

Genesis of ATIRA

During the post-independence era the Government of India decided to promote industrial growth through the establishment of scientific temper and a chain of new national laboratories were created. For the textile industry, the government decided for a Regional Research Associations on the British Model, set up and managed as a joint venture of the mills and the Government.

The enlightened industrialist of Ahmedabad under the leadership of Mr. Kasturbhai Lalbhai and Dr. Vikram Sarabhai were the first to take advantage of this Government Policy by registering the Ahmedabad Textile Industry's Research Association (ATIRA) as a Society in December 1947. The Society began to work in 1950 on rented premises with a nuclear staff of thirty. ATIRA's own estate was acquired in a Mango Orchard situated far away from main city of Ahmedabad.

ATIRA Activities



Research & Development



Testing & Analysis



Incubation Center



Environment Engineering Services



Chemical Technology Department



Consultancy



Training & Skill Development Program

About ATIRA

Ahmedabad Textile Industry's Research Association (ATIRA) is an internationally renowned textile research institute for the textile allied industry. ATIRA was Established in 1947 by the textile mills of Ahmedabad as autonomous non-profit R&D institution. The activities of the institution cover all aspects from Fiber to finished fabrics in traditional textiles as well as Technical Textiles in the arena of Geo-textiles, Nano - web technology and Composites. ATIRA has extensive and comprehensive infrastructure on NABL approved testing laboratories for cotton, yarn and fabric, state- of- the-art Geotextile laboratories, modern composite material testing labs, calibration lab, environmental engineering lab, Workshops and Pilot mill for prototype developments.

About CoE- Composites

Centre of Excellence (CoE) for Composites was created in ATIRA by Ministry of Textiles, GOI under TMTT scheme in 2011. CoE provides services such as design & stimulation, testing & certification, preform design & development, processing including up-gradation of processes, capacity building & skill development, product & prototype development through industrial projects for the mobility sector covering automobiles, aerospace & marine, housing & construction, defence and other industrial applications

one week Training Program

On

“Processing of FRP Composite Materials”

(20th June to 24th June 2022)



Ahmedabad Textile Industry's Research Association (ATIRA)

P.O. Ambawadi Vistar Ahmedabad -
380015, Gujarat, India
www.atira.in

About Course

Learn about composite manufacturing, including materials, manufacturing processes. Composite manufacturing is ready to meet the demands of the modern world, including ground breaking vehicles and aeronautical designs, which require ever lighter and stronger materials. Composite manufacturing is commonly associated with carbon fiber processes, composite manufacturing combines two materials to form a polymer with properties that would be hard to produce with a single material alone. The resulting composites are durable and light. This course teaches the fundamentals of composite manufacturing, including fiber and resin-based processes.

Course Aims

The objective of the program is to provide the thorough knowledge of the composite material-what is composite, applications, working with composite materials, fabrication process etc. All the attendees will undertake the basics of the composite materials and how the raw material transform in the finished composite components. Also, the attendees will have the hands-on experience of different composites fabrication processes.

Target Audience

This course is suitable for anyone who wants to work in the field of the development of composite materials. This includes, Researchers who want to learn composite terminology and language, A person who wants to make a career in the field of composite, existing staff of the composite industries who want to learn the operation and outsiders who want to learn more about the composite industries.

Course Content

- Basics of composite material
- Polymer matrices for composite materials
- Composite materials reinforcements and additives
- Composite material processing & Testing
 - ✓ Hand lay-up
 - ✓ compression molding technique
 - ✓ Vacuum infusion Process
 - ✓ Pultrusion process

In this module basics of different fabrication process and hands-on experience on Hand layup process, compression molding, pultrusion process and vacuum infusion process as well as provides guidance on their usage also different testing methods will be discussed.

