Volume: 5 Issue: 1, 2020

NTU CHRONICLES

NTU is the Pioneer Institute of Textile Education in Pakistan, Serving the Industry Since 1959





NATIONAL TEXTILE UNIVERSITY

Sheikhupura Road, Faisalabad (37610) Pakistan Ph: +92 41 9230081-85, Fax: +92 41 9230098 E-mail: info@ntu.edu.pk, Web: www.ntu.edu.pk



Contents

Funding and Grants	03
Important Visits at NTU	03
MoU and Collaborations	05
Careers/Job Placement/Training Sessions	07
Seminars/Events/Workshops/Exhibitions	10
Important Meetings/Events at NTU	17
NTU Participations at National and International Level	19
Achievements and Awards	24
National and International Celebrations	27
Students Activities/Industrial Tours	28
Sports Activities	31

VISION

National Textile University aspires to have a transformative impact on the socio-economic development of the country in general and textile & clothing industry in particular, with outstanding education, research, and eco-friendly innovation.

MISSION

The mission of National Textile University is to contribute towards sustainable socio-economic development of society and welfare of humanity through pursuit of excellence in education, research and innovation in areas of National importance, with special emphasis on textile and clothing.

Proof-read by:

Ambar Shah (17-NTU-1520)

Funding and Grants

High speed warping donated by Chaudhary Industries

Department of knitting recently added a new high-speed warping machine for warp knitting in its lab facilities which was donated by Chaudhary Industries. It has creel capacity of 200 cones. The beam of 12" can be loaded on it. This machine is capable of making beam with high speed. Both natural and synthetic yarns can be run on it.



Funding for Undergraduate Projects in the Department of Computer Science

Department of Computer Science is pleased to announce that funding for SIX final year projects has been approved by the Government of Pakistan. This indeed shows the quality of work by the students under the leadership of dedicated Faculty members. A special congratulation to Dr. Muhammad Asif (HOD), Dr. Haseeb Ahmad, Dr. Rehan Ashraf and Mr. Shahbaz Ahmad Sahi whose student's projects have been approved by the funding agency.

Important Visits at National Textile University

Designers as Peace Ambassadors visited Central Church of Faisalabad



Department of Design (faculty and students) in collaboration with the Ministry of communication visited the Central Church of Faisalabad as a peace gesture on the eve of Christmas to greet the Christian citizens of Pakistan. Students presented roses and sweets to all those who had come to celebrate Christmas. The message was loud and clear to the whole world that unlike our neighboring countries, Pakistan respects all religions, faiths and beliefs. We are a peaceful nation and everyone living in this country feels secure regardless of religion or culture. We all are PAKISTANI and Pakistan Army is safeguarding this ideology at the cost of their lives

Excellency Anne Marchal, Minister Counsellor, Deputy Head of Mission, Delegation of the European Union to Pak Visit

Ms. Anne Marchal, Deputy Head of Mission/Minister at European Union Delegation to Pakistan visited National Textile University to interact with faculty members and give a presentation to students. Dr. Tanveer Hussain, Dr. Yasir Nawab (Dean; Faculty of Engineering & Technology) and Dr. Muhammad Umair (Director; Student's Affairs) greeted her and exchanged their views on cordial and harmonious European Union and Pakistan textile trade relationships, research and scholarship opportunities. Ms. Anne Marchal briefed the faculty and students through a comprehensive presentation about the European Union's funded research and development programs for Pakistan which included Erasmus Mundus Program (Scholarship and Exchange Program).



Mr. Shabahat Asghar Head of Campus France Pakistan under the Embassy of France in Pakistan Visits NTU

Mr. Shabahat Asghar, Head of Campus France Pakistan under the Embassy of France in Pakistan visited NTU on 18 October 2019 with the aim to interact with faculty members and students. Director Student's Affairs, Dr. Muhammad Umair greeted him and exchanged views on cordial and harmonious relationships related to research and scholarship opportunities. Mr. Shabahat Asghar informed the students through a comprehensive presentation about the French embassy that has launched one of its offices in Pakistan "Campus France" dedicated to higher education. Campus France is an official French Government agency promoting opportunities for studies in France for Pakistani students.



Visit of NTU Delegation to Heavy Mechanical Complex Taxila



Worthy Rector NTU, Prof. Dr. Tanveer Hussain along with Director FET, Dr. Yasir Nawab visited Heavy Mechanical Complex Taxila on 2nd October 2019. Managing Director HMC, Engineer Zaheer Shah received the delegation. They decided to work together on the projects of mutual interests such as the development of textile machinery. Heads of both institutions agreed to sign an MOU to formalize the collaboration.

Visit of German Ambassador to the National Textile University, Faisalabad

His Excellency, the Ambassador of Germany, Mr. Bernhard Schlagheck visited the National Textile University (NTU). He was accompanied by Mr. Martin Herzer, the head of the economic section at the German Embassy. The Ambassador was welcomed by Dr. Tanveer Hussain, the Rector of National Textile University who also gave a brief presentation about the Pakistani Textile Industry and the history and role of the National Textile University in supporting the development of the National Textile industry. Dr. Tanveer Hussain, Professor Tahir Shah and the senior NTU faculty had a wide-ranging discussion about the possibility of collaboration between NTU and the appropriate education and research institutions in Germany. The German Ambassador showed great interest in supporting and facilitating the interaction between German and Pakistani academia and industry field of textiles. Finally, the guest was taken for the tour of the NTU's research and development facilities. After visiting the National Textile Research Centre and academic departments, the Ambassador appreciated the range of R&D activities at NTU and showed keen interest in developing research ties with the institution.









MoU and Collaborations

BASF signed MoU with Department of Polymer Engineering, National Textile University

Department of Polymer Engineering (DPE) has always been committed to promote industrial cooperation and has partnered with many national and international industries. Recently, DPE collaborated with BASF cooperation by signing MoU. The MoU will offer opportunities to both parties to cooperate with each other for the strengthening of academia-industry linkages through joint research, sharing of expertise, student's internships, technical workshops and other compatible activities as identified by mutual consent.



CHT signed an MoU with NTU to Launch CHT Undergraduates Scholarship Program

The CHT Scholarship Program for BS Textile Engineering (Textile Processing only) will support early career academics of undergraduate students to establish successful academic careers and become future leaders in their fields. The scheme provides funding for four years to allow awardees to concentrate on academics in the field of Textile Processing and help them focus on CHT level research projects. Funding for the CHT is provided by the CEO of CHT, Lahore. Three outstanding BS students from Textile Processing shall be awarded prestigious CHT scholarship on the bases of needs and academic records of students.

MoU Signed between M.R.P Resin Industries and Department of Polymer Engineering

An MoU was signed between the Department of Polymer Engineering and Multi Resin Pakistan (M.R.P) Industries on 13 September 2019. Dr. Yasir Nawab (HOD, DPE) briefed the industry personnel's Mr. M. Fahad Malik (CEO) and Mr. Qamar Abbas (G.M. Production) about the available facilities and current projects going on at the department. MRP team also visited the Polymer Engineering Labs. The MoU signing ceremony had the presence of Dr. Z. A. Rehan (Coordinator) and Engr. Abdul Rehman (Convener; Industrial Linkages).



MoU Signing Ceremony with Crescent Bahuman Limited



CEO of Crescent Group, Mr. Nasir Shafi visited National Textile University to explore the opportunities of collaboration in research and development. Prof. Dr. Tanveer Hussain, Rector of NTU greeted the guests and discussed various areas where collaboration can be established. On this occasion, MoU was signed between NTU and CBL. Guests visited research facilities at the National Textile Research Centre and admired various developments made by its researchers. It was declared that different commercialization projects will be initiated following this MoU.

MoU signed between NTU and Marmara University, Turkey

An MoU was signed between NTU and Marmara University, Turkey for faculty mobility and students exchange program under Mevlana Exchange program on 25 October 2019. It was initiated by Dr. Hafsa Jamshaid C Text FTI. The MoU will offer opportunities to both parties to exchange 5 students from textile technology for 2 semesters (Undergraduate 03, Graduate 01 and Ph.D. 01) and 2 textile faculty members for two and 5 students from Business studies and management sciences for 2 semesters (Undergraduate 03, Graduate 01 and PhD 01) and 2 faculty members for two weeks to raise their professional skills.

Strengthening Design Department of NTU and fashion world linkages



Team Design (NTU) is putting untiring efforts to break the academic stereotype of dissociation of classroom learning and the experiential world and is striving hard to position the design department to the level of world's top design schools. In persuasion to this vision, the department of design had organized a faculty tour to one of the leading Design House of Pakistan "GSMB Ventures" on 14 December 2019. Dr. Zafar Javed along with his vibrant team visited "GSMB Ventures" and had a meeting with the Co-Founder of the organization. Babar Rashid Khan (CEO) and his leading Designer 'Mah Para' stressed the need to initiate a strong link between the department of design and the fashion industry. It was a healthy discussion about synergizing the strengths of both sides and mapping the way forward to rectify weaknesses. GSMB Ventures showed a strong willingness to cooperate with NTU and to work together for the betterment of the nation.

