Brendan Kelly, 2016-2018.
15. Member of the Faculty Mentoring Committee of Dr. Rosalyn Shim, 2017-2019.
16. Chair of the Faculty Mentoring Committee of Dr. Gunvant B. Patil, 2020-2023.
17. Member of the Faculty Mentoring Committee of Dr. Lopez-Arredondo Damar, 2020-2023.
18. Chair of the Faculty Mentoring Committee of Dr. Haydee Laza, 2021-2023.
19. Chair of the Search Committee of the Assistant Professor for Renewable Bioproducts, 2022.
20. Chair of the Search Committee for the Assistant Professor for Biopolymers for Biomedical Applications, 2023.
21. Chair of the Search Committee for the Assistant Professor in Sustainable Biobased Product Manufacturing, 2024.