Important Dates:

Last date of registration	:	10 th June 2022
Confirmation of registration	:	13 th June 2022

Link to Fill Registration Form:

<https://forms.gle/owJpY5EFr9zwneB1A>

Special Note:

After deposit of registration fees, it is requested kindly send the screen shot of transaction details on finance@atira.in, composites-research@atira.in

REGISTRATION FEE

₹ 10,000/- + 18% GST

(Registration fees included Lunch and tea)

Bank Account Detail

A/c holder name	:	Ahmedabad Textile Industry's Research Association
A/c No.	:	7212148230
Name of Bank	:	Kotak Mahindra Bank Limited
Branch	:	Satellite Branch
IFSC Code	:	KKBK0000810
MICR Code	:	380485004

Note: Kindly mention in the Remark "ATIRAIT2022"

Contact details:

For any query kindly contact to

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Coordinator

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Centre of Excellence for Composites
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અહમદાબાદ વસ્ત્ર ઉદ્યોગ અનુસન્ધાન સંસ્થાન (અટીરા)

P.O. Ambawadi Vistar, Ahmedabad - 380015, Gujarat, India

પી ઓ આંબાવાડી વિસ્તાર, અહમદાબાદ- ૩૮૦૦૧૫, ગુજરાત, ભારત

One week training program on “Processing of FRP Composite Materials”

(20th June 2022- 24th June 2022)

Timing: 10:00 AM to 04:30 PM

Registration fees: ₹ 10,000/- + 18% GST (Registration fees included Lunch and tea)

Link to Fill Registration Form:

<https://forms.gle/owJpY5EFr9zwnB1A>

Schedule

Day 1	
10:00 AM - 10:30 AM	: Registration and Inauguration
10:30 AM - 11:30 AM	: Theory class: Introduction about composite, different technical textiles
11:30 AM - 11:45 AM	: Tea break
11:45 AM - 1:00 PM	: Demonstration of technical textiles, weaving, handling and storage
01:00 PM - 01:45 PM	: Lunch
01:45 PM - 3:00 PM	: Fiber and fabric testing
03:00 PM - 3:15 PM	: Tea break
03:15 to 4:30	: Introduction to Braiding machine
Day 2	
10:00 AM to 11:30 PM	: Theory class: Matrix material, Fabrication process of the composites (Hand lay-up & compression molding)
11:30 AM - 11:45 AM	: Tea break
11:45 PM - 1:00 PM	: Mold design and preparation
01:00 PM - 01:45 PM	: Lunch
01:45 PM - 04:30 PM	: Composite fabrication using hand layup and compression molding (practical demonstration)
03:00 PM - 3:15 PM	: Tea break



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Day 3		
10:00 AM to 11:30 PM	:	Theory class: Vacuum infusion process, sandwich structure and prepregs
11:30 AM - 11:45 AM	:	Tea break
11:45 AM - 12:15 PM	:	Curing and demolding of the composite
12:15 PM- 1:00 PM		Demonstration of Prepreg and handling of prepreg
01:00 PM - 01:45 PM	:	Lunch
01:45 PM - 04:30 PM	:	Development of composite from VARTM and demonstration of sandwich panel
03:00 PM- 3:15 PM		Tea break
Day 4		
10:00 AM - 11:00 AM	:	Theory class: Pultrusion process and filament winding
11:00 AM - 11:15 AM	:	Tea break
11:15 AM - 12:00 PM	:	Demonstration of pultrusion process
12:00- 01:00 PM		Post processing – trimming, drilling
01:00 PM - 01:45 PM	:	Lunch
01:45 PM - 04:30 PM	:	Painting & Associated process
03:00 PM- 3:15 PM		Tea break
Day 5		
10:00 AM - 11:00 AM	:	Theory class: different composite testing processes
11:00 AM - 11:15 AM	:	Tea break
11:15 AM - 01:00 PM	:	Testing of composite materials, quality check, inspection
01:00 PM - 01:45 PM	:	Lunch
01:45 PM - 04:00 PM	:	Testing of composite materials, quality check, inspection
03:00 PM- 3:15 PM		Tea break
04:00 PM - 04:30 PM	:	Valedictory and certificate distribution