MoU signed between NTU and NIET University, Uzbekistan

The National Textile University (NTU) inked a Memorandum of Understanding (MoU) with NIET University, Uzbekistan for exchange of Faculty and Students of both the Universities on 24 September 2019. Dr. Tanveer Hussain (Rector; NTU, Faisalabad), and Senator Odiljon Mamatkarimov (Rector; NIET University, Uzbekistan) signed the MoU. A delegation of 22 members from NIET University Uzbekistan which comprised of Mr. Odiljon (Rector) and Mr. Avazbek Obidov (Vice-Chancellor), Mr. Umarjon Melibaev (Dean of Faculty), Mr. Mansurjon Mansurjon (Specialist of Foreign Languages; NIET) reached Faisalabad from Uzbekistan to sign this MoU. The worthy Rector of NTU, Prof. Dr. Tanveer Hussain was assisted by Dr. Yasir Nawab (Dean; Faulty of Engineering), Dr. Zafar Javaid (Director; Human and Social Sciences) and Mr. Suleman Saif (Registrar; NTU). Speaking on this occasion, Mr. Odijon and Dr. Tanveer Hussain opinioned that after signing of the MoU between the two leading Universities, their faculty members and students would take the opportunity to higher studies in both countries and raise their professional and technical skills.







Careers/Job Placement/Training Sessions

Recruitment Drive to HR Team from Ibrahim Fibers Limited visited National Textile University

Ibrahim Fibers Limited is one of the leading manufacturers of polyester fiber and PC yarns in Pakistan. Due to a long affiliation, IFL has always relied on NTU to provide Textile Engineers some valuable assets to serve its industry. HR team from IFL visited NTU on 3rd December 2019 for a recruitment drive to hire fresh engineers to take forward the vision of IFL. After a brief introduction of Ibrahim Fibers Limited, a written test was conducted followed by interviews for shortlisted candidates. Mr. Mirza Mahmood Akhtar (Deputy Director, Student Advisor Office) assisted the HR team of Ibrahim Fibers Limited.



GRE Test Preparation Workshop-Fulbright Scholarship Program by USEFP



Advisor Students Affairs Office organized Phase-I, GRE Test Preparation Workshop for Fulbright Scholarships by USEFP (United States Educational Foundation in Pakistan) on 17 October 2019. Ms. Maryam Zahra Khan (Education USA Adviser at USEFP) told the strategies to solve GRE Math and English. This workshop was of two hours in duration. Further, she gave tips on cracking the verbal section of the exam, solved practice questions and discussed study skills related to GRE. She also announced the upcoming Phase-II (Informational Seminar on Fulbright Scholarships) and orientation of the GRE test expected to be held in November 2019

National Textile University Business Incubation Center (NTU-BIC) arranged an informative session

National Textile University, Business Incubation Center (NTU-BIC) arranged an informative session for final year students of NTU. Mr. Asif Bashir (Manager; BIC) briefed them about the role of NTU-BIC and how it will provide resources and mentorship to young entrepreneurs to convert their ideas into a successful startup.



Mr. Tariq Rasul Education Consultant Morgan Wiseman Solicitors, UK



Mr. Tariq Rasul is an Education Consultant at Morgan and Wiseman Solicitors, United Kingdom. He visited NTU on 7 November 2019 with the aim to interact with faculty members and students. Dr. Tahir Shah and Dr. Muhammad Umair greeted him and exchanged views on cordial and harmonious relationships related to research and education opportunities in the UK. Mr. Tariq Rasul informed the students through a comprehensive presentation about Higher Education in UK universities. Moreover, he explained the education services and supportive residential opportunities. Dr. Tahir Shah also addressed the students and shared his experiences of higher education abroad. In the end, a souvenir was presented to him by Dr. Tahir Shah as a token of memento.

Mr. Ali Ahmad Malik from the Mads Clausen Institute of the SDU

Mr. Ali Ahmad is from the SDU Technology Entrepreneurship and Innovation Dept. of Mads Clausen Institute of the University of Southern Denmark (SDU). SDU is the largest public-sector university in Denmark with seven campuses in different Danish cities. He visited NTU on 9 January 2020 with the aim to interact with faculty members and was interested in recruiting some highly talented students for Masters in Engineering programs. He stated that the Engineering Innovation & Business department is involved in industry led research projects in the domains of smart manufacturing, Industry 4.0, human-robot collaboration and digital twins where the partner companies are Danfoss, LINAK, LEGO and Siemens. At his session, he informed the students about the scholarships available for non-EU students.



NTU-BIC successfully conducted pitches for 2nd Cohort



NTU-BIC successfully conducted pitches for 2nd Cohort. Applicants from different fields presented their business idea to the Selection Committee.

NTU-BIC organized a boot camp about startup weekend

NTU-BIC and techstars arranged a boot camp about startup weekend on 5th November 2019 in the seminar room of ORIC. The incubatees and students were informed about startup weekend (22-24 November 2019) where in just 54 hours they will experience the highs, lows, fun, and pressure that makeup life at a startup. Mr. Altaf Hussain (Connect Ventures), Mr. M. Bilal (Connect Ventures) and Dr. Saif Maqbool (Assistant Professor; FAST NUCES), Ms. Nazish Saqib (Head of Student Affairs; FAST NUCES) and Mr. Asif Bashir (Manager; NTU-BIC) along with their teams were also present in the boot camp.



Training on "Outcome Based Education"



Quality Enhancement Cell and Human Resource Department of National Textile University organized an in-house training on "Outcome Based Education" on 11th and 22nd October 2019. Faculty members discussed the significance of Outcome Based Education, teaching practices and implementation model for this education process. The resource person of the workshop was Dr. Yasir Nawab, Director of Engineering & Technology and Ms. Asra Tariq from the Department of Polymer Engineering

Training (Part-I and Part-II) of Group-1 and 2 under "Faculty Development Training Program"

Quality Enhancement Cell and Faculty of Engineering & Technology of National Textile University (NTU) organized an in-house training under the "Faculty Development Training Program" on 29 October 2019, 5 November 2019 and 12 November 2019. This program is the replication of the HEC's 6-week skills-based faculty development program, held in July. The resource person for this training was Ms. Asra Tariq (Lecturer in Polymer Engineering) and Mr. Hassan Iftikhar (lecturer in fabric Manufacturing) who had attended the HEC's training. Mr. Ayaz Sheikh (Deputy Director; QEC) and Mr. Muhammad Haroon (Asst. Director; QEC) were the focal persons for organizing the training. Faculty members of Group-1 (Textile Processing, Polymer Engineering and Faculty members of Karachi Campus) and Group-2 (Weaving and Knitting) attended the session. Karachi Campus was linked through video call. The aim of the program was to convey the principles and practice of effective teaching with the strategies and tools to overcome the challenges faced by students. The training session was interactive and based on various hands-on activities. All the participants participated with great enthusiasm and highly appreciated the training





Two Days Training on "Lean Thinking" was organized by Business R&D Society and Business A & D Research Group



Two Days Training on "Lean Thinking" was organized by Business Research and Development Society and Business Analytics and Decision Research Group (FMS) from 5 October to 6 October 2019. The resource persons were Dr. Hakeem-Ur-Rehman, Dr. Sajjad Ahmed Baig, Dr. Muhammad Hashim, and Dr. Muhammad Zia-Ur-Rehman. The nominated representatives of the different manufacturing industries of Pakistan attended this training session and shared their industrial/Practical experiences and issues with the audience.

Training Workshop on "Preparation of Self-Assessment Report" organized by Quality Enhancement Cell

Quality Enhancement Cell of National Textile University (NTU) organized a training workshop on "Preparation of Self-Assessment Report (SAR)" on 11 October 2019 for the Faculty members of NTU, Karachi Campus through video link. The resource person was Mr. Muhammad Haroon, Asst. Director QEC at NTU Faisalabad while the focal person at Karachi Campus was Mr. Ayaz Sheikh, Deputy Director of QEC. Mr. Haroon delivered a comprehensive presentation on the importance and preparation mechanism of SAR. Also, the SAR preparation of Engineering programs was discussed according to the format recommended by the Pakistan Engineering Council (PEC).



Seminars/Events/Workshops/Exhibitions

Islamic Banking Conference at National Textile University, Faisalabad in coordination with State Bank of Pakistan

In order to strengthen the knowledge and disseminate the true spirit of Islamic Banking, Faculty of Management Sciences, NTU, Faisalabad organized one day "Islamic Banking Conference" in coordination with State Bank of Pakistan and Meezan Bank, on 14 October 2019. Mr. Shaukat Zaman, Director State Bank of Pakistan briefed the theme of the conference and encouraged the students to learn and develop new business products under shariah complaints. Convener of the Conference, Dr. Muhammad Shahzad Iqbal explained that the basic purpose of this event was to update the recent developments and innovations in Islamic Finance and to introduce business opportunities for small and medium businesses under the Islamic Financial System.



An Interactive Lecture on Digital Design Solutions was arranged by the Design Department



An interactive lecture for the students of the final year of the Design Department was organized on 4 October 2019 under the guidance of the head of the department, Dr. Zafar Javed. The main goal of the lecture was to make students aware of color separations, full tone, half tone, water separation, repeats, film printing, digital printing and also about trends in the local and international markets. The guest speaker was Mr. Syed Qamar Rizvi (Textile designer and Wacom country head). He shared his professional experience and explained how Wacom relates to contemporary digital design solutions.

Implementation of Lean in Textiles

A seminar on "Implementation of Lean in Textiles" was arranged by the society of garments and textile knitters on 22 October 2019 in the main hall of NTU. Mr. Mudassar Hassan from Masood Textile Mills and Mr. Wasantha Kumara from Kamal hosiery were the guest speakers. Mr. Mudassar Hassan shared his team success in MTM and guided the student about the basic concept of leans. Mr. Wasantha Kumara shared his experiences and guided the student about how lean is important in our industry and how lean concept affects productivity and cost in textiles.



