



## “APSU Conference for Dam Safety”

13 November 2021, 17:15 – 19:15 pm

Venue: - **Babylon Hall** / **Mosul Dam Camp** - Iraq

### **Technical Session 5:**

Instrumentation, equipment, and techniques as technological aspect to ensure dams safety.

**Moderator:** Mr. Hatim T. Al-Tae – Mosul Dam

A properly maintained and operated dam requires an appropriate level of instrumentation and monitoring to verify project performance.

### **Main Goals the Instrumentation:**

The objective of instrumentation and monitoring is to maintain and improve dam safety by providing information to:

- 1) evaluate whether a dam is performing as expected and...
- 2) warn of changes that could endanger safety of the dam.

Instrumentation and monitoring, combined with vigilant visual observation, can provide early warning of many conditions that could contribute to dam failures and incidents.

This session discusses the importance of instrumentation role in maintain safety for dams and how technology and advanced software would ease analyzing and evaluating acquired data collected.

### **Session's Goals:**

Instrumentation typically provides data to:

- characterize site conditions before construction.
- verify design and analysis assumptions.
- evaluate behavior during construction, first filling, and operation of the structure.
- evaluate performance of specific design features.
- observe performance of known geological and structural anomalies; and
- evaluate performance with respect to potential site-specific failure modes.



**Session details and Key Speaker is as follow:**

	Title	Speaker	Organization	Participation mood
1	Enhancing Safety-Sheet Piling Solutions in Hydraulic Engineering	Ali Salahuddin	Arcelormittal Company	Physical
2	Data Monitoring Systems Data acquisition for reliable, stand-alone dam-structure monitoring	Dr.Saadi Al-Musawi	Al-Worod Al-Dania Engineering System Co. Representative of Campbell scientific Inc.USA in Iraq	Online
3	Automated Data Acquisition System ADAS	Omar Husham Abdul Rahman Mohamed	Mosul dam SCODAR	Physical
4	OTT Hydromet Dam Monitoring Expertise	Mr. Bernard KALAANI	OTT HydroMet	Online
5	Dams and reservoirs maintenance	Mr. Alaa	Al-Rafidain Company for the implementation of dams	Physical
6	Dam foundation and cut off walls with Casagrande Hydromills	Eng. Giorgio Michelazzo	Casagrande S.p.A.	Online

