



In the Name of God

Islamic Azad University of Yazd

**Faculty of Textile Engineering
and Polymer Engineering**

2017



Islamic Azad University of Yazd, General Catalog

By : Dr. Mohammad Mirjalili

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Y. B. Islamic Azad University, Publications Office

E-mail: entesharat_elmi@iauyazd.ac.ir

Yazd Branch, Islamic Azad University, Hesabi Blvd., Safaiyeh, Yazd,
Iran

P. O. Box: 89195-155 Yazd, Iran

www.iauyazd.ac.ir

Telefax: 00983538214813, 00983531872280

Authors' Introduction

Achieving Iran's high ideals calls for a full-fledged effort in all cultural, scientific, social and economic dimensions. Science and technology are among the most important infrastructures of the country for growth and development, being a rigorous tool for competition in various fields. As such, realization of the transcendent goals of the country like the resurrection of Iranian great civilization, having an active and contributing presence in different world arenas, and being at the vanguard of advancement among other nations all necessitate a full-scale development in science. A new era in life of research and technology has started in the country, a distinguishing feature of which is an ever-increasing change in the attitude towards education and research, and the prominent role they play in enhancing the quality of people's life.

In the general policies of the scientific programs of the country, organizing and mobilizing the facilities and capacities have been stressed on in order for increasing Iran's contribution in scientific production of the world, improving the soft-ware movement, promoting research, acquiring specifically modern technologies and securing the majesty of the country based on scientific development and the significance of the implementation of the Comprehensive Scientific Plan of the Country. Besides, scientific and technological development has become the cornerstone of the country's plans, and knowledge-based economy has been announced to be the major strategic approach in this regard.

In fact, one of the major programs of the Research and Technology Office of the Islamic Azad University of Yazd has been an emphasis on the transition

form a knowledge-based university to a research-based one, and hence an approach towards generating wealth by research development. The current view in the world today is research-based economy. No research means no wealth and, in turn, no welfare. Lack of knowledge-based and research-oriented managerial thought undoubtedly checks a country's development and prosperity. It is therefore incumbent upon us to integrate research with technology, revise our old prospects and replace them with new ones oriented towards new, meaningful and well-set goals.

A university has to have a constructive partnership with academic, economic and industrial institutions, government and private sectors, and community organizations, creating jobs for the country. The technological productions of a university need to increase so much that it will have an undeniable effect, locally, regionally, nationally and even internationally, on people's standards and quality life. And this is exactly what the Islamic Azad University of Yazd has aimed to reach. i.e., turning into a first-rate center of science with an excellent educational and research approach, acceptable in the eyes of world criteria.

Among the major goals the university has set for advancement are 1. providing financial and academic support for the students, 2. establishing the innovation and entrepreneurship center, 3. commercialization and transferring technology, 4. considering new priorities in research, education and science, 5. establishing the Research Thought Center, 6. formulating policies for employment growth and 7. applying knowledge-based economy for the generation of economic and technical values and maximized performance.

It is hoped that the Islamic Azad University of Yazd will succeed in cultivating and implementing the above-mentioned goals, and fulfill its vital role in making an environment conducive to acquisition and dissemination of knowledge by enhancing its quality of education, encouraging the spirit of

generic research at the highest level of excellence and hence contributing to the scientific, economic, cultural, industrial and ethical growth and advancement of the country.

The present general catalogue is intended to provide the required information in familiarizing the interested readers all around the world with the history, capabilities, programs and achievements of the Islamic Azad University of Yazd in its various fields of activities.

Mohammad Mirjalili

January 2017

An Introduction to Yazd Province



An Introduction to Yazd Province

A Short History

According to some historians, the first foundation of Yazd belongs to the time of Zahhak. Also they believe that the constructions of two other historical cities of the province, Meybod and Abarkooh, go back to the time of Solomon and Abraham (pbuh). Yazd is an ancient word which comes from the root-word "Yast" or "Yazt", meaning worship, praise, adoration, God, etc. One of the five chapters of Avesta (the Zoroastrian's holy book) is also called "Yast".