National Textile University Wings Society with Collaboration of "SKMCH&RC" arranged an awareness session on "FIGHT FOR THE CURE"



Make a Pledge! take out five minutes for yourself—30 October 2019 The month of October is observed as "Awareness and Self prevention about Breast Cancer" month. Therefore, NTU WINGS society arranged an awareness session on "FIGHT FOR THE CURE OF BREAST CANCER" along with the theme display of "don't be afraid and fight for it" for females to tell them how to take care of themselves. Dr. Fatima ul Zahra working as Medical Officer Allied Hospital and Ambassador of Shaukat Khanum Memorial Cancer Hospital and Research Centre (SKMCH&RC) presented comprehensive information for the awareness, early detection and treatment as well as palliative care of this disease.

Seminar on Blockchain and Industry 4.0

Department of Computer Science in Collaboration with UNIAL, arranged an invited talk on emerging technologies including Blockchain and Industry 4.0. The guest speaker was Prof. Dr. Rizwan Khan, Chief Technology Officer of DRGA, USA. The talk was attended by faculty members and senior students of the Computer Science Department. It was very informative and will open the ways to work in this emerging technology.



An Artist talk by Visual Artist and Performer Ms. Natasha Jozi



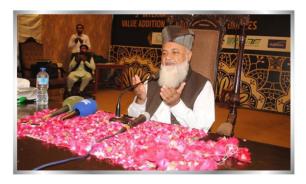
An artist talk was organized for the students of Visual Arts (3rd and 5th semester) by Ms. Nida Ramzan at the Department of Design. Natasha Jozi was a guest speaker. She is a visual thinker artist, writer and performer interested in performative self, collective experience and eastern philosophy. She has performed different concepts nationally and internationally. She is also a Fulbright Scholar with a Masters in Studio Arts majoring in Performance art from Montclair School of Arts, USA. The session proved very fruitful

An "Artists Talk" by Visual Artist Ms. Sana Kazi

Ms. Sana Kazi was invited as a guest speaker for an artist talk organized at the Design Department by Ms. Nida Ramzan. She is an international studio artist, writer and art critic. She has done an MFA in Visual Arts from the National College of Arts. Ms. Sana received a number of awards including an exhibition in New York, funded by the Rockefellers Brother Fund Foundation in collaboration with the New York Foundation of Arts (NYFA,) an exhibition in Washington DC, funded by the Crispus Music Industries and a solo residency in Abu Dhabi by the Art Hub. During the discussion, she explained how she uses the traditional form of Indo-Persian Miniature with a contemporary spin. She also covered several social issues that affect the world today.



The Concept of State of Madinah and the Islamic Welfare State in the Light of Teaching of The PROPHET MUHAMMAD



NTU Quran society arranged a lecture on the topic of "The Concept of the State of Madinah and The Islamic Welfare State in The Light of Teaching of The PROPHET MUHAMMAD" It was delivered by well-known Islamic Scholar Syed Saeed ul Hassan Shah Sahab (Noor ul Huda Foundation, Gulshan e Saeed, Faisalabad) on 13 November 2019 in NTU Main Hall. In the end, Dr. Zulfiqar Ali (Director of Graduate Studies) gave closing remarks. Then the shield of the owner was presented to the chief guest by Dr. Bilal Qadir (Chairman YMD) and Dr. Zulfiqar Ali (Director Graduate Studies).

Grand Challenge Fund Orientation Seminar

An awareness seminar on Grand Challenge Fund (GCF) was arranged by the Higher Education Commission (HEC), Islamabad Resource persons for the event were Director General R&D, HEC and project chairman, GCF. NTU faculty participated in the seminar via video conference. Faculty members from various departments discussed their queries regarding the proposal submission and other details of the project.

Awareness Seminar on Road Safety

NTU Road Safety Club arranged an awareness seminar on road safety on January 9, 2020. Mr. Sardar Muhammad Asif Khan (PSP Chief Traffic officer, Faisalabad) shed light on the importance of road safety. Mr. Waqas Ali Warriach (In-charge Education Unit, City Traffic Police, Faisalabad) coordinated the whole session. Souvenir was presented to the worthy guest by Mr. Salman Saif (Registrar, NTU). A Souvenir was also presented to the respected Registrar by Mr. Sardar Muhammad Asif Khan. At the end of this session, Mr. Farooq Jamal (Convener of the Road Safety Club; NTU) paid special thanks to the worthy guests for their presence.



Hand Block Printing Workshop



To endorse the concept of active learning, one-day workshop of Traditional Block Printing was arranged for students of BVA (3rd semester) by the instructor Ms. Aroobah Mumtaz. It is a traditional method of fabric printing. Learners participated in the workshop with full spirit and designed their apparel products. Students were also demonstrated about preparation of color recipes and design registration process during printing

Calligraphy workshop by Ustad Shafiq Uz Zaman

Design Department (NTU) is focused to equip students with the latest happenings in the field of design. "Ustad Shafiq Uz Zaman" the chief calligrapher of The Prophet's Mosque, Madina visited NTU and conducted a workshop of calligraphy at the Department of Design on 24 December 2019. He performed calligraphy (in the Thuluth script) on 177 domes of the Prophet's Mosque. He has been giving his services for the last 30 years. He won second prize at the International Calligraphy Competition in Istanbul, Turkey. NTU faculty and students enthusiastically participated in the workshop. Ustad sahib wrote Quran verses in 4 calligraphic fonts and taught participants the rules of calligraphic fonts.



Zero mm Youth Film Making Workshop



"The Little Art" is a non-profit arts education organization that works in Pakistan since 2007. They have developed a youth film festival. "Zero mm - Youth Film Festival South Asia" and Film Making Workshop. The five -day workshop was organized in National textile university from 2 to 6 December 2019 by "The Little art" under the supervision of Sir Ehsan Ali and Madam Nida Ramzan. The very talented filmmakers and Trainers, Madeeha Raza, Momina, Mudassar and Irfan conducted the workshops. Students from NTU Department of Design did a very effective story visualization exercise conducted by the trainers and then translated it on paper. They also learned the importance of sound in films and how teamwork is as important as breathing in making a film.

Workshop on "Knitting Machine Needles"

An interactive workshop was arranged by the Society of Textile Knitters on 23 October 2019 in the Conference room. Mr. Rasmee Al Dakheel, area sales manager from Groz-Beckert, Germany was the guest speaker. Groz-Beckert is the world's leading provider of industrial needles, precision components and fine tools as well as systems and services for the production and joining of textiles. He guided the student about the latest innovation and products of Groz-Beckert used in knitting. In the end, students asked him different questions and innovative ideas were shared.



Digital Knitting Workshop



Society of Textile Knitters organized a workshop on "Digital Knitting". Mr. Khurram Shahzad was invited a trainer who is the Programmer of SDS and M1 PLUS of Shima Seiki and Stoll. He is currently working in the production unit of "Cambridge" in Karachi. During the workshop, he shared different useful techniques of programming and his developments at Cambridge.

CPD workshop on Introduction to PLC and SCADA held at NTU

Department of Weaving organized the 1st CPD Workshop of the year 2020 on 13 January at NTU, Faisalabad. The title of this workshop was "Introduction to PLC and SCADA". PEB Coordinator of the CPD workshop was Dr. Talha Ali Hamdani (HOD; Weaving Dept.). The resource person of the workshop was Mr. Furqan Javed from F&F automation. A number of faculty members, students and industrialists participated in the workshop.



DOD, NTU in collaboration with JICA arranged a workshop for faculty and students on fashion forecasting and illustration



Department of Design, NTU in collaboration with JICA arranged a workshop for faculty members and students on fashion forecasting and illustration. Ms. Sakado Tei (fashion Forecasting expert) taught how to go through the process of fashion forecasting and choosing an appropriate color palette for each season. She shared her own A/W 2021 fashion and color forecasting catalog with the participants. The Students and faculty members of DOD also displayed their work. Ms. Tei appreciated the work and claimed that the students and faculty members have great potential to excel in the field of design. Afterwards, she gave a live demonstration of developing a fashion illustration with movement in it. At the end of the workshop, Dr. Tanveer Hussain and Director DHSS, Dr. Zafar Javed presented souvenirs to the guests.

Workshop on Advancement in Knitting Technology

Knitting department of National Textile University, Faisalabad arranged a Workshop on Advancement in Knitting Technology in collaboration with SHIMA SEIKI and Almurtaza Machinery. Mr. Yamad representing Shima Seiki, who deals with the marketing of Shima products all over the world was the guest speaker. He delivered a talk to guests and students about the latest trends and advancements in the knitting technology. The knitting department had recently installed a hybrid flatbed knitting machine in its lab. Mr. Soong, senior technician of Shima from Malaysia briefed the guests about the working of the designing systems and machines. Later, Mr. Zulfiqar Ali from Al-Murtaza thanked local industrialists and Japanese guests.



Department of Weaving arranged an event to display first-year student's projects



Department of Weaving arranged an event on 16 January 2020 to display first-year student's projects. The projects were assigned to them by Prof. Dr. Yasir Nawab. Students of first year visited different textile industries and studied the production flow from raw material to final product. They made documentaries, reports and flexes based on their research. At the end of this session, Dr. Yasir Nawab and the Chairman of the weaving department, Dr. Talha Ali Hamdani, announced the winners and distributed achievement certificates.

