

Training Courses

13-16 March 2018
BITEC, Bangkok, Thailand



13 March 2018 (Tuesday)

Rubber Compounding Formulation – Optimization & Case Studies

Instructor: Dr. Hans-Joachim Graf
Registration fee: 500 US\$/Person, *Language:* ENGLISH

13 March 2018
9am to 5pm

Behavior of Rubber Flow during Molding & Basic Process Troubleshooting

Instructor: Van Walworth
Registration fee: 500 US\$/Person, *Language:* ENGLISH

13 March 2018
9am to 5pm

15 March 2018 (Thursday)

Latex Compounding: Principles & Practice

Instructor: Dr. CC Ho
Registration fee: 500 US\$/Person, *Language:* ENGLISH

15 March 2018
9am to 5pm

Applied Rubber Technology

Instructors: Dr. Krisda Suchiva & Dr. Chakrit Sirisinha
Registration fee: 6,500 Baht /Person, *Language:* THAI

15 March 2018
9am to 5pm

Rubber Injection Molding

Instructor: Van Walworth
Registration fee: 500 US\$/Person, *Language:* ENGLISH

15 March 2018
9am to 5pm

16 March 2018 (Friday)

Rubber Compression Molding

Instructor: Van Walworth
Registration fee: 500 US\$/Person, *Language:* ENGLISH

16 March 2018
9am to 5pm

Rubber to Metal Bonding: Science & Practice

Instructor: Dr. Hans-Joachim Graf
Registration fee: 500 US\$/Person, *Language:* ENGLISH

16 March 2018
9am to 5pm

Course Instructors:

Dr. Hans-Joachim Graf has over thirty five years' experience in the rubber industry. He was first with manufacturing companies for pharmaceutical and technical rubber parts. He then joined DESMA a manufacturer of Rubber Injection molding and polyurethane shoe machines responsible for process development, followed by Rhein Chemie as senior manager of material developments for rubber industry. After Cooperstandard, Automotive(CAN), division of profile extrusion, as a director of materials, he joined WOCO (GE), a manufacturer of injection molded parts in charge for material development. Since retirement he act as a consultant in the rubber industry and science adviser for TechnoBiz-group. Mr. Graf has authored over 60 publications and paper presentations and invented more than 15 patents. He has given seminars for graduates at University of Waterloo and German Institute Rubber Technology (DIK). He is a member of the American Chemical Society (ACS), Rubber Division of ACS (RdofACS), Deutsche Chemische Gesellschaft (GDCh) and Deutsche Kautschuk Gesellschaft (DKG). He received his diploma degree from University of Mainz and his doctorate in polymer chemistry from University of Freiburg, both Germany. During DKT12 (German Rubber Conference 2012) he was awarded with the Erich-Konrad Medal of the DKG.

Van Walworth is a product design and development specialist. Van has a BS degree from the University of Alabama in mechanical engineering drafting and design, and has become a well-known "hands on practitioner". Most of his primary application skills are focused on products manufactured from materials related to the rubber, plastic, & pipe industries. In many circles, he is known as "The Ideaguy" or as "The Rubber Whisperer". Van is an internationally recognized technical educator for in-plant seminars, and university level continuing professional education programs. He is a published author of many technical papers as well of the author of the book "Rubber Molding Principles" first published in 2013 and the creator of a series of Troubleshooting Charts for processing rubber, all published and distributed by TechnoBiz. His professional career spans over three decades holding executive management positions with industry leading companies practicing product R&D, mold design, tooling & equipment design, process establishment & improvement, reverse engineering, troubleshooting, project management, and spontaneous creativity. His creative approach and understanding of the patent process has been instrumental in the preparation, prosecution, and granting of over fifty patents, with many more currently pending. Van is President of TechnoBiz-USA, Inc., established in Tennessee, USA as a partnership joint venture with the TechnoBiz Group which is based in Bangkok, Thailand. Van is a partner in an India based joint venture with Genx Hydraulics to design and develop improved equipment technology for the rubber industry.

Dr. C. C. Ho received his BSc (Hons) degree from the University of Malaya in 1968 and MSc and PhD from the University of Bristol, UK in 1969 and 1972 respectively. He started his career as a research officer at the Rubber Research institute Malaysia in early 70's and moved to University of Malaya in 1975 as the head and professor at the Department of Chemistry. Currently an Adjunct Professor of University of Tunku Abdul Rahman. Dr Ho is a Fellow of the Malaysian Institute of Chemistry, the Academy of Sciences of Malaysia and the Royal Society of Chemistry, Britain

Dr. Krisda Suchiva is director of Rubber Technology Research Centre at Mahidol University Thailand with more than 35 years experience in rubber research. Dr. Krisda has been involved with rubber industries to conduct research and process development. His expertise include Structures and Properties of Elastomers; Structures, Properties and Modifications of Natural Rubber; Rubber Surfaces and Interfaces; Rubber Latex Science and Technology. He did Ph.D. from University of Bradford, UK (1979).

