

# COMPOSITES

PROF. (DR.) D. D. KALE

#### **DR. SHREEKANT PATIL**

B.TECH., M.CHEM.ENGG., B.Sc.(Chemistry), B.Sc.(Tech.), M.Sc.(Tech.), PH.D. Ph.D.(Tech.), DBM, DIM, C. Engg

**Chancellor - Polymerupdate Academy** 

**Faculty - Polymerupdate Academy** 

### **ADDRESS:**

1001/1002, Lodha Supremus, Opp 'The World Towers' Senapati Bapat Marg, Lower Parel (West), Mumbai – 400013,

Tel: (91-22) 61772000 (25 Lines)



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## **LECTURE 1**

Lecture 1deals with the Introduction of the basic concept of Polymeric Composites, Fiber Reinforcement, Fillers and Additives.

## **LECTURE 2**

Lecture 2 explains and emphasizes on the details of Processing, Compounding techniques and applications of Polymeric composites.

## **LECTURE 3 AND LECTURE 4**

Both Lecture 3 and 4 provide detailed material on both Thermoplastic and thermoset polymers used for manufactured composites, their manufacturing processes and their structure property relationships.



## **LECTURE 5**

Lecture 5 deals with the Introduction of the basic concept of Polymeric Composites, Fiber Reinforcement, Fillers and Additives.

## **LECTURE 6**

Lecture 6 discusses the testing of thermoset resins together with the mechanical and electrical properties of Composites in details.

## **LECTURE 7**

Lecture 7 explains the environmental aspects and recycling of polymeric Composites.





### PROF. (DR.) D. D. KALE

B.TECH., M.CHEM.ENGG., PH.D.

#### **Chancellor - Polymerupdate Academy**

Born on November 16, 1945, Prof. (Dr.) D. D. Kale is a Chemical Engineer and has obtained his Ph. D. from University of Salford, UK.

With a teaching experience of over 40 years, Prof. (Dr.) D. D. Kale retired from University of Mumbai's Department of Chemical Technology, UDCT, Mumbai in 2005 as a Professor of Polymer Technology and as a Head of the Department of Polymer Engineering.

At present, he is a technical advisor to Giriraj Group, Mumbai and in the past has also been a consultant to several plastics industries.

He is a member of high power expert committee to Government of Maharashtra on various environmental issues and is on the expert panel for centers of excellence by DCPC. (Dr.) D. D. Kale is also a member of committee to define single use plastics set up by Ministry of Chemicals and fertilizers, New Delhi.

He has been a Visiting Professor in South Korea.

After superannuation in 2005, he has worked with Reliance Industries Ltd. for a tenure of three years.

His research interests include polymer processing, rheology, product design and recycling. He has guided 28 Ph. D. and 65 Masters Students. He has published more than 100 papers in peer reviewed journals and has one patent to his credit. He has presented papers in several International conferences such as IUPAC and has travelled widely.

He is associated with many professional bodies such as PLASTINDIA, All India Plastics Manufacturers Association, (AIPMA), IPI and SPE etc.

Prof. (Dr.) D. D. Kale has trained more than 5000 undergraduate and post graduate students in India and overseas. He has also trained more than 1000 industry personnel and has successfully authored two books. He was Honorary Editor of the journal, "Chemical Engineering Journal" published by I.I.Ch.E., India.



#### **WORK EXPERIENCE:**

- Jan 2018 till date Technical Director, Euressia Polymers, Mumbai.
- Feb 1, 2010 to May 2012 Director, Shroff S R Institute of Chemical
   Technology, Vataria, Taluka Valia, Bharuch, Gujarat, India
- Aug 1, 2011 to Dec. 2012 Visiting Professor, IIT Gandhinagar
- Jan 1, 2006 to Dec 31, 2008 Advisor, Reliance Industries Ltd.
- Jan. 31, 1991 Nov 30, 2005 Professor of Polymer Technology, Head,
   Plastics and Paints Technology Division UICT, University of Mumbai.

#### **AWARDS AND HONORS:**

- 1. Elected as a Fellow of Maharastra Academy of Science (1998)
- 2. Received the Teaching Services Award (Best Teacher) of Mumbai University, 2003-2004
- 3. Received the Prof. K. S. Armugam National Award for Innovative Research in the Field of Engineering and Technology by the Indian Society for Technical Education (ISTE) New Delhi (2004)
- 4. Received 'Life Time Achievement Award' from Color Society, (2015)

#### **OTHER INFORMATION:**

\*Editor 'Chemical Engineering Journal' published by I.I.Ch.E. (1992 – 94)

- \*Designed course work for
  - 1. Plastics for non-plastic personnel,
  - 2. Flexible packaging
  - 3. Coloration of plastics
  - 4. Chemical Engineering for plant personnel

\*Member of Board of Studies for Polymer Engg. Course of many Universities.

Has organized more than 10 Refresher Courses for Industry on behalf of Professional Bodies like IPI, SPE, Indian Institute of Chemical Engineers, Indian Small Scale Paint Association.

<sup>\*</sup>Headed the Knowledge Management group of I.P.I.





#### **DR. SHREEKANT PATIL**

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#### **Faculty - Polymerupdate Academy**

Dr. Shreekant Patil is an accomplished Polymer Technologist with over 30 years of comprehensive experience with Technical, Commercial, and Managerial skills.

After graduating B.Sc. in Chemistry, he completed his B.Sc. (Tech.), M.Sc. (Tech.), Ph.D. (Tech.) qualification from the Institute of Chemical Technology (ICT, Mumbai). Dr. Patil is also an expert in educational Management advancement.

With an industry experience of working with prominent resin manufacturing companies and having served the paint and ink industries, Dr. Patil has been a Business Head and was on the Board of Directors for various MNC's like Reichhold India, Ashland India, and Ineos Composites India.

He was responsible for foreign collaborations and building world-class automated greenfield resin manufacturing plants having large manufacturing capacities and has played an important role in the mergers and acquisitions of multinational businesses. Having contributed immensely to the circular economy by developing and commercializing various resins products from industrial waste for most of the high-performance composite applications, he has a track record of turning around loss-making companies into sustainable profitability by introducing cost effect resin products and import substitutes.

Dr. Shreekant Patil has authored two technical books on the Testing of Paints which is ready reckoner in the paint industry, along with 38 Research and Review Papers to his credit. He has successfully presented 6 Technical papers in National and International Conferences.

With extensive experience in organizing Technical Seminars, Workshops, Short courses, Training programs, Roadshows for customers, exhibitions in associations with professional institutes and bodies, Dr. Patil has also been a Lecturer and Examiner for various educational institutes and professional bodies.

At present, Dr. Shreekant Patil is an Independent Consultant to numerous Resin Industries.



# THANK YOU

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