Seminar on Innovative and Creative Design

A seminar on "innovative and creative design" was arranged for the final year students of Fashion and Textile Design. Director of DHSS, Dr. Zafar Javed was the speaker of the seminar. The seminar was divided into three sessions; In the first session, Dr. Zafar Javed gave a persuasive talk about innovative design. In the second session, he motivated the future designers to dig out creative solutions for the issues in the textile sector especially Sustainability which is affecting the world on a global scale The last session was about technical and smart textiles. Students were given an insight into the amazing world of futuristic textiles and apparel.



Society of Textile Weavers arranged a technical lecture on "Global Denim Market from Weaving Prospect"



Society of Textile Weavers arranged a technical lecture on "Global Denim Market from Weaving Prospect" on 16 December 2019. Mr. Kashif Junaid delivered the lecture as a guest speaker. The main objective of the seminar was to develop the technical abilities of the students who were interested in developing their own business. They were also provided with the opportunity to utilize their business ideas. At the end of the event, the shield was presented to the guest speaker by Dr. Muhammad Zubair.

Kashmir Solidarity through Cultural Mela 2020

On 9 January 2020, NTU Arts and Culture Society arranged the event "Kashmir Solidarity through Cultural Mela". It was inaugurated by Dr. Zafar Javed (Director; Faculty of Humanities and Social Sciences). Students of different cultures participated and showed the diversity of Pakistan followed by cultural performances. There were different stalls representing Pakistani cultural values. These stalls were also visited by Mr. Muhammad Asif Awan, Chief Officer Traffic Police (CTO) Faisalabad and Mr. Salman Saif, Registrar. They appreciated the patriotism and energy of students. The best stall representation was won by Sindhi Culture and the best performance was won by Punjabi Culture. The best dress male category was won by Waleed Khan from the Software Engineering department and the female category was won by Iqra Tabbasum from Design Department. Shields were distributed by Convener of the society, Mr. Saqib Rao, Ms. Nadia Shamim and Jury members from the design department.



Motivational Lecture by Islamic Scholar Peer Muhammad Ajmal Raza Qadri



On 8 January 2020, NTU Health Care and Blood Donation Society in collaboration with NTU Quran Society had arranged an event and motivational lecture on the topic" Human made for Humanity and Kindness". Islamic scholar Peer Muhammad Ajmal Raza Qadri was invited to deliver the motivational speech to the volunteers of the Health Care and Blood Donation Society. In the end, the shield was rewarded to the honorable quest.

Technical Seminar on Interview Skills and Techniques

Society of Textile Spinners arranged a technical seminar on Interview Skills and Techniques on 2nd January 2020 in the Main Hall. Students from all the departments of the university participated in this seminar. The Honourable teacher Miss Nazish, Lecturer Management Sciences, NTU delivered a brief lecture on Interview Skills and techniques. She guided the students on how to give a successful interview to get a better job opportunity. At the end of the session, the Shield was presented to Miss Nazish by Dr. Waqas Iqbal (Convener of Spinning Society). The society of textile spinners is very thankful to Miss Nazish for giving her precious time.



Technical Lecture on Advanced Spinning Processes



Society of Textile Spinners arranged a technical lecture on "Advanced Spinning Processes" on 3rd January 2020 in the IT lab. Honorable Speaker was Mr. Talib Butt, Technical Director, Crestex. The students from the 3rd year and 4th year attended the lecture. The session provided a huge knowledge to the students about modern techniques used in Spinning industries. The session ended by giving a shield to the guest speaker by Dr. Bilal Qadir, Sir Uzair Hussain and Dr. Waqas lqbal. Society of Textile Spinners was pleased to have some quality time with Mr. Talib Butt.

Society of Textile Spinners arranged a Technical lecture on Textile Waste Recycling

Society of Textile Spinners 2019-20 arranged a Technical lecture on Textile Waste Recycling on 19 December 2019. The honorable speaker of the lecture was Mr. Abu Bakker Marwat (Head of NPD from Midas Safety, Faisalabad). Students of the third year and final attended the lecture to enhance their capabilities. In the end, a souvenir was presented to Mr. Abu Bakker by Dr. Bilal Qadir, Sir Uzair Hussain and Dr. Waqas Iqbal (convener of society). Society of textile spinners is highly obliged to Mr. Abu Bakker Marwat for taking out time from his hectic schedule.



National Textile University Entrepreneurship Society Organized a Seminar on "Entrepreneurship as a Viable Career Option"



NTU Entrepreneurship Society Organized a Seminar on "Entrepreneurship as a Viable Career Option". Dr. Sara Khawar was the Guest Speaker of this Session. Dr. Sara Khawar is the fourth person from Pakistan who did PhD. in Entrepreneurship. She is the Business Consultant in Sethi Motors, Lahore and also Assistant Professor in Information Technology University, Lahore.

National Textile University Entrepreneurship Society Organized "HULT PRIZE Ecopreneurship Business Idea Competition" at FMS Department

NTU Entrepreneurship Society Organized "HULT PRIZE Ecopreneurship Business Idea Competition" at FMS Department. Students from the whole university presented their different business ideas. 2 students, Asim Ali from DMT and Gohar Ali from BBA Dept. are selected for the next level of competition which will be held soon in Lahore. Mr. Farooq Jamal. Dr. Shahzad Iqbal, Dr. Sajjad Ahmed Baig, Dr. Ahmed-ur-Rehman were the Judges of this event.



Inter Faisalabad Comic Fest 2k19



On 18 December 2019, NTU Arts and Culture Society arranged comic fest 2019. The purpose of the event was to enhance the creativity of students and provide some healthful environment. Students from different institutes of Faisalabad participated in this event. This event had different activities including Individual cosplay, Team cosplay, Face painting, Game stalls, and Food stalls. The event was inaugurated by Rana Sikandar Azam (President Chamber of Commerce Faisalabad). The winner of Team cosplay was Ali Nadeem's team (Money Heist) from NTU and Individual cosplay was won by Syed Samam Bukhari (Thomas Shelby of Peaky Blinders) from NTU and Aiman Fatima won Face painting contest from FIHS. It was huge fun and was one of its kind that took place in Faisalabad.

Technical lecture on "Modern Techniques for Testing of Yarn Parameters"

Society of Textile Spinners (2019-20) arranged a Technical lecture on "Modern Techniques for Testing of Yarn Parameters". Mr. Sadiq Awan (Technical Director) from Nishat mills, Faisalabad was the keynote speaker. The lecture was attended by all the senior students of BSTE. In the end, a souvenir was presented to the honorable speaker by Dr. Waqas Iqbal (convener of society).



"GIZ, Pakistan" organized one-day seminar



The Department of Textile Processing in collaboration with "Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Pakistan" organized a one-day seminar on 5 December 2019. The focus of the Seminar was on "The Top Ten Issues in Chemical Management (ZDHC Training) and Textile Wastewater Flows and Pollution Load" People from the Industry, Faculty members and the Students of NTU attended the Seminar

Seminar on "Coloration of Textiles by digital Printing: Present & Future"

The textile processing department organized an event on "The Coloration of Textile by Digital Printing: Present and Future". The keynote speaker was "Professor Long Lin" who has traveled all the way from the University of Leeds, England to deliver this important lecture on the novel techniques and technologies of textile digital printing. Textile Processing Department at NTU was honored to have Professor Long Lin from Britain here, who is an authority not only in textile digital printing but also in the coloration of textiles. He shared his vast knowledge and advanced expertise in textile coloration with the students and the faculty.



Important Meetings/Events at National Textile University

9th Meeting of Academic Council



The 9th meeting of Academic Council was held on 16 September 2019 in the Video Conference Room of the University. Worthy Rector NTU, Dr. Tanveer Hussain chaired the meeting. All Deans, Directors, HODs, Registrar and QEC officials were present. Members of the Academic Councils of other universities and organizations also attended the meeting. It started with the recitation of the Holy Quran. The Rector welcomed all the participants and started the proceedings of the meeting. Then the agenda items were presented to the house for discussion and decision making accordingly.

First general meeting of Textile Industrial Advisory Board (TIAB) held at NTU

The first general meeting of the Textile Industrial Advisory Board (TIAB) was held on 25 October 2019 in Video Conference Room under the Faculty of Engineering and Technology (FET). Dr. Tanveer Hussain, Rector of NTU chaired the meeting and Co-Chair were Dr. Yasir Nawab, Director FET and Mr. Rana Sohail Ahmad, CEO of Shan Associate. The purpose of this meeting was to help shape strategic directions of the University and to propose means of strengthening the partnership between the University, the Textile Industry and the Community.



Inauguration of Business Incubation Centre



Mr. Nasir Shafi, CEO of Crescent Group Inaugurated NTU-Business Incubation Centre. The center aims at enhancing Entrepreneurship culture in NTU. It will act as an incubator for different types of startup based on innovation projects completed by faculty and students at NTU. It will provide the basic requirements of space infrastructure and mentorship needed to nurture startups into healthy companies.

1st Quarterly Progress Review Meeting of NTU-BIC Incubated Companies

The 1st Quarterly Progress Review Meeting of NTU-BIC Incubated Companies was held on 1st November 2019 in ORIC Seminar Room. The CEO's of Incubated companies included Niofox, Zert Club, Green Avengers, SmarTech Solutions, Agilerz, The Developers participated in the meeting. It was noted that the companies have successfully generated revenue worth Rs. 0.6 million in the last quarter.



The 11th meeting of Faculty Board of Studies (FBOS) of Faculty of Engineering and Technology



The 11th meeting of Faculty Board of Studies (FBOS) of Faculty of Engineering and Technology was held on 31 December 2019 in Video Conference Room of National Textile University, Faisalabad.