Dr. Chakrit Sirisinha is director of Rubber Technology Research Centre at Mahidol University Thailand with more than 25 years experience in rubber research. Dr. Charkrit has been involved with rubber industries to conduct research and process development. His expertise includes Polymer rheology and processing, Polymer blends, Rubber mixing, Viscoelastic behaviour of rubber compounds and vulcanisates. He did Ph.D.(Rubber Engineering), from Institute of Polymer Technology and Material Engineering (IPTME) Loughborough University of Technology, Loughborough, UK

Course Description

Rubber Compounding Formulation – Optimization & Case Studies

Instructor: Dr. Hans-Joachim Graf / 13 March 2018

This course is designed for rubber compounders with experience. The focus is on good practices in development and optimization of compound with various case studies. The tools needed to resolve problems quickly and finding solutions much faster will be demonstrated. At the end of this seminar the participant should be able to take advantage of such available tools and adopt them in his/her daily routine and strategic work. Compounding methods and tools are illustrated, demonstrated and practiced in workshop mode at the end of this seminar. All what is learned should enable the compounder to select sufficient methods under consideration of the difficulty and size of the project he is working on. Specifically this knowledge enables the compounder to stay ahead of his responsibility to control all cost aspects in rubber manufacturing, which requires such engineering techniques and tools. Briefly, this course outline includes: Recipe Development Methods, Methods and Tools in Compounding: Review, Statistic Experimental Design and Compounding Program: A Comparison, Workshop: Compound to Performance and Cost etc. Practical Exercises on Various Compound Formulation, Exercise on Cost Reduction – Value Analysis of Compounds Processing

Behavior of Rubber Flow during Molding & Basic Process Troubleshooting

Instructor: Van Walworth / 13 March 2018

This course discusses how rubber behaves as it flows in and through rubber molds and cavities during the processing of rubber in molding systems such as compression, transfer, and injection. A thorough understanding of how rubber flows and behaves in molding systems is a vital tool useful in assisting process practitioners when troubleshooting molding problems. Many examples of rubber molding problems are presented and used as workshop examples by the instructor drawing upon his personal extensive experience discussing troubleshooting solutions.

Latex Compounding: Principles & Practice

Instructor: Dr. CC Ho / 15 March 2018

This training course covers Natural rubber latex properties, Synthetic latexes and their properties, Instrumentation and analytical techniques for latex dispersion, Characterization of latex dispersion and latex dipped products, Latex additives and rubber chemicals, Latex compounding and vulcanization of rubber etc. This course is suitable for technical people based in latex products processing industries.

Applied Rubber Technology (Thai language)

Instructors: Dr. Krisda Suchiva & Dr. Chakrit Sirisinha / 15 March 2018

This course covers overview of rubber technology. It includes natural rubber & syntetic rubber properties and selection, rubber chemicals & additives selection, rubber mixing, formulation development, extrusion, molding of rubber, adhesion of rubber. This course is suitable for non-technical people, who are new to rubber industry.

Rubber Injection Molding

Instructor: Van Walworth / 15 March 2018

This program presents the principles of injection molding including basic mold designs as well as more complex injection mold designs. Designs of runner layouts, runner cross sections, and runner balancing techniques are discussed in detail. Hot runner designs are presented in comparison with cold runner block designs. Sprues, gates, and venting techniques are discussed in combination with vacuum techniques. Solid and split cold runner blocks are discussed. Cold nozzle drops and valve gate techniques are presented.

Rubber Compression Molding

Instructor: Van Walworth / 16 March 2018

This seminar presents the principles of compression molding including basic mold designs as well as more complex compression mold designs. Mold designs using transverse parting lines are compared to mold designs using positive parting lines are discussed in detail. Processing techniques are presented to optimize and enhance the capabilities of effective compression molding methods. Vacuum applications for compression molding are presented.

Rubber to Metal Bonding: Science & Practice

Instructor: Dr. Hans-Joachim Graf / 16 March 2018

Reinforcing elements are widely used in rubber parts for the automotive and construction industry. There are a few principles, which are supported scientifically and technologically. After an introduction into the principles of adhesion, manufacturing of rubber metal parts are discussed from metal preparation to molding process is discussed. A troubleshooting guideline is provided based on these principles. The content includes: The physics and chemistry of adhesion, Rubber to metal adhesion and manufacturing, Process considerations molding rubber to metal parts, Adhesion testing and troubleshooting, Manufacturing aspects of two component parts

Registration Form

Please download registration form at www.rubbertechnology-expo.com

Remarks

- The registration fee includes documents, lunch and refreshments
- Group Registration: 10% discount for 3 or more registrations for the same course from the same company
- Early Registration: 10% discount for registrations before 15 February 2018

Special Corporate Registration Package: 3,000 US\$

- This package includes 10 training tickets. Each ticket is valid for one person for one course. All the participants must come from single company.



Contact Address

TechnoBiz CURC United Co., Ltd.

2521/24, Lardprao Road, Khlongchaokhunsingha, Wangthonglang, Bangkok 10310 THAILAND

Tel: +66-2-933 0077

Fax: +66-2-955 9971

Email: cs2@technobiz-asia.com

Web: www.rubbertechnology-expo.com

