**TechnoBiz** 

EXECUTIVE DIPLOMA 360°

# RUBBER INDUSTRY

**TECHNOLOGY & MANAGEMENT** 

**3-Month Online Program** 

**Unique & Universal** 

https://diploma.technobiz.org

## 360°

### RUBBER INDUSTRY DIPLOMA **TECHNOLOGY & MANAGEMENT**

TechnoBiz is offering Executive Diploma 360o Program on "Rubber Industry - Technology & Management" as 3-Month Online Program with emphasis on "Non-Tyre Rubber Products" industry. This program is designed for professionals working in the rubber industry with objective of "Developing Workforce with Technical, Analytical, Management, Communication & Leadership Skills for Rubber Industries". This is a Unique and a Universal Program by addressing technical and management aspects with 360o approach.

#### 360o Approach

3-Month Online Program focusing on

- Applied Science & Technology
- Products Manufacturing
- Design & Development
- Manufacturing Operations
- Engineering & Maintenance
- Regulations & Standards
- Best Practices & Productivity
- Research & Innovations
- Management & Leadership

#### **Participant Criteria**

The selected participants are required to have atleast 3 years experience in rubber industry either in technical or in nontechnical position.

This program is not suitable for everyone. TechnoBiz team will assess participant's qualification and relevance to this program through personal interview via online. Participants must be working currently in rubber industry.

#### **PROGRAM FORMAT**

#### Feature 1: Presentations from **International Experts**

- 100+ Scheduled Modules
- 40+ International Experts
- Specialized Industry Topics
- 200+ hrs Presentations Length

#### Feature 2: Cross Learning between **Participants**

Participants are required to make 5 presentations related to their experience and expertise.

#### **Feature 3: Conversation with Business** Leaders

Participants will have business conversation with invited business leaders from the rubber industry to discuss about business management aspects

#### Feature 4: Unconventional Assessments

Participants have to complete assessment tests by teaming with two of their colleagues as a group.

#### Feature 5: Special Session on "100+ Good Practices for Rubber Industries"

Participants are required to develop 100+ Good Practices in Rubber Industry by having group discussions with other participants as well as their colleagues & **Customers/Suppliers** 

#### **Feature 6: Uniqueness of Participants**

Participants are from different parts of world, who are working in the rubber industry.

#### Feature 7: Tech Supplier's Presentations

Suppliers of participant companies will be invited to make presentations in latest technologies and products to all colleagues.

#### Feature 8: Participants can join program while working in their company

Participants can join and complete the program while working in their organization. Time schedules are in such a way, that facilitate the participation in convenient manner.

#### **Module List**

Module 01: Introduction to Non-Tyre Products Industry

Module 02 : General Purpose Rubbers

Module 03: Special Purpose Rubbers - Part 1 (EPDM, NBR, CR, CPE, CSM, ACM, AEM)

Module 04: Special Purpose Rubbers - Part 2 (HNBR, FKM, ECO, VMQ, FQM, PU)