INTER LAB COMPARISON PROGRAM ILCP Cohort I and II 2020

National Textile Research Center has announced the launching of its Inter Lab Comparison Program (ILCP) for the year 2020. Participation in Textile Testing laboratories all over Pakistan will be highly encouraged.

The 5th convocation of National Textile University was held on November 30, 2019

The 5th convocation of National Textile University was held on Saturday, November 30, 2019. Worthy Rector, Professor Dr. Tanveer Hussain presided over the convocation. During the convocation, 46 Gold medals, 39 Silver medals, and 1473 degrees were awarded to the students. While addressing the faculty, students and parents, the Rector said: "Today, we are celebrating a day of achievements. I congratulate the graduating students and their families on this important occasion. I hope that you will be able to give back to your profession and community more than what we have attempted to inculcate to you. Moreover, I would like to congratulate faculty for their contributions to making this a success story. I wish you every success as you enter this next exciting stage of your life and career and very much hopeful that you would contribute positively to whatever the field you choose for your life."











NTU Participations at National and International Level

3rd International Indonesian Textile Conference

Mr. Ateeq ur Rehman (Lecturer, Department of Garment Manufacturing) presented his research titled "Fabric Hand Vs Sensory Comfort; A Comparative Study of Knitted Clothes" in 3rd International Indonesian Textile Conference. The conference was held at Bandung, Indonesia on 27 July 2019.



Participation in 2nd PEC Deans International Conference



Dr. Yasir Nawab (Director; FET), Prof. Dr. Zahid Rizwan (Dean; QEC), Prof. Dr. Tahir Hussain (Dean; FOS), Dr. Sajjad Ahmed Baig, (Director; FMS), and Dr. Syed Talha Ali Hamdani (Chairman; Department of Weaving) participated in the 2nd PEC Deans International Conference of Engineering Institution held on 14-15 October 2019. The main theme of the conference was Globalization of Engineering Education and Practice. The conference was inaugurated by Honorable President of Pakistan, Dr. Arif Alvi along with Federal Minister for Science and Technology, Mr. Fawad Hussain Chaudry.

Two-day workshop on "(OBE) and Complex Engineering Problem"

Dr. Hafsa Jamshaid C Text FTI participated in the two-day workshop on "Outcome Based Education (OBE) and Complex Engineering Problem" for PEVs by Pakistan engineering council and Punjab Higher Education Commission in Lahore. Minister for Higher Education of Punjab, Raja Yassir Humayun Sarfraz distributed the certificates to the participants of the two-day workshop.



Brainstorming session at APBUMA

Prof. Dr. Tanveer Hussain (Rector, NTU) and Dr. Yasir Nawab (Dean FET, NTU) addressed to the Brainstorming Session on "Role of NTU for the Promotion of Value Addition Innovation Diversification and Identification of problems for solution" of All Pakistan bedsheets and Upholstery Manufacturers Association which was held on 25 January 2020 at APBUMA Office, Kashmir Bridge, Canal Road, Faisalabad.

1st International seminar on "Times Higher Education University Rankings"



The 1st International seminar on "Times Higher Education (THE) University Rankings" was organized by the University of Lahore at Lahore Campus on 24 October 2019. QEC team of National Textile University; Prof. Dr. Zahid Rizwan, Director; Mr. Muhammad Haroon, and Mr. Arshad Abbas, Data Analyst attended the seminar. The seminar provided a platform to the universities in Pakistan to learn about the methodologies of THE World University Rankings and other rankings relevant to the region.

Department of Polymer Engineering Participated in ISAM-2019

Ms. Ayesha Afzal (lecturer; DPE), Ms. Iqra Abdul Rashid (Lecturer; DPE) and Mr. H.M. Fayzan Shakir (lecturer; DPE) participated as a presenter in 16th INTERNATIONAL SYMPOSIUM ON ADVANCED MATERIALS (ISAM- 2019) held at National Centre for Physics, Islamabad on 21-25 October 2019.

Participation in PIEAS National Olympiad'19

Students of the Department of Design and Computer Science participated in PIEAS National Olympiad'19 (PION19) held from 25-27 October 2019. Students actively participated in different academic and extracurricular modules such as web development, speed programing, Essay Writing, Calligraphy, Live Painting, Graphic designing, e-gaming, T-Shirt Painting, Scavenger Hunt, Scrap Art and Bridge Building. Our students performed very well and got different positions in different modules



Artist Talk by Ms. Nida Ramzan

Ms. Nida Ramzan from the Department of Design was invited as a guest speaker for an artist talk at GC Women University where she shared her experiences and art practices with the students of fine arts. The topic of discussion was female and her relationship with different elements and everyday objects in various spaces and environments. This exchange of ideas helped the students to develop and define their specific interest and also, they were exposed to multiple points of view about the topic under discussion.



Department of Design participated in Lyallpur Art Fair

Ms. Nida Ramzan and Ms. Syrrah from the department of Design participated in Lyallpur Art Fair arranged at Galleria Faisalabad. Both artists from the Design Department displayed their selected work in an exhibition along with twenty other artists from different institutes.

"How to Implement Outcome Based Education in HEIs" organized at Lahore

Quality Enhancement Cell (QEC) team of National Textile University attended a training workshop on "How to Implement Outcome Based Education (OBE) in HEIs on 2 November 2019 organized by Institute of Human Skill Development at Lahore. The Resource Persons for the training were Dr. Saeed Ahmad Buzdar, Director QEC of The Islamia University of Bahawalpur and Dr. Naveed Ahmed, Dy. Director QEC of NCA. The training covered various aspects of OBE, methods of OBE Assessment, Bloom's Taxonomy and learning objectives and outcomes, quality control of the curriculum, challenges in the implementation of OBE, and ensuring attainment of outcomes through assessment.



Academia Network-PM's Naya Pakistan Housing Program in NED University



Dr.Hafsa Jamshaid C Text FTI participated in Academia Network- PM's Naya Pakistan Housing Program at NED University Karachi. Delivering talk regarding the use of textiles in construction materials i.e. textile reinforced concrete (TRC).

Visit of the Registrar to the Seminar of Industrial Parks in China

On the Invitation of the Chinese Government, Mr. Salman Saif, Registrar of NTU visited China on a comprehensive Multilateral Seminar on Building and Operation of Industrial Parks under the Belt and Road Initiative. The seminar was organized to have an insight into the development model of China, implemented through various Industrial Parks, fashioned far and wide in diverse parts of China. During the visit under the theme of Building and Operation of Industrial Parks under the Belt and Road Initiative, not only different aspects of the Chinese economy, culture and technological advances with indigenous intelligentsia were discussed but famous cultural sites present there were also appreciated.



NTU Literary Society in the 6th Faisalabad Literary Festival (FLF)



NTU Literary Society along with students of other societies participated in the inauguration ceremony of the 6th Faisalabad Literary Festival (FLF) under the auspices of Lyallpur Literary Council at Nusrat Fateh Ali Khan Auditorium, Faisalabad on November 22, 2019 (Friday) under the Supervision of Mr. Mujahid Mahmood, Convener Literary Society and Ms. Nadia Shamim, Assistant Director Student Affairs.

Emerging Trends in Big Data Architectures, Frameworks and Technologies

Dr. Haseeb Ahmad (Assistant Professor, Department of Computer Science, NTU) delivered a keynote speech at the symposium entitled "Emerging Trends in Big Data Architectures, Frameworks and Technologies" on 1 January 2020. The title of his speech was "Making Sense of Big Data: Opportunities and Challenges". Renowned researchers from prestigious institutes including ITU, QAU, UOG, and UMT attended the symposium. The symposium was organized by the Virtual University of Pakistan.



Participation in the 8th International Conference on ICICT



Students of the Computer Science Department participated in the 8th International Conference on Information and Communication Technologies (ICICT) held on 16-17 November 2019. The conference was organized by the Institute of Business Administration (IBA), Karachi and sponsored by IEEE. Students presented their topics and got valuable suggestions from experts for their future research. There was also an arrangement of Presidential dinner where President Dr. Arif Alvi came and appreciated researchers for their efforts.

Manager NTU-BIC participation in Incubator Round Table Meeting at NIC, LUMS

National Incubation Center (NIC), LUMS, Lahore arranged a round table meeting of Incubators at National Entrepreneurs Summit'19. The agenda of the meeting was to improve collaboration among Incubators and to engage Pakistani Diaspora to work with startups in Pakistan. Incubators that participated in the meeting were NTU-BIC, NIC Lahore, NIC Quetta, University of Agriculture Faisalabad, NSpire, Takhleeq, Innovation District, Critical Creative Innovative Thinking (CCIT) Agha Khan University, Durshal (Peshawar, Mardan, Swat, Swabi), Namal Mianwali, University of Veterinary and Animal Sciences Lahore and University of Sargodha.



Five NTU-BIC Incubated companies along with Manager NTU-BIC represented NTU-BIC in NES'19 held at NIC, LUMS

Five startup companies of NTU-BIC participated in four days National Entrepreneurs Summit'19 (NES) from December 10 to December 13, 2019. It was organized by National Incubation Center (NIC), LUMS, Lahore.