On the other hand, a collection of scattered ancient works in the province indicates the great cultural and historical background of this region, including the stony hand tools in the valleys of Mount Shirkooh, engravings of Mount Ernan's slate and painted pieces in Narin Castle which belong to the Islamic period. In addition, a story tells that the four ancient points of Mehrizand Fahraj, Yazd, Rostaghand Meybod, and Ardakan had been the centers of civilization in the province. Researchers have also depicted its location on the ancient highways of Rey-Kerman and Pars-Khorasan, a part of the far land of Media. But according to other documents, one can mention the important and especial role of Yazd in Achaemenid period. In fact at that time, big roads, tall houses, well-equipped post offices and Chapar Khanehs (Pony Expresses) had changed Yazd to a guard of important roads of Iran. In accordance with some old religious memorials, before New Zoroastrianism, other ancient religions had prevailed in this region. Amongst them Mithraism and worshipping Anahita can be mentioned.

Some other obvious sings of Yazd's long history are the old 5000 years cypress

of Abarkooh and the coins relating to the time of Purandokht, the Sassanide, which have been coined in Meybod.



Yazd, the land of wind towers

Yazd in the Islamic Period

In ancient Iran, Yazd was situated in the margin of the main highway of eastwest. Thus, during the first Islamic periods, it was occupied by Muslims. A group of Bani of Tamim and BaniAmer tribes settled there and founded Kuy-e Arabha (The Lane of Arabs).

After the dominance of the Deylamian dynasty over the south and the west of Yazd, a group of Alavian (descendants of Imam Ali (pbuh)) migrated to this city and founded Kuy-e Husseinian (The Lane of Husseinian). The most famous Alavi migrant was named Imamzade Seyyed Ja'far (pbuh), whose mausoleum has been a shrine for a long time.

After Islam, the dynasties and rulers who have ruled Yazd include:

Al-e Kakuyeh: They constructed a lot of mosques, schools, Qanats (aqueducts) in villages and around the city of Yazd.

Atabakan, Mongols and Al-e Mozaffar: During their 77 year period of reign, Yazd came to a climax in cultural, social and economical development.

Timurids and Safavid: At this period, extravagant religious fanaticism and unreasonable massacres caused great spiritual damage in Iran, especially in Yazd.

Afsharian and Qajar: A lot of artifacts and works are remained from this period.



**Dolat Abad garden, one of the desert gardens
which has been internationally registered**

Natural Geography

With an area of 131551 sq. km, Yazd province is located on part of the Iranian plateau. The semi-plain climate is hot and dry. But some local phenomena like Mount Shirkooh have affected the climate of some parts of this region. On the other hand, salt marshes and big and bare plains in the central and eastern parts of the province have strengthened the dryness and desert conditions. In this province, the temperature is always dramatically variant, ranging from 20c to 46c. Therefore, Yazd has just two seasons: the long season of hot weather and the short season of cold weather. Usually December and January are the coldest months of the year, while June and July are the hottest

months.

The Heights of the Province

Shirkoh is the most important ruggedness of the province. As a mountainous wall, it separates the central part of the province from Abarkooh hole. With a height of 4075 m, Shirkooh peak is in the 20 km of Yazd. Saeidi with a height of 3320 m and Lorg with a height of 1525 are the two peaks of shirkooh.

Mount Kharanagh is in the north of Yazd and its highest peak is 3158 m high. **Chak Chak**, **Oshtory** and **Hamaneh** can be mentioned as some other mountains of Yazd province.



Eagle Mountain, a beautiful natural structure located in Taft, Yazd, Iran

Deserts

The deserts of Ardakan, (Siahkooh), Abarkooh, Taghestan and Daranjir are the most well-known deserts of the province.

Human Geography

Yazd province has a population of around 900000. 78% of this population

live in cities and 28% in villages. The people of the province are Iranian of Aryan race. They speak common Farsi, in an accent classified as one of the central semi-languages of eastern class. Zoroastrians speak in Farsi Dari. Also in some villages like Zeyn Abad, the original Farsi Dari is prevalent. In Yazd province, most of the people are Muslims and Shiites. According to a census in 1997, 3879 Zoroastrians, 78 Christians and 100 Jews lived in this province.

Political and Economical Geography

Today, Yazd province comprises 10 townships, 21 districts, 51 rural districts and about 5000 villages. 1323 of these villages are populated and the others are deserted because of the immigration.

