### **Cover Story**

An update on hydropower and dam projects currently under construction or in development across the globe.
Image courtesy of Voith Hydro

#### **5 World News**

Governments urged to step up green recovery; Three Gorges sets world record; \$35 million for hydrokinetic turbine development

## 9 Spotlight

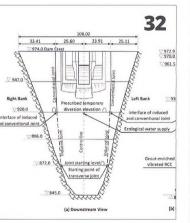
Rachel Gray looks at how STEM stereotypes need to change to encourage more women into the sector Classified

50 Contacts

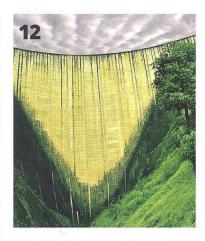
#### features











### India

## **10** Indian insights

Interview with Devendra Kumar Sharma, President of the Indian Committee on Large Dams

## **12** Indian initiatives

Developments taking place across India in 2020

### Safety

# **16**Michigan dam failures prompt re-assessment of safety

Dam safety in the US state of Michigan was thrown into the spotlight after the failure of Edenville and Sanford Dams during May 2020

## **20**Satellite technology for dam monitoring

A recent webinar by Rezatec and AssetLife Alliance showed dam owners and operators how new proven technologies can help prioritise maintenance and upgrade works;



## **22**Development of the ODINBoom

Paul Meeks of Worthington Waterway Barriers details the development of the ODINBoom

## **24** Safety is no accident

IWP&DC takes a closer look at key safety developments across the industry

## New construction

#### 27 In with the new

Spotlight on construction work at new dam projects

#### Design

## Recent advances in RCC Arch Dam design

This paper reviews and discusses advances in the state of knowledge and innovative design in roller compacted concrete (RCC) dams over recent years. Among others, discussions focus on the design concept of "strong-



arch and weak-cantilever", advance in design of induced transverse joints, understanding of load transfer mechanism, the combination of induced transverse joint in the lower part and conventional transverse joint in the upper part of a single joint and using MgO concrete in RCC arch dams.

## **38** A pioneering approach

Studio Pietrangeli has used innovative design solutions in many of the dams and hydropower projects it has worked on over the years.

#### Wave & Tidal Power

## **42** Collaborations and commissioning

A number of firms and organisations are working together to push forward the development of wave and tidal power projects, while investments are being secured for new projects and other schemes are demonstrating their feasibility