Promoting Higher Education Quality through Policies, Standards & Practices

Quality Assurance Agency (QAA) of the Higher Education Commission (HEC) organized an International Conference on "Promoting Higher Education Quality through Policies, Standards and Practices" in Islamabad on Dec 4-5, 2019. Engr. Muhammad Haroon (Assistant Director; QEC) attended the conference. The conference was first of its kind in Pakistan where distinguished Higher Education professionals from across the world participated. The conference aimed at improving existing state of quality at the Higher Education Institutions through advancing the understanding of international quality assurance standards and bringing together international organizations and countries at one platform. The conference also focused on the exploration of the local contextual issues and to find solutions for attaining international quality standards. The President of Pakistan, Dr. Arif Alvi was the chief guest of the conference. Dr. Judith Eaton (The President of Council for Higher Education Accreditation) and Dr. Susanna Karakhanyan (The President INQAAHE) were amongst the keynote speakers along with other experts of Higher Education quality from across the globe.

Participation in DICE Virtual Competition at CENTIN, UMT Lahore



Center of Entrepreneurship and Innovation (CENTIN) of the University of Management and Technology (UMT), Lahore in collaboration with Distinguished Innovations, Collaboration, and Entrepreneurship (DICE) Foundation, organized an entrepreneurial competition "UMT DICE Virtual Competition 2019". Mr. Asif Bashir (Manager NTU-BIC) was invited as a Jury Member of the competition for the evaluation of innovative business ideas of participants.

Participation in Anti-Corruption Awareness Activities by NAB

On 12-13 November 2019, National Textile University participated in the "National Declamation Contest" held under the umbrella of NAB. Character Building Society of NTU arranged the students and gave them the opportunity to take part in such healthy competitions. Fizza Khalid (BS Software Engineering) presented her thoughts in the English declamation topic "We only curse when we are victims" while Mr. Danial Shabir (BS Textile Processing) and Mr. Aqib Ali Askari (BS Textile Management & Marketing) presented their thoughts in Urdu declamation.



News Flash (EDEX-2020)

National Textile University participated in EDEX-2020, the largest educational exhibition in Colombo, Sri Lanka. Dr. Muhammad Umair, Assistant Professor (FMD) and Mr. Arshad Mahmood, Admission Officer represented NTU in the event. Sri Lankan students showed great interest in academic programs of NTU











Achievements and Awards

Award of Quaid e Azam Gold Medal to Prof. Dr. Tanveer Hussain



Dr. Tanveer Hussain, Rector of NTU was awarded Quaid-e-Azam Gold Medal on his meritorious services for research and education by Tehreek-e-Istehkam-e- Pakistan Council (Regd).

Ph.D. Computer Science Final Defense

January 9, 2020, Mr. Muhammad Adeel successfully defended his thesis defense of Ph.D. in Computer Science, entitled "Modeling and Computer Simulation of Mammary Gland Tumor Cells Aggression Level for Evaluating the Efficacy and Toxicity of Anticancer Drugs", under the supervision of Dr. Muhammad Asif (Associate Professor and Chairman in Department of Computer Science at NTU) and co-supervision of Dr. Muhammad Naeem Faisal (Assistant Professor, Institute of Pharmacy, Physiology and Pharmacology, University of Agriculture, Faisalabad). It is a big milestone for the Computer Science Department of NTU. Because it is not only the First produced Ph.D. by the Computer Science Department of NTU, but it is also the first Ph.D. in Computer Science produced ever in Faisalabad.



Dr. Hafsa Jamshaid C Text FTI appointed as The Textile Institute. Manchester (UK) council member

The Textile Institute (TI) is a unique organization in textiles, clothing, and footwear. It was incorporated in England by a Royal Charter granted in 1925 and is a registered charity. The Institute has individual and corporate members in up to 80 countries. The membership covers all sectors and all disciplines in textiles, clothing and footwear. The Council is the Institute's international governing body and is composed of nominees from the duly constituted Section, National and Regional Committees and an equal number of members elected by the membership at large. The constitution of Council and the conduct of elections to it are closely governed by the Institute's Charter and Byelaws.Dr.Hafsa Jamshed C Text FTI has been appointed as Textile Institute (UK) council member in the 109th Annual General Meeting held in May 2019.



FET faculty members finalized in TechXtile Start-Up Challenge, Turkey

Dr. Salman Naeem and Dr. Abdul Jabbar submitted a project titled; "Development of Conductive Nonwoven Web for Electromagnetic Shielding and Ohmic Heating", for "TechXtile StartUp Challenge" which has been organized and conducted by Uludag Textile Exporter's Association Turkey and Bursa Eskişehir Bilecik Development Agency Turkey since 2009. The project has been selected after the evaluation process. There was a total of 107 projects received worldwide out of which 18 projects have been finally selected to be awarded.

Department of Design won Second and Third Position in AUST Dice 2019 Mega Innovation and Entrepreneur Event



Creative designers from the Design Department displayed two projects in Dice 2019 Mega Innovation and Entrepreneurship Event on 11 October 2019 at Abbottabad University of Science and Technology in the category of ART. Feasibility reports and business proposals were presented along with the innovative concepts. Project titled "Conversational Textile Arts" was executed by Ms. Sumbal and Ms. Marwa (final year TD) won the second position cash prize. It was a class assignment in the subject of Embroidery and Embellishment Techniques. The other project titled "Fruits on the Brink of Decay" was executed by Ms. Huda Waseem (Thesis 2019) who won the third position cash prize. Both projects were supervised by Ms. Aroobah Mumtaz from Design Department, NTU.

The Italian Technology Award 2019 was organized by "ACIMIT" in collaboration with "ITA" at Milan

The Italian Technology Award 2019 was organized by the Italian Textile Machinery Manufacturers Association (ACIMIT) in collaboration with the Italian Trade Agency (ITA) in Milan, Italy on 10-17 November 2019. The Italian Trade Agency honored Mr. Tehseen Ullah (enrolled in Ph.D. Advanced Materials) and Dr. Amjed Javid (Assistant Professor) with the Italian Technology Award on November 12, 2019. The program comprised of the lectures, presentations, group discussions and visits of the various textile machinery manufacturing companies. It provided an incredible opportunity to collaborate with international academic institutions and to learn about the innovations in textile machinery.



National Textile University, Faisalabad has got the membership of Pakistan Aerospace Council (PAeC)

The Pakistan Aerospace Council (PAeC) is a cluster organization for enterprises active in the aerospace, defense and high-tech electronics market. It is formed for global promotion of high value addition and high technology players of Pakistan while meeting the national needs for technology acquisition as well as export-led, sustainable, growth of Pakistani Aerospace Industries.



2nd Position in National Policy Making Competition in YPDC CHAPTER UOL

The YPDC (Youth Peace and Development Corps.) organized the first of its kind policy making competition Chapter UOL at the National level. Around 70+ teams from 30+ Universities participated from all over Pakistan. Teams were given a chance to present on three different modules: 1-Environment, 2- Security, 3-Economy and Development. Advisor Student Office nominated 06 participants from NTU Faisalabad M Faizan Ali (President YPDC Chapter; UOL) guided the team. Students attended a one-day workshop and then participated in different competitions of above said modules.



SHIMA SEIKI terry gloves knitting machine in its lab facilities



Department of knitting recently added a SHIMA SEIKI terry gloves knitting machine in its lab facilities. It has 13 gauge and is equipped with two extra color yarn carriers capable of producing color stripes. This machine is capable of producing fine quality gloves using different types of conventional and high performance materials. Terry gloves are used in higher abrasion applications, light heat applications, good heat-absorbing material, and these gloves are great at handling rough, sharp metal parts.

Accreditation of Bachelor of Science in Software Engineering (BSSE)

Department of Computer Science at National Textile University, Faisalabad is pleased to announce that it has got accreditation of its BS (SE) program from the National Computing Education Accreditation Council (NCEAC), Islamabad. DCS of NTU is the first department in the Faisalabad region who has got its accreditation of the Software Engineering program. This is an outcome of the collective effort of all the stakeholders of the department and especially the efforts of Mr. Shahbaz Ahmad Sahi, the focal person for NCEAC.

National and International Celebrations

Defense Day and Kashmir Solidarity Activities

A rally was conducted at National Textile University, Faisalabad with respect to Kashmir Solidarity as directed by the Prime Minister of Pakistan. This walk was led by Dr. Tanveer Hussain, Rector of NTU. The event started with National anthem and special prayers for the people of Kashmir were offered. All the Employees including Dr. Zafar Javed, Dr. Yasir Nawab, Dr. Zahid Rizwan, Dr. Sajjad Baig, Dr. Zulfiqar Ali, Dr. Amjad Javed, Mr. Zabeehullah Khan, Mr. Zulfiqar Ahmad, Mr. Waqar Ahmad, Mr. Salman Saif and Mr. Pervaiz Akhtar were also present.



Celebrations of World Teacher's Day by NTU Arts and Culture Society



World teacher's day, the day that provides an occasion to celebrate the teaching profession worldwide was celebrated by the students of NTU on 4 October 2019. The purpose of this celebration was to pay tribute to the respected teachers for their pedagogy services. In the end, Worthy Rector, Dr. Tanveer Hussain and Director Student's Affairs, Dr. M. Umair paid homage to the teachers for their matchless services in building a nation and cake was cut to acknowledge their contribution along with faculty members.

Celebrations of Igbal Day on 9 November, 2019

Iqbal Day was observed by the NTU Iqbal Society to acknowledge and commemorate the contribution of Allama Muhammad Iqbal. Mr. Asif Tanveer Awan Advocate (Public Relations Associate, Muslim Institute Islamabad) shed the light on Iqbaliyat and paid homage to the national poet. He highlighted different aspects of his life and teachings. Allama Iqbal Portrait, Sketch and calligraphy competitions were conducted. Cash prizes and certificates were awarded to winners and participants. Kalam-e-Iqbal was hummed by the students. At the last, the event was ended with a thanking note by Mr. Saleem Ansari and an awareness walk in campus



Environmental Management and Green day



The Department of Knitting arranged a workshop on "Environmental Management" and celebrated "Environmental Day" to motivate the students for reducing the wastages. Students from the Knitting department developed different recycling products, from daily life waste. A comprehensive lecture on proper utilization of waste materials was delivered by Mr. Shafqat Ullah (Director Cleaner Production Institute). A plantation ceremony was also held outside the Knitting department.