Economical Resources of Yazd Province

For a long time, Yazd has been intertwined with industry and Production. At present, there are about 2200 productive and industrial units with operation license, amongst them textile, tile and ceramic are especially important. Besides, with four billion tons of geological resources, Yazd province is one of the main mineral regions of Iran.

Agriculture and Animal Husbandry

A semi-traditional method and a peasant farming system dominate the agriculture of the province. Today, over 110 hectares of lands are under cultivation.

Feasts and Celebrations

Norooz, Sizdehbedar, religious feasts and special ceremonies like wedding, are the most important and exquisite scenes of culture and religion in Yazd province. The people of Yazd, like other Iranians, observe these celebrations through specific and various customs.



Mourning Sites

When somebody dies, the relatives cook a kind of pottage and oleaginous bread, called Surok, in memory of him/her. Nakhl Bandi (decorating Nakhl) and Nakhl Gardani (carrying Nakhl) are the other specific rites of Moharram Month in Yazd. Nakhl or Naghl, as a symbol of the coffin of people who died as martyrs in Karbala, is made of wood, shaping a leaf of tree or cypress. And Karbala was the place in modern Iraq where Imam Hussein and his comrades were martyred in a battle with their enemies in the Moharram month. Hence, in every Moharram, the men of the district carry the Nakhl magnificently and move it through the crowd like an honorable coffin. Other rites of Moharram include, forming the groups of Saghhas (water-carriers) which consist of some youngsters in black clothes who give water to the mourners, and ornamenting a saddled horse, named Kotal, as a symbol of Imam Hussein's (pbuh) horse.

Zoroastrians' Celebrations

Every month, as the names of day and month come to be the same, Zoroastrians hold some celebrations. Amongst them, the most significant ones are Noroozgan, Mehregan and Sadeh.

Noroozgan is held at the night before Norooz. When the darkness of the last night of the year grows faint, Zoroastrians light a fire on the roofs. In the next day, they lay Haft Sin (seven things whose name start with the "S" sound in Persian) cloth and celebrate Norooz. The main traditional food they eat this day is paludeh-e morvarid (Paludeh is a sweet beverage containing starch jolly in the form of thin fibers). They start preparing the required wheat and starch, from the beginning of winter. **Mehregan** is another celebration which lasts for six days. It is said that this celebration is held on the occasion of Iranian's victory over Zahhak. **Sadeh** or the celebration of arising fire has been held on the 100th day of winter, from long ago.

Gahanbar or Seasonal Celebrations: These are the symbols of six stages of Creation and considered as some Zoroastrians' religious feasts. Through them, Mubads (Zoroastrian's priests) and other people come together and sing the song of Avesta.

Hiromba: A celebration which is the same as lightening fire in Sadeh, and which is held every year on the last week of Farvardin (the first month of the year), in Sharaf Abad (Ardakan), and lasts for two days.

Sedreh Pushi (wearing Sedreh): When a boy or a girl reaches the age of Sedreh Pushi (7-10 years old or puberty age), the parents hold a celebration, invite the relatives, and the boy or girl wears Sedreh. Also, Zoroastrians have specific customs for espousal and wedding and even burial ceremonies, which are the memorials of the ancient Iran.



Zoroastrian Fire Temple, Yazd, Iran

Messiah Feast of Jews

It is held by the small Jewish minority of Yazd, in Hadash synagogue, on the occasion of saving the Israelites by Moses, and lasts for eight days.

Food and Sweets

Shuli: It is a kind of pottage, cooked with grains and vegetables, which is very popular.

Confectionary: In Yazd, confectionaries are called Khalifeh or Haj Khalifeh. From 70 years ago, they have presented Yazd sweets to Iran and the world. These sweets include, Baghelava, loz-e Bidmeshk (musk- willow), Loz-e Pesteh (with pistachio), Loz-e Nargil (with coconut), Ghottab, Nan-e Berenji, Haji Badam and Pashmak.

These sweets, along with handicrafts such as Termeh (cashmere), Daraiee, Ziloo (a kind of carpet with no pile) and ceramics are among the major souvenirs of Yazd province.

Traditional Arts

Ceramics: The art of ceramics has beautiful and innovative designs in Yazd province, especially in Meybod. Ceramic products are locally called Kevareh. Khorshidkhanum (the Sun) and Morgh-o Mahi (bird and fish) are two very well-known designs in Meybod.