Module 05: Fillers for Rubber Reinforcement

Module 06: Rubber Processing Additives

Module 07: Natural Rubber: Grades & Selection

Module 08: Rubber Mixing Technology

Module 09: Key Ingredients of Rubber Compounds

Module 10: Mixing of Rubber Compounds

Module 11: Flow Properties of filled Rubber Compounds

Module 12: Reinforcement - A Key Property of Filled Rubber Vulcanizates

Module 13: Carbon Black - Characterization, Dispersion & Reinforcement

Module 14: Precipitated Silica - Characterization, Dispersion & Reinforcement

Module 15: Rubber Process Oils: Types & Selection

Module 16: Rubber Compound Formulation: Development & Case Studies

Module 17: Molded Rubber Products: Compound Development

Module 18: Rubber Mixing Procedures & Sequence

Module 19: Reverse Engineering in Compound Development

Module 20: Hydraulic Hoses: Rubber Compound Development

Module 21: Best Practices for Rubber Chemists in Material Development

Module 22: Metal to Rubber Bonded Products: Compound Development

Module 23: Rubber Reclaim Application in Non-Tyre Products

Module 24: Rubber Curing by Sulfur: Property Design

Module 25: Rubber Curing by Peroxide - Advantages & Limitations

Module 26: Rheology and Rheological Effects in Rubber Compounds

Module 27: Fill-Factor & Batch Weight of Internal Mixer

Module 28: Rubber Industry Clinic - Part 1

Module 29: Rubber Industry Clinic - Part 2

Module 30: Rubber Industry Clinic - Part 3

Module 31: Rubber Industry Clinic - Part 4

Module 32: Rubber Industry Clinic - Part 5

Module 33: Rubber Testing Laboratory: Instruments & Purpose

Module 34: Understanding the Working Principle of the Rubber Extruder

Module 35: Impurities in Rubber Compounds - How to Handle?

Module 36: Rubber Profile Extrusion & Vulcanization Lines

Module 37: Thermoplastic Elastomers - Process, Properties & Recent Applications

Module 38: Rubber Chemicals - Quality & Handling

Module 39: Rubber Testing - Good & Bad Practices

Module 40: Rubber Product Molding and Process Overview for the Non-Technologist

Module 41: Rubber Compound & Process Design to Reduce Backrinding

Module 42: Introduction to Compression Rubber Molding

Module 43: Rubber Processing & Part Deflashing in Compression Molding

Module 44 : Compression Rubber Mold Design - Part 1

Module 45: Compression Rubber Mold Design - Part 2

Module 46: Pulse Filling & Compression Preforms in Compression Molding

Module 47: Platens, Mold Mounting and Mold Insulation in Compression Molding

Module 48: Air Removal in Compression Molding

Module 49: Troubleshooting of Compression Molding

Module 50: Rubber Materials and Compounds Characterization by RPA

Module 51: Best-Practices Rubber Injection Molding Machinery Investment & Planning

Module 52: Design of Rubber Injection Molding Process

Module 53: Blooming Problems in Rubber Products: Why? How to Avoid?

Module 54: Design of Experiments (DoE) in Rubber Manufacturing Processes

Module 55: Use of Alternate Carbon Blacks in Rubber Compounding

Module 56: Selection of Rubbers for meeting Heat, Ozone and Oil Resistance

Module 57: Introduction to Rubber Hoses

Module 58: Rubber Compound Development for Hoses

Module 59: Rubber Hose Manufacturing Process & Control

Module 60: Rubber Rules - Vulcanization

Module 61: Rubber Rules - Polymer Characterization

Module 62: Rubber Rules - Rubber Flow

Module 63: Rubber Rules - Cavity Filling

Module 64: Rubber Rules - Response to Applied Force

Module 65: Understanding of TPE & TPV Families

Module 66: TPV Industry Overview

Module 67: TPV Structure & Properties

Module 68: TPV Processing

Module 69: TPV Applications in Automotive

Module 70: TPV Applications in Industrial & Consumer Products

Module 71: Troubleshooting of TPV Molding

Module 72: TPV Extrusion Principles & Troubleshooting)

Module 73: India Rubber Industry - Outlook & Opportunities

Module 74: Sri Lanka Rubber Industry - Outlook & Opportunities

Module 75: Malaysia Rubber Industry - Outlook & Opportunities

Module 76: Coaching Mentoring Need for Executives & Managers in Rubber Industries