Christmas Celebrations at Department of Design

Education is the only key to open the world of peace, to eliminate inequality and to foster tolerance for multiple cultures and religions. Educational institutions should play a key role in educating youth to show dignity and respect to the minorities. Learners at the Design Department have their unique way of expression. They designed greeting cards with best wishes and sweets for the Christian workers at NTU.

Student Activities/Industrial Tours

Welcome Batch 2019 and Congratulations on your admittance to the NTU

NTU Orientation program has been conducted to welcome the new students on 29 September 2019 by the Advisor Student's Affairs Office with respective departments. This Orientation session served as the first step in a new student's transition to University life. Dr. Yasir Nawab, Dean Faculty of Textile Engineering gave a warm welcome to students and parents into an entirely holistic education system of NTU. Further, Dr. Talha Hamdani on behalf of faculty of Textile Engineering, Dr. Shahzad Igbal and Mr. Faroog Jamal from Faculty of Management Sciences, Dr. M. Asif from Computer Sciences department and Director Faculty of Humanities and Social Sciences Dr. Zafar Javed briefly guided the students about Academic/Semester rules and regulations followed by introduction of faculty members. Moreover, the students were also given a brief introduction about campus culture, policies, ingenious extra-curricular activities and expectations as they embark on a four-year journey for their undergraduate degree. Student led-campus tour along with faculty and Orientation leaders (OL students) guided new students more about the cutting-edge facilities, resources, and services present in National Textile University.





Oath taking Ceremony 2019



The oath taking ceremony of newly-elected Presidents of the student's societies for the academic session 2019-2020 was held in the main hall on 23 October 2019 by Advisor Students Affairs. The Oath was taken by Dr. Muhammad Umair (Director Student's Affairs). In their Oath, the Presidents of societies pledged to be active member, execute their duties with honesty and commitment to follow the core values of National Textile University and also to abide by rules and regulations of NTU societies. President of each society presented aim of their respective societies. Further, Ms. Nadia Shamim briefed the society office bearers through comprehensive presentation about society SOPs. Speaking to the occasion, Dr. Muhammad Umair encouraged the students to take part in such ceremonial activities so that the students have an enriching university experience.

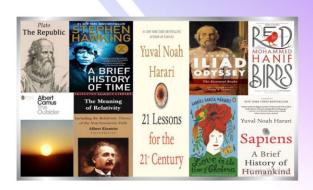
Abdul Moeed from BS PE, shared his experience of Internship at Bursa Uludag Uni, Turkey

Abdul Moeed discussed his experience of international internship in Turkey with his fellows and faculty of DPE. He also talked about the step by step guide of getting this scholarship program. He worked on various projects of hydrogel composites and electrospinning. In addition, he also shared the details of his visit to various international industries such as BursaliTekstil and BatmazTekstil. Prior to this session, Abdul Moeed also gave a very informative talk to young researchers of Bursa Uludag University, Turkey about his work and experience of study at NTU.



An Introductory Session of NTU Literary Society

NTU Literary Society organized an introductory session for newly selected members and executives of the society on November 14, 2019, in the Main Hall of the University. The event started with the recitation of the Holy Quran. Mr. Zaryab Tayyab, General Secretary Literary Society called Mr. Mujahid Mahmood, Convener Literary Society on the stage. The Convener Literary Society welcomed all the newly selected members and executives of the Society. The Convener gave a short presentation on the history of literature (fiction, nonfiction) and poetry. He presented a short introduction of 10 books which are considered one of the most influential books in History. After the presentation, the convener invited all the members and executives for their introduction, interest in literature and suggestions for future events. He told that Literary Society is also going to publish NTU Literary Magazine named "Kavish" this year.



NTU Entrepreneurship, Media Club & Photography Society collaborated for an activity "Presentation Competition



NTU Entrepreneurship Society and NTU Media Club & Photography Society collaborated for an activity "Presentation Competition" on November 05, 2019. This competition is designed to emphasize the value of an ability to deliver clear, concise and effective oral presentations, particularly pertaining to some sphere in which students are or should be involved. Each student presentation lasts fifteen minutes and is followed by a five minute "Question and Answer" session. The students presented on the topics related to Motivation, Entrepreneurship, and Youth and Discover Yourself etc. Cash Prizes were distributed among winners selected by jury members.

Textile Exports Marketing, Opportunities, and Challenges: A comprehensive lecture by Mr. Abdul-Munim

TMM society, on the 22nd of October, arranged a symposium. Mr. Abdul-Munim (Marketing Manager, MK sons) was encouraged to come and talk about different aspects of being a Marketing Manager. Dr. M. Hashim (program director of BSTMM and convener of TMM Society) and Ms. Mehwish Sultan (Coordinator of TMM Society) supervised the activity. Mr. Abdul-Munim delivered a comprehensive presentation on the current situation of the Pakistani textile industry and talked about the ways in which it could progress. Mr. Munim talked about his experiences being serving this sector and shared a few tips with students who intended to be starting their careers in the textile sector of Pakistan. After the presentation, the Question and Answer session was held. A healthy debate with the students lasted for about 30 minutes. Feedback from the students of BSc (TMM) was overwhelming and very positive, said Mr. Munim. Lastly, Mr. Sajjad Baig presented a shield to Mr. Munim as a token of appreciation.



Anti-corruption Week Awareness Activities NTU Character Building Society (CBS)

To commemorate anti-corruption week from December 01, 2019, to December 10, 2019, NTU Character Building Society (CBS) arranged a series of events and activities. The details of the activities are as follows: Declamation Contest: Participants presented their thoughts on the topics related to corruption. Among all the participants Ajwad, Daniyal and Aqib Ali secured 1st, 2nd, and 3rd positions respectively. Digital Poster Designing Competition: Another healthy event, to raise awareness on Anti-corruption was held. Though the efforts of all the students were extra-ordinary. Talha Sattar secured 1st position while M.Yasir and Fatima secured 2nd and 3rd positions respectively. Essay Writing Competition: CBS conducted an Essay Writing Competition. The topics of the essay were: "Corruption When Creeps Make the land Barren" and "Good Governance and the mince of Corruption". Shahzaib Ijaz, Roha Babur, and Hamza Abbasi wrote exceptionally well and secured 1st, 2nd and 3rd positions. Poster Designing Competition: CBS arranged the Poster Designing Competition. The winners of the competition are Naba and Maryam, Shehrish and Quratulain





General Quiz Competition



Society of Textile Spinners (2019-20) arranged a "General Quiz competition" on October 30, 2019. The competition was held in the Main Hall, in the presence of the respectable convener of society, Dr. Waqas Iqbal. The purpose of the activity was to enhance the aptitude and analytical skills of the students.

Interdepartmental Declamation Contest 2019-20

NTU debating club arranged an interdepartmental declamation competition titled as "Quaid ka Pakistan". More than 15 debaters from both English and Urdu categories participated in the event and paid their tribute to the father of the nation, Quaid-e-Azam Muhammad Ali Jinnah on Quaid's birth anniversary. The team trophy was awarded to the team of textile processing department for the distinguished performance of Danial Shabir and Saif ul Islam (TP 3rd semester) in both Urdu and English declamations. Shields among first, second and third positions for both English and Urdu categories were distributed by Dr. Munir Ashraf, Mam Nadia Shamim and convener debating society, Mam Asthma lqbal. Mr. Syed Jarrar Haider Naqvi from hi-tech university, a well reputed name in the debating circle and Ms. Laiba Fatima were the adjudicators of the event. In the end, jury members provided critics to the debaters.



Blood Group Checking Camp

On 11 December 2019, NTU Health Care and Blood Donation Society have done the successful activity of Blood Group Checking camp. The DHQ team was invited for this camping. The main purpose of this event was to check student's blood group. Shields and certificates have also been rewarded to the DHQ team and Blood Donors.