Crockeries, outstanding handicrafts made in Meybod, Yazd, Iran

Ziloo and Carpet Weaving: The nice hand-woven works of this province are of a long history and are coordinated with the life of people in desert. Some original designs of Yazd carpets are Harati, Gol-o Mahi (flower and fish), Sardar-e Jangal and Kermani.

Sha'r Weaving: Sha'r weaving works are varied and include: Termeh, ZarBafi (brocade weaving), Shamad (bed sheet), Dastmal (handkerchief), Makhmal (velvet), Daraiee and Chadorshab (wrapper for bed-cloth). The first weaving of

Termeh dates back to around 250 years ago. This fabric is always considered as a souvenir of Yazd. Some of the other handicrafts of Yazd are Giveh weaving which is often the entertainment of rural women in their free time, Hasir or Buria weaving (mat making) using the fibers of palm tree, Khorjin weaving or Labbafi, Rufarshi, Ehrami and Namad Mali (felting).



Sha'r weaving device, one of the traditional arts in Yazd

Goldsmith's: It is another handicraft of Yazd province. Goldsmiths create various ornaments for men and women, with very nice designs, including simple geometric designs made of precious stones. From many years ago, there has been a row, named Zargarha (Goldsmiths) in the old Khan Bazaar.

Historical Buildings

Jaame' Kabir Mosque

This mosque is one of the most valuable historical heritages of art and a treasure of the Islamic architecture. The primary foundation is related to Ala'oddoleh Garshasb Al-e Buye, in 12th century. But the present mosque belongs to the Al-e Mozaffar and the Timurids periods in 14th and 15th centuries. The artistic and architectural privileges of this mosque are the stability and strength of the construction, the precious and interesting tile works, the high

facade, the two precious inscriptions (one in Kufic script and the other in Sols script on an azure mosaic tile near the magnificent facade), the two elegant minarets, the tiled ornaments of the interior walls of Shabestan (part of a mosque designed for winter prayers) and also the inside and outside of the dome. The minarets are 48 meters high, and the facade is about 24 meters high.



Amir Chakhmaq Square, Yazd, Iran

Fahraj Jaame' Mosque

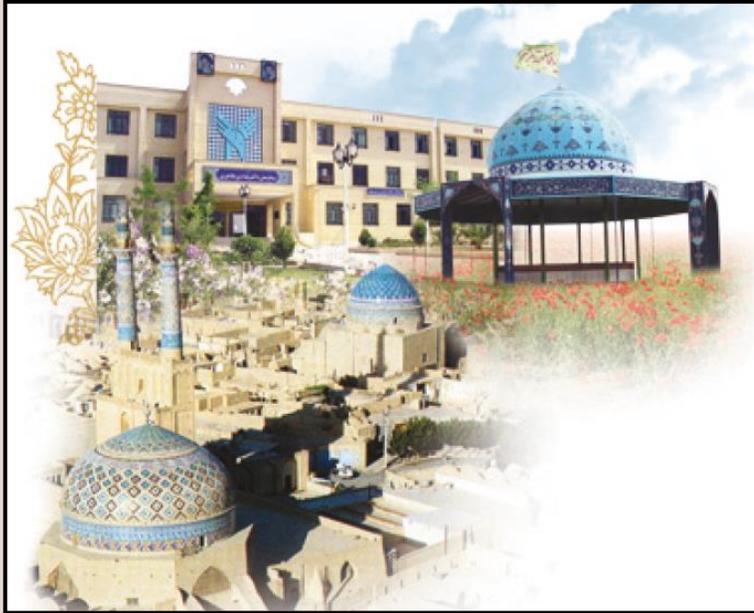
This mosque is located in Fahraj village; the construction dates back to the early years of Islamic period and is of a great importance in Iranian Islamic history. It is also comparable with Tarikhaneh mosque in Damghan.

Other Mosques

Some other mosques include **Abol-ma'ali** which goes back to the 14th century, **Shah Tahmasb** that belongs to the 16th century, the remaining of **Nazamieh** in Abarkooh, **Mehr Abad Jaame' Mosque**, **Abarkooh Jaame' mosque**, **Bafgh Jaame' Mosque**, and the mosques of Abrand Abad, Firuz Abad, Kharanagh, Bafrouieh, Aghda, Ardakan, Mehriz, etc.

