

### **THEME**

GEOSYNTHETICS TO REDUCE SEEPAGE LOSSES AND IMPROVE STRUCTURAL INTEGRITY OF CANALS

#### SCOPE

Many parts of the world experience water scarcity caused by climate change. On the other hand, a constantly increasing population stresses the global food demand. One of the paths forward is to put in place better water management strategies to reach better yields and ensure food security.

This series of webinars is intended to present the use of geosynthetics to the engineering community specializing in canal design and restoration. Renowned experts were selected by the Technical Committee on Hydraulics of the International Geosynthetics Society to present this series of webinars on the use of geosynthetics in canals.

Geosynthetics have been used successfully in construction for decades. They offer cost-effective and durable solutions for numerous applications in geotechnical engineering. They are used in large canals as well as in medium to small canals: to control seepage, avoid erosion, stabilize banks, or ensure structural integrity. They have been used successfully in thousands of kilometers of canals in all parts of the world: the Americas, Europe, Asia, the Middle East, Africa, and Australia/New Zealand.

**About the International Geosynthetics Society (IGS):** The IGS is a learned society dedicated to the scientific and engineering development of geotextiles, geomembranes, related products, and associated technologies. The purpose of the IGS is to provide the understanding of and promote the appropriate use of geosynthetics throughout the world.

## **LOCATION**

Webinars will be held online through Zoom

⇒ REGISTER ONLINE <=</p>





15 November 2021

16:00 – 18:30 (Egypt time, UTC +2)

Retrofitting Irrigation Canals With Geosynthetics: An Overview

#### INTRODUCTION

- Prof. Chungsik Yoo, President of IGS
- Prof. Ragab Ragab, President of ICID

#### **KEYNOTE SPEAKERS**

Overview of the national project for the rehabilitation and lining of canals by His Excellency, Dr. Mohamed ABDEL ATY

Geosynthetics in canals: applications and performance

By Jean-Pierre GIROUD

Geosynthetics: a sustainable solution for water management in canals **By Nathalie TOUZE** 

Service life of geosynthetics By Eric BLOND

**QUESTION & ANSWER** 

#### **KEYNOTE SPEAKERS**



ABDEL ATY
Minister of Water Resources
and Irrigation of Egypt



Dr Jean-Pierre GIROUD
Consultant
IGS Past President



Dr Nathalie TOUZE
President, INRAE (France)
IGS Vice-President



Eng. Eric BLOND

Eric Blond Consultant

Chairman, IGS Technical

Committee on Hydraulics







Improving the Performance of Canals with Geosynthetics

15 - 17 November 2021 | Virtual Event

# **DAY 2:**

16 November 2021

16:00 – 18:00 (Egypt time, UTC +2)

**Retrofitting Irrigation Canals** 

With Geosynthetics: Seepage Control

**INTRODUCTION (16:00) KEYNOTE SPEAKERS (16:05)** 

Canal Lining Using Geomembranes By Hervé PLUSQUELLEC

Practical Considerations of Retrofitting Canals with Geomembranes

By Chris DAVEY

Bituminous Geomembranes for Waterproofing Large Canals

By Pau LLINAS and Bertrand BREUL

Stopping Leakage in Canals in the Dry and in Flowing Water Conditions

By Alberto SCUERO

Long-term Integrity of Canals Lined with Geosynthetics

By Catrin TARNOWSKI and Adam MASKAL

QUESTION & ANSWER (17:45)

#### **KEYNOTE SPEAKERS**



Hervé PLUSQUELLEC Former World Bank Irrigation Adviser



Chris DAVEY Independent Consultant on Irrigation and Drainage



Pau LLINAS Export Sales Engineer, Coletanche



**Bertrand BREUL** Civil Engineering Manager, Coletanche



Alberto SCUERO Executive Managing Director, Carpi Tech



Catrin TARNOWSKI Product Manager, Solmax



Adam MASKAL Global Product Manager -Geomembranes, Solmax









# Improving the Performance of Canals with Geosynthetics

**DAY 3:** 

15 - 17 November 2021 | Virtual Event

17 November 2021

16:00 – 18:00 (Egypt time, UTC +2)

**Retrofitting Irrigation Canals With Geosynthetics: Bank Stabilization** and Erosion Control

**INTRODUCTION (16:00)** 

**KEYNOTE SPEAKERS (16:05)** 

Overview of Geosynthetics Products for **Erosion Control in Irrigation Channels** By Pietro Rimoldi

Concrete Mattresses for Lining and Sealing of Canals

By Simon Ebbert

An Introduction to Geosynthetic Cementitious Composite Mats - an innovative approach to lining canals

By Will Crawford

The Use Of Gabions and Mattresses to Provide Stabilization and to Prevent Seepage Losses in Water Courses

By Paulo Di Pietro

Canal Bank Protection with NPA-Geocells By Zeev Strahl and Eyal Blatman

Channel Bank Protection with Making Use of Sand Filled Fabricated Geosystems

By Edwin Zengerink

QUESTION & ANSWER (17:45)

GeosyntheticsSociety.org

#### **KEYNOTE SPEAKERS**



Pietro RIMOLDI Civil Engineering Consultant and IGS Council Member



Simon EBBERT Hydraulic Civil Engineer, Huesker



Will CRAWFORD Owner, Concrete Canvas



Paolo DI PIETRO Senior Specialist Double Twist Products, Maccaferri



**Zeev STRAHL** Territory Business Director, PRS GeoTechnologies



Eyal BLATMAN Product & Innovation Director, PRS GeoTechnologies



**Fdwin 7FNGFRINK** Technical Manager, TenCate



