

THE LOS ANGELES RUBBER GROUP, INC
BASIC RUBBER TECHNOLOGY CLASS - 2018/2019
 Location: R.D. Abbott Company, Inc., 16511 Carmenita Rd. Cerritos, CA
 Thursday 6:30 pm -8:30 pm

COURSE TOPICS & READING ASSIGNMENTS:

FIRST SEMESTER

- 09/06 Introduction to Class, Rubber History and Terminology
Text Book Provided in Class: Fundamentals of Rubber Technology
- 09/13 Introduction to Elastomers (Standard elastomers): *Natural Rubber, Styrene Butadiene, Polyisoprene, Polybutadiene, Nitrile, Chloroprene, Ethylene Propylene, Butyl, Fluorocarbon & Urethane*
Reading Assn.: Glossary (pp.317-333) & Elastomers an Historical Perspective - Chapter 1 (pp. 1-21)
- 09/20 Introduction to Elastomers (Engineered elastomers): Introduction to Rubber Compound Ingredients: *Fillers, Plasticizers, Activators, Antidegradents, Accelerators, Vulcanizers and Miscellaneous Materials.*
Reading Assn.: Elastomers as Engineered Materials Part 1 - Chapter 2 (pp.27-43)
- 09/27 Introduction to Rubber Compound Ingredients: Continued
Silicones
Reading Assn.: Elastomers as Engineered Materials Part 2 - Chapter 2 (pp.43-55)
- 10/04 **Plant Tour:** Mixing Specialists: R&S Processing Co., Inc., Paramount, CA - Karen Kelly
Reading Assn.: Mixing, Calendaring and Extrusion of Rubber Part 1 - Chapter 4 (pp. 97-111)
- 10/11 **No Class** – ACS Rubber Division Meeting - Dismissed so those who want to attend may do so
- 10/18 **Plant Tour:** Molding and Extrusion Specialists: West American Rubber Co., Orange, CA- Jim DeLeo
Reading Assn: Molding Part 1- Chapter 5 (pp. 129-136)
- 10/25 Exhibit: Commercial Products (Students Show & Tell)
- 11/01 Molding and Processing & Rubber to Metal Bonding
Reading Assn.: Molding Part 2 - Chapter 5 (pp. 136-149) & Bonding- Chapter 8 (pp.219-229)
- 11/08 **Plant Tour:** Product-Design and Tooling: M.R. Mold & Engineering Corporation, Brea, CA - Rick Finnie
Reading Assn.: Chapter 4 Part 2 (pp. 112-125)
- 11/15 Standards and Specifications Part 1 **Guest Speaker:** Don Bowman

SECOND SEMESTER

- 01/03 Standards & Specifications Part 2 & Compounding Part 1 - Class Project: Formulating Silicones Part 1
Reading Assn.: Rubber Compounding Part 1- Chapter 3 (pp.61-75)
- 01/10 Compounding Part 2 - Class Project II: Formulating Silicones Part II & Formulating Organics Part I
Reading Assn.: Rubber Compounding Part 3- Chapter 3 (pp.75-91)
- 01/17 Rubber Vulcanization - Class Project III: Formulating Organics Part II
Reading Assn.: Testing - Chapter 6 (pp. 155-188)
- 01/24 Latex and Sponge Rubber
Reading Assn.: Special Topics- Chapter 12 (pp.300-302)
- 01/31 In Lab Training Part 1 (Silicone) – Tensometer Testing and Mill Mixing
Reading Assn.: Testing - Chapter 7 (pp. 195-213)
- 02/07 **Plant Tour:** Hexpol Compounding, 11841 Wakeman Ave., Santa Fe Springs, CA 90670- Andrew Wallace. Reading Assn.: Overview of Rubber Matr's Used in Rubber Manuf.e - Chapter 11 (pp.281-287)
- 02/14 **No Class** - Valentines Day!!!
- 02/21 **Plant Tour:** Wacker Silmix, 13910 Oaks Ave.,Chino, CA 91710 – Kim Liberato
Reading Assn.: Tires - Chapter 10 (pp, 261-275)
- 02/28 Rubber Technology behind Tire Design **Guest Speaker:** Kevin Kulbaba
- 03/07 In Lab Training Part 2 (Organic) – Rheology Testing and Banbury Mixing
- 03/14 Graduation Dinner and Presentation of Certificates

COURSE CONTACTS: Rick Ziebell – Instructor

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