Fara Shah Ghadamgah and **Molla Agha Baba** synagogues are two other historical and religious buildings. The construction of Ghdamgah goes back to 11th century. Molla Agha Baba or Molla Sadr synagogue which is located on

the Jaame' Kabir Mosque street, belongs to the Qajar period. There is a picture relating to Moses (pbuh) on the wall of Shabestan.



Governmental Establishments

In the Pahlavi period, the construction of the Shah Street (present Ghiam Street), the complex of old Bazaar of Yazd was divided into two parts. Some major bazaars of the complex include Orosi Duzha (shoe-makers), Mohammad Ali Khan, Panjeh Ali, Darvazeh Mehriz, Zargari (Goldsmiths), Sadri Gheysarieh, Ja'farkhan.



Amir Chekmaq Street, Yazd, Iran

Abro Bridge

Constructed in the architectural style of the Sassanids, this very old bridge with four openings, is unique as a functional architectural construction. The pillars of the openings are made of cement and the semi-circular arches are in the Roman style.

Castles

The Narin Castle (Narenj Castle) is the most important historical building of Meybod. The construction of this castle dates back to the time of Soloman (pbuh) and belongs to the pre-Islamic period. In the Al-e Mozafar period, it underwent some modifications. **Mehrjard** is another castle of Meybod which goes back to Zandieh and Afsharieh period.

Abrand Abad Castle has been constructed by one of Irandokht's (the daughter of Khosro Parviz) colonels and dates back to the Sassanid period. **Robot Castle of Abarkooh**, with nine spherical towers, is located in the west margin of Abarkooh and belongs to the Sassanid period. **Shavvaz Castle**, with the area of 5000 sq.km, is the major mountainous castle of Yazd, which is constructed over the rocks, at the height of 100 meters. It has a unique and magnificent stony door. Dating back to the 13th century, **Marvast Castle** is situated in the center of Marvast. **Pahlevan Badi Castle** belongs to the pre-Islamic period and is constructed on Mount Milok. **Rahmat Abad Castle** in Rahmat Abad village and **Garmsar Castle** in Taft, can be mentioned as two other castles of the province.



Tower of Silence, the structure used by Zoroastrians for the burial of the dead

Old Fortifications of Yazd

According to the oldest documents, these fortifications were constructed by four colonels of Abu Ja'far Kakuyeh in the 11th century. It has four gates including Ghatarian (Shahi), Kushk-e No, Mehrjard (Mehriz) and Kia (Hazireh). But in the 13th century, a destructive flood ruined many parts of these fortifications. Some years later, it was repaired and a few towers and gates were added. The remaining of the old fortification can be found in such districts as



Fahadan, Seyyed Golesorkh, etc.

The foundation of Arjnan Tower, on 20 km to the south-west of Ardakan, goes back to the Qajar period. Pagondeh and khaje Ne'mat are considered as two other old towers of Yazd province.

A Brief History and Overview of the University



A Brief History and Overview of the University

Today, university is the most important center of science, knowledge, wisdom, hope, excellence and progress, and fortunately, our society enjoys a young, talented and energetic population. This has provided a suitable ground for development and honor for our Islamic country.

On the basis of having trust in God and the gifts from Imam Khomeini, and the unlimited treasure of people's confidence in and respect to the Islamic society, the Islamic Azad University of Yazd was established on December 26th, 1982 in the city of Yazd.

In 1982, 180 students were admitted in four fields of Mathematics, Metallurgy Engineering, Textile Technology Engineering and Civil Engineering. Since Yazd province has always possessed a great attraction in its economic, cultural and social stance in both industry and training, and due to the extensive demand for university education, the Islamic Azad University of Yazd was able to make use of this appropriate ground and public need for its growth and development, and accordingly in each academic year, expanded its domain of activity in quantity as well as quality. At present, the university, with an area of approximately 1184312 square meters, offers 166 fields of study for various degrees including, Non-continuous Associate Degree (Kardani Napesvaste), Continuous Associate Degree (Kardani Peyvaste), Non-continuous Bachelor's Degree (Karshenasi Napeyvaste), Continuous Bachelor's Degree (Karshenasi Peyvaste), Non-continuous Master's Degree (Karshenasi Arshad Napeyvaste), M.A. and M.Sc. Degree and Ph.D. Degree. The university holds over 15075 students, 156 competent faculty members and 320 visiting instructors, while

approximately 62714 have so far graduated from the university.

