



# Polymer Failure Analysis Course-NSW

This Training course will be available in May in Victoria and in June in NSW

## Introduction

After having successfully organized multiple training courses at the beginning of this decade, the Australia-New Zealand Section of the Society of Plastics Engineers (SPE: A-NZ Section) has not held training courses for a number of years due to a lack of resources, but will do so again now that resources have improved, so the SPE: A-NZ Section can announce a training course on “**Failure Analysis**”.

Specialist training staff for such courses have traditionally been brought in from overseas. The SPE: A-NZ Section decided to search for a local solution, so a training course can be made available at more acceptable pricing to the industry.

## Overview

Because of the expertise of John Scheirs and his team at Excelplas, you will benefit from their extensive experience obtained from more than 1000 failure analysis projects.

The training course will lead you from failure modes of polymers through to actual case studies in which root cause analysis is the main goal, so appropriate measures can be formulated to prevent failure in the future. The course will include an overview of tools used in failure analysis investigations. The afternoon will be concluded with a number of

polymer problem examples.

### **Outline of the course**

The title of this course will be: “**Failure Analysis**”. The course program will be delivered over one afternoon with interactive participation covering in detail the following topics:

1.30 pm

**Registration - coffee/tea**

2.00 pm

**Introduction by SPE**

2.05 pm

**Introduction course**

2.10 pm

**What is Failure Analysis and why is Failure Analysis important**

2.20 pm

**Methodologies for Failure Analysis and Positive Material Identification (PMI)**

3.00 pm

**Failure Mechanism Determination (FMD) and Root Cause Assignment (RCA)**

3.30 pm

**Break**

3.50 pm

**Case Studies**

4.50 pm

**Questions**

5.00 pm

**Announcements by SPE**

5.15 pm

**Closure**

## **Networking with drinks and finger food**

6.30 pm

### **Finish of event**

The course will take 3 to 3½ hours with a short break in between; coffee and tea will be available throughout the course. Registrations for this afternoon course will open at 1:30 pm. The course will commence at 2 pm and finish at about 5 pm.

The SPE: A-NZ Section will offer refreshments and finger food after the course when time will be available for networking and discussion with the instructor and representatives of the sponsors.

### **Who should attend?**

The training course has been designed with three main groups of industry people in mind who will benefit from participating:

- Those employees in plastics manufacturing who have some practical experience with Failure Analysis, but would like to have more structured knowledge about methodologies;
- Technical staff (engineering and production) and management staff (sales and marketing) who want to be updated about Failure Analysis methodologies;
- Staff of new entrants to manufacturing plastic products who would like to be aware of failure modes of polymers and potential solutions.

## **Expected Outcome**

The course provides a basic understanding of:

- Failure modes of polymers;
- Tools and methodologies in Failure Analysis;
- Practical examples of problem solving.

## **Presenter**

The training course will be presented by Dr John Scheirs, who is the Founder and Managing Director of one of the largest polymer testing laboratories in Australia (ExcelPlas) with 15 full time staff.

Dr John Scheirs has more than 25 years of experience in studying the composition of polymers, their structure-property relationships and their failure behaviour. His research and consulting has resulted in over 60 refereed journal articles, 6 textbooks on polymers, 12 patents, and numerous conference presentations both domestically and at an international level.

He has been an expert witness in the field of polymer analysis, structure-performance properties and polymer failure of polymers, rubbers, coatings and composites to various courts and tribunals including the Federal Court of Australia, Supreme Court of Victoria, Supreme Court of NSW, District Courts, County Courts, VCAT, etc.

He has consulted to over 1000 companies and organisations in the area of polymer failure and polymer failure analysis.

ExcelPlas is a NATA-accredited, independent, analytical testing

laboratory providing polymer testing and polymer analysis services for local and international clients.

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**Where:** Dooleys Waterview Club,  
Cnr Clyde St & Silverwater Road,  
Silverwater, NSW 2128

**When:**  
Thursday, 20th June 2019  
1:30 PM - 6:30 PM

**Contact:**  
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