Module 77: Fine Mesh Straining of Rubber Compounds

Module 78: Micronized Rubber Powder & Applications

Module 79: Research Trends in Rubber Science & Technology

Module 80: Aspects of Compounding with Ground Rubber

Module 81: Importance of Wall Slip in Rubber Processing

Module 82: Sponge / Cellular Rubber Technology Basics

Module 83: Raw Materials & Selection for Sponge / Cellular Rubber

Module 84 : Compound Development for Sponge / Cellular Rubber

Module 85: Manufacturing of Sponge / Cellular Rubber

Module 86: EPDM Rubber Industry: Market, Supply Chain & Competencies

Module 87: EPDM Rubber Chemistry & Properties

Module 88: EPDM Rubber Compounding

Module 89: EPDM Rubber Processing

Module 90: EPDM Rubber in Foam Products

Module 91: EPDM Rubber in Automotive

Module 92: EPDM Rubber in Construction & Industrial Goods

Module 93: EPDM Rubber in Tyres & Tubes

Module 94: Troubleshooting of EPDM Rubber Processing

Module 95: Rubber Industry Clinic - Part 6

Module 96: Cost Reduction in Moulded Rubber Products Manufacturing

Module 97: Rubber Industry Clinic - Part 7

Module 98: Elastomer Characterization by Temperature Scanning Stress Relaxation (TSSR) Test

Module 99: Cost Estimating for Molded Rubber Parts

Module 100: Rubber Mold Debug

Module 101: Intellectual Property Guidelines for Rubber Industries

Module 102: Quality Management System Guidelines for Rubber Industries

Module 103: Product Stewardship Guidelines for Rubber Industries

Module 104: Operational Excellence Guidelines for Rubber Industries

Module 105: Establishing Credit Terms for Non-Terms Customers

Module 106: Steps to Handle Marine Insurance Claims for Sea Shipments

Module 107: Natural Rubber Processing Behavior: Custom Rubber Mixer Perspective

Module 108: Effect of Additives in Rubber Compounding & Products Performance

Module 109: Fluorocarbon Rubber (FKM) & PFAS REACH Restrictions

Module 110 : Silicone Elastomers : Properties & Compounding

Module 111: Colour Matching of Rubber Compounds

Module 112: FDA Testing of Rubber Materials

Module 113: Rubber Mixing Technology

Module 114 : Sales Order Entry & Developments in Rubber Mixing Business

Module 115: Cold Runner Technique in Rubber Injection Molding

Module 116: 100+ Good Practices for Rubber Industries

Module 117: Rubber Industry Clinic - Part 8

Module 118 : Developments in Regulations for Rubber Industry

Module 119: Mould Maintenance & Management in Rubber Industry

Module 120: 3D Printing of Rubber

#### Remarks:

- TechnoBiz reserves the right to make amendments to the program as appropriate without prior notification.
- Registered Participants are required to become a "Premium Gold Member" of "TechnoBiz" Channel on YouTube to access some of the modules.

#### **Upcoming Schedules**

- 1 Feb 30 Apr 2024
- 1 Jun- 31 Aug 2024
- 1 Sept -30 Nov 2024

Registered participants can choose any of the three time zones that is convenient to participate

- Central Europe Time
- USA Eastern Standard Time
- Thailand

#### **Customized Schedules**

• Participants can also design customized schedules to participate in this program. Additional costs apply.

#### **Learning Hours:**

- ~ 3 Hours/Day (Weekday Program) (Mon-Fri) (2pm-5pm)
- ~ 7 Hours/Day (Weekend Program) (Sat-Sun) (9am-6pm)

Remarks: Confirmed participants can choose either weekday or weekend schedule to participate in this program

#### **Registration Fee**

2024 Fee Structure

• Individual: US\$ 4,500 • Group (5-pax): US\$ 12,000 Remark: VAT 7% & Bank Fee Applies.

#### How to Apply?

- Please send detailed CV of participant to peram.technobiz@gmail.com for eligibility and online interview.
- Approved participants are required to complete the registration process at https://diploma.technobiz.org

#### **Participant Feedback**

Please scan QR Code to view the feedback from current participants



**Zander Byrne** Laboratory Technician Clwyd Compounders Ltd United Kingdom



Raja Sellamuthu, Dept. Head Technical & Product Dev. (T&PD) Linatex Rubber Products Sdn Bhd (Weir Minerals) Malaysia



QC Inspector - IM Rubber Multotec Manufacturing South Africa



#### **Contact Person for Assistance**

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