We expect our students to be harbingers of knowledge and peace, and examples of humanity in word and in action by augmenting their professional education and scientific capabilities.



Islamic Azad University of Yazd, Entrance Gate

Founder and Former President of the University (1982-2009)

Late Dr. Ali Soltani

Following the Supreme Leader's command on being innovative, the Islamic Azad University of Yazd has put in front the promotion of scientific and research work since its inauguration, and it has been an appropriate platform for enhancement of education, research and culture with the help of its committed professors and hard-working personnel and a collection of

educational, cultural and research potentials and facilities.

We strive to expand educational opportunities for those who have completed secondary education as well as for those who desire to translate life and work experience into university credits. We are committed to provide students with an effective study program, individually designed to enhance their personal performance and competency to allow them to achieve their personal and professional goals.

Students are the powerful arms of the university, and I invite them all to participate and cooperate in university affairs towards a sustainable development and a bright horizon for growth and prosperity. I would like to thank all the efforts of all authorities, hard-working unit managers, members of respected faculty and students in enhancing knowledge, wisdom, trust and cooperation. I embrace you with my deepest affection and wish you luck. May God be with you!



Islamic Azad University of Yazd, Entrance Gate



Islamic Azad University of Yazd, Entrance Gate

President of the University

The Islamic Azad University of Yazd, enjoying an international recognition, is one of the most renowned and notable academic and cultural centers in Iran which, in addition to training the experts needed by various organizations and sectors, has always been influential in the sociopolitical structure of the society.

The University consists of colleges, faculties, offices, research institutes and centers. Each faculty consists of different departments and sections. Other than individual faculties, the institute and research centers (affiliated to the colleges and faculties as well as independent ones) are part of the University's research body.

Since the beginning of its activity, many renowned scholars and highly respected figures in the modern history of Iran have studied, taught, and conducted research at this university.

We are committed to excellence in the field of progressive education which emphasizes the specific needs of the learners.



Responsibilities

1. Appointing the deans of the faculties and colleges based on the recommendation of the faculty members
2. Deciding on the administrative global policies of the university within scientific, educational and research policies of the country
3. Presenting the university's annual report
4. Supervising current university activities within approved regulations
5. Appointing and chairing the Board of Directors of the university
6. Chairing the University Council
7. Legally representing the university before respective authorities

Faculties and Departments of the University



Faculty of Textile Engineering and Polymer Engineering

Department of Textile Engineering

Yazd Province is considered as an important pole in textile industry, and about 25% of the total textile industries of Iran are situated in this region. The faculty was established since the Islamic Azad University started, and till date it has been working in the field of textile education as one the most promising faculties on Yazd Branch campus which is committed to provide a comprehensive education for those who wish to pursue a career in this field and to improve the technological skills of workers and professionals in textile industry. The faculty also seeks to recruit and retain faculty who do high-quality research that benefits students and professionals. Currently, the department has 13 full-time and 1 part-time faculty members and 3 Ph.D. candidates. The Faculty of Textile Engineering offers courses for the following majors:

1. Ph.D. in Textile Chemistry and Fiber Science
2. Ph.D. in Textile Technology Engineering
3. B.S. and M.S. in Textile Chemistry and Fiber Science
4. B.S. and M.S. in Textile Technology Engineering
5. M.S. in Textile Management Engineering
6. B.S. in Clothing Engineering
7. B.S. in Textile Engineering
8. B.S. in Textile Industries Engineering
9. B.S. and M.S. in Polymer Industries Engineering- Polymer
10. B.Sc. in Polymer Industry Engineering - Color Technology

Our mission is to provide excellence and innovation in integrating quality teaching and learning, with applied research and relevant experience, preparing

students for professional careers by our faculty members who have gained national and international reputations through their publications in their areas of specialty.



