INTRODUCTION TO
COMPOSITE REPAIR
AND REHABILITATION
OF INFRASTRUCTURE

TECHNOLOGY SEMINAR

This one-day introductory course will span the topic of repair and rehabilitation of steel and concrete infrastructure using composite materials. Target audience includes engineers unfamiliar with composite materials and/or their use in repair applications, as well as composite technicians seeking to learn about repair.

COURSE OBJECTIVES
On completion of the course, attendees will have:
• Solid foundation knowledge of composite materials
• Appreciation of design philosophy for composite repairs to steel and concrete structures
• Knowledge of repair materials, types, procedures and inspection methods
• Awareness of relevant design standards.

COURSE OUTLINE
• Review of Composite Materials, Processes, Applications and Issues:
  General introduction to composite materials, manufacturing processes, industrial applications and issues.
• Composite Repair and Rehabilitation of Structures (General):
  Introduction, history, definitions, applications, advantages, disadvantages and issues, current research and developments.
• Repair of Steel Infrastructure including Example Repair Analysis for Overwrap:
  Repair design philosophy, types of repair, repair procedures and materials, inspection and validation, walk-through of standard ISO TS 24817, including calculations, comparison of fibreglass vs carbon, case studies of repair, tests, DNV recommended practice for certification of patch repair.
• Repair of concrete via Composites:
  Concrete structures rehabilitation design philosophy, types of repair and strengthening, procedures and materials, site inspection to application, relevant standards followed by a demonstration.

DATES AND VENUES

SOUTH AUSTRALIA
Tuesday 21 July
Glenelg Golf Club
James Melrose Road
Novar Gardens, SA 5040

VICTORIA
Thursday 29 October
Waterford Valley Golf
131 Bunjil Way
Knoxfield VIC 3180
ABOUT THE PRESENTERS

Dr Andrew Gunnion, Program Manager - CRC-ACS

Dr Andrew Gunnion is the Program Manager for Operations & Sustainment within the Cooperative Research Centre for Advanced Composite Structures (CRC-ACS). In his current role, he oversees a five-year, $25M research and development program for aerospace, defence and oil & gas industries. The program considers repair design and analysis methods, inspection methods, surface preparation, repair materials and processes, durability, structural health monitoring and certification for a number of industry applications. Andrew has 15 years experience in advanced composite materials research and development.

Dr Pedram Mojarrad, Civil Engineer - Sika Australia

Dr Pedram Mojarrad is a Civil Engineer and currently acts as Product Manager- Refurbishment at Sika Australia. Concrete repair and protection, structural strengthening and grouting fall under his portfolio. He has been in the construction industry for 13 years, working for consulting engineers and construction chemicals firms. Pedram received his PhD in Concrete Technology from the University of Technology Sydney. He is a committee member of Australian Standard’s new AS-5100, Part 8, Bridge Rehabilitation, in which for the first time, FRP composites have been introduced in a normative format.

Andrew Sarkady, Business Development Manager - Construction Systems, BASF Australia

Mr Andrew Sarkady is a civil engineer and is currently Business Development Manager – Construction Systems at BASF Australia Ltd. His 28 years of construction industry experience include over 15 years’ experience with FRP materials. Working on solutions for major infrastructure projects, he draws on his knowledge of the full range of construction materials used for repair and protection, structural strengthening, performance flooring, engineered grouts and waterproofing. Andrew is Chair of the working group for Appendix A “FRP Strengthening” for the Australian Standards’ new code AS 5100.8 (Bridge Repair and Rehabilitation) and the new President of the Victorian Branch of the Institution of Structural Engineers.

HOW TO REGISTER

Delegates can register online at www.compositesaustralia.com.au/events

Alternatively, complete the booking form (below) and returning to Anna Civiti at Composites Australia by fax on 9421 5516 or email admin@compositesaustralia.com.au

Please complete the details below by ticking the appropriate square ☑

COSTS

☐ Composites Australia and CRC-ACS Member $360
☐ Engineers Australia Member $360
☐ Non-Member $470
☐ Student $175

COMPANY INFORMATION

Organisation: ________________________________
ABN: ________________________________
Address: ________________________________
Suburb: ________________________________ Postcode: __________
State: ________________________________

Delegate/s

Name: ________________________________
Job Title: ________________________________
Email: ________________________________

Name: ________________________________
Job Title: ________________________________
Email: ________________________________

PAYMENT

Amount Paid $__________

☐ Cheque (made payable to Composites Australia)

☐ Direct credit –
  Composites Australia,
  BSB: 063-167 A/C: 1019 2685
  Payment Date ______ / ______ / ______

☐ Credit card (Visa & Mastercard only)

Cardholder’s Name ________________________________
Cardholder’s signature ________________________________

SELECT DATE/VENUE

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  Glenelg Golf Club

☐ VICTORIA
  Thursday 29 October
  Waterford Valley Golf

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The organisers have made every attempt to ensure the information is correct at time of printing. Any part of the program is subject to change. Composites Australia is not liable for any loss or expense incurred.