

THE CYPRUS GROUP OF CIVIL AND MECHANICAL PROFESSIONAL ENGINEERS.



(Cyprus Branch of the I.C.E. and the I.Mech.E. of U.K.)

INVITATION TO PRESENTATION

CIRCULAR No. 2/ 2024 AYIA NAPA MARINA TWISTING TOWER ENGINEERING CHALLENGES



Dear Members and friends of the Cyprus Joint Group of Civil and Mechanical Engineers,

We are delighted to invite you to join us on **May 8, 2024 on 19.00-20.00 EET** for our upcoming **webinar** on the **«Challenges faced during the construction of Ayia Napa marina's twisting towers in Cyprus»**, to be presented by the Cypriot Civil & Structural Engineer Mr **Yiannis Pericleous**.

The webinar is an international event of the **Institution of Civil Engineers** and it will take place online through TEAMS.

The lecture will be in English, it is free and is open to all Joint Group members.

Event information:

The towers are high-rise buildings with 28 levels, standing at approximately 120 metres tall. The buildings are situated on the beachfront of the east coast of Cyprus and combine the high seismicity of the eastern Mediterranean region with an innovative architectural twisting design of a relative rotation of 1.6 degrees per floor with inclined columns. The fact that the columns are inclined creates torsional stresses on the buildings due to the imposed gravity loads, which in turn generates a creep effect on the concrete mass and rotational displacement on the buildings' floors.

Through the use of laboratory tests to identify appropriate locally sourced aggregates for construction and detailed analysis of the long-term safety of the project, engineers were able to design truly innovative towers. Furthermore, a monitoring plan was carried out during construction, with the results evaluated to compare the actual with the estimated displacements and rotation of the building, thus offering accurate results in line with the predictions of the concrete creep models formulated in the initial phase of planning.

Registration

Please register your interest by completing and sending the following statement by e-mail to: <u>efi.kallis@cytanet.com.cy</u>, by Wednesday **May 1 2024**. Upon registration you will be sent the relevant link.

I will attend the lecture on 8/5/2024	
NAME:	SURNAME:
E-MAIL:	
TEL:	INSTITUTE:

If you have any questions then please do not hesitate to get in touch.