Faculty of Textile Engineering



Laboratory, Textile Department



Laboratory, Textile Department

One of the teaching aims of DTE is to improve the technological skills of workers and professionals in the textile industry. Consequently, various courses are held by the department to achieve this aim. So far four long-term courses have been held for the Textile Industrial Committee of Iran and two are currently being held as well as a number of short-term courses according to the needs of the industrial centers and factories.

The Research Activities of DTE Include:

- Projects related to the dissertations and theses of students at all levels
- Projects for industry
- Independent research projects
- Projects carried out in the man-made fibre research center

Virtual Education:

- Textile Industries Management Engineering

Graduate Courses:

Textile (Ph.D. Program)

- Physic and mechanic of fabric



General Catalog

- Mechanical & rheological properties of fibres
- Necessary courses regarding to students research field
- Qualify examination
- Dissertation

Textile Technology (Master Program):

- Advanced fiber physics
- Statistics& research methods
- Data analysis in textile
- Advanced fiber production technology
- Advanced mathematics
- Structural mechanics of yarn
- Structural theory of fabric
- Bphysics of textiles
- Weaving dynamics
- Mechanisms design
- Project
- Seminar

Textile Chemistry and Fiber Science (Master Program):

- Advanced fiber physics
- Statistics& research methods
- Advanced mathematics
- Advanced fiber production technology
- Chemistry of surface act. Agets
- Advanced polymer rheology
- Advanced spectroscopy
- Advanced colorimetry
- Advanced microscopic methods in textile
- Advanced microscopic method in textile laboratory
- Special subject in text. chemistry
- Fiber composites
- Mechanism of textile finishing



- Thermal analysis of polymeric materials and fibers
- Physical chemistry of dye absorption
- Project
- Seminar

Management Engineering of Textile Industries (Master Program):

- Economics for managers
- Decision making analysis
- Quality & productivity management
- Textile physics
- Processes of advanced dyeing & finishing
- Environment management in textile indust.
- Project
- Seminar

Nano Fibrious - Structures (Master Program):

- Quantum physic
- Physics and mechanics of nano-fibers structures
- Advanced structures of nano-fibers
- Advanced methods of optimization and modeling
- Technology and production methods of nano-fibrous structures
- Specification and analysis of nano –fibrous structures
- Advanced mathematics
- Project
- Seminar

Centers of Excellence:

- Center of Excellence on Modern Methods of Identification of Textiles
- Center of Excellence on Functional Fibrous Structures and Environment

Research Centers and Institutes:

- Textile Industry and Man-Made Fibres

Area of Research:

- Smart fabrics
- Chemical and biological protective clothes
- Membrane textile
- Color physics
- Fiber science
- Electrospinning and nanofibrous structures
- Dyeing, printing and finishing
- Fiber-to-fabric manufacturing
- Fiber spinning
- Non-woven and man-made carpets
- Surface coatings
- Corrosion eng
- Color physics
- Nano coatings
- Synthesis of color
- Printing inks
- Resin synthesis
- Conversion coatings
- Surface chemistry and colloids

Textile Laboratories and Workshops:

- Fibre Science
- Textile Finishing
- Finished-Fabrics Quality Control
- Statistical Quality Control



- Fibre Physics
- Thermal Analysis and IR spectroscopy
- Optical Microscopy
- Colorimetry
- Electro spinning
- Spinning Workshop
- Weaving Workshop
- Knitting Workshop
- Melt Spinning Workshop
- Clothing Technology Workshop
- CAD Workshop
- Non-woven Workshop

Department of Polymer Engineering and Color Technology

The increasing consumption of polymer materials, their unique and multifaceted characteristics and their versatile applications have created the need for specially trained experts in this field.

The Department of Polymer Engineering and Color Technology was inaugurated in 2010 as one of the departments pertaining to the Faculty of Textile Engineering, and it is now offering B.Sc. and M.S. programs for the students to pursue their studies in industrial polymer and color technology engineering. This department has 5 full-time faculty members.

Enjoying well-known and highly-talented faculty members who are highly involved in research and teaching activities, the department is dedicated to offering a quality education and thereby providing leadership technology for a broad base of commercially viable polymer-related materials, processes and products via the development and application of its capabilities, which include education, research, analysis, modeling, design and synthesis, among others.