Sports Activities





































Testing Services Offered by NTU

FIBER TESTING	STANDARD TEST METHOD
Single Fiber Strength test	ASTM D 3822
Fiber Composition of Textiles (Quantitative)	AATCC 20A
Fiber Composition of Textiles (Qualitative)	AATCC 20
Cotton Fineness	ISO 2403, ASTM D 1448-11
Cotton Fiber Length and Length Uniformity	ISO 6989, ASTM D 5103-7
Cotton Breaking Strength by Pressley Tester	ISO 3060, ASTM D 1445-12
Cotton Trash Content	ASTM D 5867-5
Fiber Moisture Content	ASTM D 2495-12
Cotton Fiber (HVI) Tests	ASTM D 5867-12
YARN TESTING	STANDARD TEST METHOD
Yarn Unevenness (Uster-5)	ASTM D 1425
Linear Density by Skein Method	ASTM D 1907, ISO 2060
Linear Density by Short Length Method	ASTM D 1059
Tensile Properties of Single Yarn	ASTM D 2256, ISO 2062
Lea Breaking Strength	ASTM D 1578, ISO 6939
Twist by Contraction Method	ASTM D 1422, ISO 17202
Twist by Direct Method	ASTM D 1432, ISO 2061
Classification of Yarn Faults	Lab Developed
Yarn Crimp and Yarn Take-up	ASTM D 3883-4
Yarn Type Analysis	ASTM D 3887-4
FIBRIC TESTING	STANDARD TEST METHOD
Fabric Width	ISO 22198, ASTM D 3774
Fabric GSM	ISO 3801, ASTM D 3776
Pilling Resistance by Martindale Tester	ISO 12945-4, ASTM D 4970-12
Pilling Resistance by ICI Method	ISO 12945-1, BS 8479
Random Tumble Pilling	·
	ISO 12945-3
Abrasion Resistance	ISO 12947-2
Tearing Strength by Elmendorf Tester Bursting Strength of Fabrics	ISO 12937-1
Breaking Strength by Grab Method	ISO 12938-2
Wrinkle Recovery Test	ISO 13934-2
Dimensional Stability to Washing	AATCC 66
	ISO 6330/AATCC 135S
Skew Change (After Washing)	AATCC 179S
Smooth Appearance (After Washing)	AATCC 124
Soil Release of Fabric	AATCC 130
Color Evaluation by Spectrophotometer	AATCC Evaluation Procedure 6
Breaking Strength by Strip Method	ISO 13934-1
Seam Strength	ASTM D 1683
Weave and Design of Fabric	ASTM D 3775
Gauge of Knitting Machine	Lab Developed
Courses and Wales of Knitted Fabric	Lab Developed
Thickness of Fabric	ISO 5084, ASTM D1777
Bow and Skew in Fabric	ASTM D 3882
Color Fastness to Sea Water	ISO 105-E02
Color Fastness to Sea Water	ISO 105-E03
Dye-ability Test	Lab Developed
Method of Color Fastness to Perspiration	ISO 105-E04
Color Fastness to Washing	ISO 105-C01,2,3,6/ AATCC 61
Color Fastness to Dry Cleaning	ISO 105-D01
Color Fastness to Light	ISO 105 B02,B04 / AATCC 16.3
Color Fastness to NaClO Bleach in Home	AATCC 188
Color Fastness to Crocking	ISO 105 X12, AATCC 08
Absorbency of Textiles	AATCC 79
Fault in Cloth	Lab Developed
Blend Ratio of Fabric (2 Components)	AATCC 20, 20

Identification of Yarn/Fabric	Lab Developed
Percentage of Yarn in Fabric (per side)	Lab Developed
Seam Strength Test	ISO 13935-2, ASTM D 683
TESTING OF COMFORT PROPERTIES OF TEXTILE FABRICS	STANDARD TEST METHOD
Thermal Properties of Fabric (Sweat Guard Hotplate)	ISO 11092
Water Vapor Permeability (Sweat Guard Hotplate)	ISO 11092
Thermal Properties of Fabric (Permetest)	ISO 11092
Water Vapor Permeability (Permetest)	ISO 11092 ISO 8096
Water Vapor Permeability (Standard Room Conditions)	ISO BS 720
Air Permeability Test	ISO 9237, ASTM D 737
Fabric Touch Properties (Fabric Touch Tester)	Lab Developed
Fabric Stiffness	ASTM D 4032
Moisture Management of Textiles (MMT)	AATCC 195
Drying Rate Test	AATCC 199
Fabric Drape Test	
Kawabata Bending Test	BS 5058
	Kawabata
Kawabata Compression Test	Kawabata
Kawabata Surface Test	Kawabata
Kawabata Shear Test	Kawabata
Kawabata Thermal Test	Kawabata
PROTECTIVE TEXTILES TESTING	STANDARD TEST METHOD
Vertical Flammability Test	ASTM D6413
Limiting Oxygen Index Test	ISO 4589-1, ASTM D2863
Static Charge Test (Conductivity Tester)	BS EN 1149-1
UV/Sun Protection Factor Test	AATCC 183
Water Repellency Test (Spray Method)	AATCC 22
Water Resistance of Fabric (Hydrostatic Head Tester)	ISO 811, AATCC 127
Antimicrobial Test Qualitative	AATCC 147
Antimiorobial Tast Quantitativa	A ATOO 100
Analytical Test Quantitative	AATCC 100
ANALYTICAL TESTING	STANDARD TEST METHOD
ANALYTICAL TESTING X-Ray Diffraction (XRD)	STANDARD TEST METHOD Standard Protocol
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM)	STANDARD TEST METHOD Standard Protocol Standard Protocol
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy	STANDARD TEST METHOD Standard Protocol Standard Protocol Standard Protocol
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer)	STANDARD TEST METHOD Standard Protocol Standard Protocol Standard Protocol Standard Protocol
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy	STANDARD TEST METHOD Standard Protocol Standard Protocol Standard Protocol Standard Protocol Standard Protocol
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy	STANDARD TEST METHOD Standard Protocol Standard Protocol Standard Protocol Standard Protocol Standard Protocol Standard Protocol
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy	STANDARD TEST METHOD Standard Protocol
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential	STANDARD TEST METHOD Standard Protocol
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX)	STANDARD TEST METHOD Standard Protocol
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC)	STANDARD TEST METHOD Standard Protocol ASTM D 3418
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING	STANDARD TEST METHOD Standard Protocol STANDARD TEST METHOD
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser Thermomechanical Analyser Resistance to thermal transmission	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545 ASTM E 1530
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser Thermomechanical Analyser Resistance to thermal transmission Dilatometer	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545 ASTM E 1530 ASTM E 831
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser Thermomechanical Analyser Resistance to thermal transmission Dilatometer Rheometer	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545 ASTM E 1530 ASTM E 831 Standard Protocol
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser Thermomechanical Analyser Resistance to thermal transmission Dilatometer Rheometer Drop Weight Impact Test	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545 ASTM E 1530 ASTM E 831 Standard Protocol ASTM D 7136
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser Thermomechanical Analyser Resistance to thermal transmission Dilatometer Rheometer Drop Weight Impact Test Pendulum Impact Test	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545 ASTM E 1530 ASTM E 1530 ASTM E 831 Standard Protocol ASTM D 7136 ISO 179, ISO 180
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser Thermogravimetric Analyser Resistance to thermal transmission Dilatometer Rheometer Drop Weight Impact Test Pendulum Impact Test Melt Flow Indexer	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545 ASTM E 1530 ASTM E 831 Standard Protocol ASTM D 7136 ISO 179, ISO 180 ASTM D 1238
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser Thermomechanical Analyser Resistance to thermal transmission Dilatometer Rheometer Drop Weight Impact Test Pendulum Impact Test Melt Flow Indexer Universal Testing Machine	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545 ASTM E 1530 ASTM E 1530 ASTM E 831 Standard Protocol ASTM D 7136 ISO 179, ISO 180 ASTM D 1238 ASTM D 3039, ASTM D 7264
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser Thermomechanical Analyser Resistance to thermal transmission Dilatometer Rheometer Drop Weight Impact Test Melt Flow Indexer Universal Testing Machine HAZARDOUS MATERIALS TESTING	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545 ASTM E 1530 ASTM E 1530 ASTM E 831 Standard Protocol ASTM D 7136 ISO 179, ISO 180 ASTM D 1238 ASTM D 3039, ASTM D 7264 STANDARD TEST METHOD
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser Thermogravimetric Analyser Resistance to thermal transmission Dilatometer Rheometer Drop Weight Impact Test Pendulum Impact Test Melt Flow Indexer Universal Testing Machine HAZARDOUS MATERIALS TESTING GCMS Test for Hazardous Materials	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545 ASTM E 1530 ASTM E 1530 ASTM E 831 Standard Protocol ASTM D 7136 ISO 179, ISO 180 ASTM D 1238 ASTM D 3039, ASTM D 7264 STANDARD TEST METHOD ISO/DIS 21084, ISO 18254-1
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser Thermogravimetric Analyser Resistance to thermal transmission Dilatometer Rheometer Drop Weight Impact Test Pendulum Impact Test Melt Flow Indexer Universal Testing Machine HAZARDOUS MATERIALS TESTING GCMS Test for Hazardous Materials HPLC Test for Hazardous Materials	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545 ASTM E 1530 ASTM E 1530 ASTM E 831 Standard Protocol ASTM D 7136 ISO 179, ISO 180 ASTM D 1238 ASTM D 3039, ASTM D 7264 STANDARD TEST METHOD ISO/DIS 21084, ISO 18254-1 ISO 14362-1
ANALYTICAL TESTING X-Ray Diffraction (XRD) Scanning Electron Microscopy (SEM) Optical Microscopy Particle Size Analysis (Zeta Sizer) UV-Vis Spectroscopy UV-Vis-NIR Spectroscopy Fourier Transform Infrared Spectroscopy Electro-Kinetic Potential Energy Dispersive Spectroscopy (EDX) Differential Scanning Calorimetry (DSC) COMPOSITE TESTING Dynamic Mechanical Analyser Thermogravimetric Analyser Thermogravimetric Analyser Resistance to thermal transmission Dilatometer Rheometer Drop Weight Impact Test Pendulum Impact Test Melt Flow Indexer Universal Testing Machine HAZARDOUS MATERIALS TESTING GCMS Test for Hazardous Materials	STANDARD TEST METHOD Standard Protocol ASTM D 3418 STANDARD TEST METHOD ASTM D 4065 ASTM E 1131 ASTM D 1545 ASTM E 1530 ASTM E 1530 ASTM E 831 Standard Protocol ASTM D 7136 ISO 179, ISO 180 ASTM D 1238 ASTM D 3039, ASTM D 7264 STANDARD TEST METHOD ISO/DIS 21084, ISO 18254-1