Research activities of the Department of Polymer Engineering and Color Technology are aimed at various areas of polymer processing. The Department is quite well equipped with modern instruments, machines and computers, sophisticated laboratories and workshop facilities, enabling to deal with various projects and issues. The graduates have opportunities in rubber, plastic, fiber, suede, compound material, resin, packing, color and anti-corrosion coating, tile, ceramic, leather and sanitary industries.



Polymer Laboratories:

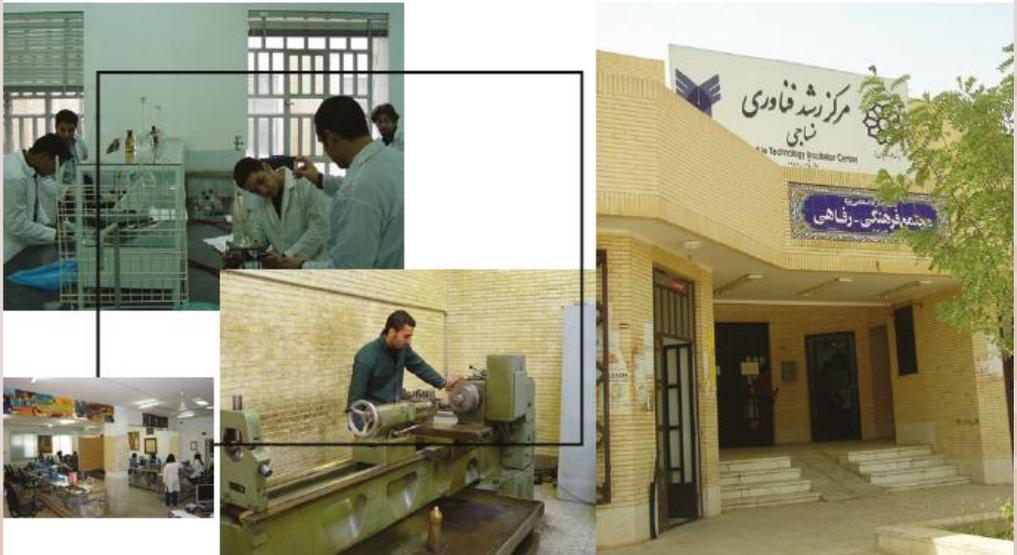
- Organic Chem. Lab.
- Polymer Chem. & Kinitics Lab.
- Synth. Intermed & Colorurants Lab.
- Eng. Indus. Resins Workshop
- Electrochem. & Corossion Eng. Lab.
- Chem & Tech. of Dying
- Colour Control Lab.
- Process Control Lab. Plastics Eng. Workshop
- Compodite Workshop
- Dyeing Lab. (Natural)



Dyeing Laboratory



Colour Control Laboratory



Faculty of Textile and Polymer Engineering



Scientific Association of Nanotechnology

The Scientific Association of Nanotechnology in the Islamic Azad University of Yazd has been found in 2004. The association has aimed to promote applied research, increase academic participation and disseminate crucial knowledge in the field of nanotechnology and non-science.

Objectives and Activities

- Promoting and enhancing science, quantitative and qualitative development of the experts and improving the educational and research activities in the field of nanotechnology
- Proposing and conducting scientific and research projects in the university and the province in collaboration with researchers and experts in nanotechnology
- Encouraging researchers and honoring the distinguished and eminent researchers and professors
- Holding national and international scientific meetings, workshops and seminars
- Developing and utilizing human resources in the field of Nano and promoting problem-oriented research
- Creating a strong linkage between the university and the Nanotechnology Initiative Council to accelerate the goals of both sides towards progress in nanotechnology
- Creating a perfect platform to offer new content and solving the current problems of science and research in the field of nanotechnology

Recent Successes

- Holding a series of Nanotechnology workshops in 2012
- Holding the National Nanotechnology Competition in 2012 and 2013
- Holding the Student Competition of Egg Rescue in cooperation with the Young Researchers and Elites Club of Yazd Branch
- Achieving the 11th rank in the National Nanotechnology Competition in 2012
- Achieving the top article rank in the 2nd Competition and Festival on Nanotechnology held among Islamic Azad universities
- Achieving the top book rank in the 2nd Competition and Festival on Nanotechnology held among Islamic Azad universities
- Presenting more than 50 scientific papers in national and international conferences
- Publishing over 20 articles in international ISI-indexed journals



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