



# ACQ-PRO: Towards the propagation of AC Quantum Voltage Standards

**Status:** ACJVS are hard to develop  $\Rightarrow$  used only in a small number of NMI. Traceability to AC quantum standards maintained by small number of NMI. Limited research and transfer to industry.

**Goal:** To increase ACJVS dissemination and research capability.

## Objectives:

- **Transfer experience** and expertise
- Design a new practical ACJVS
- Good **Practice Guide** on the use of ACJVS
- Establish **future collaboration** between metrological institutes working on ACJVS
- Create **individual strategy** for NMI development in ACJVS metrology



## Expected impact:

- Reduced technological gap between NMIs
- Repeated success of DCJVS with ACJVS
- Improved traceability by disseminating expertise in ACJVS and increasing number of ACJVS
- Decreased uncertainties of AC waveforms  $\Rightarrow$  impact on CMC of AC voltage, power, power quality
- Created working group on ACJVS
- Prepared a comparison between selected NMI

## First results:

- Collection of training materials (250 pages focused on ACJVS, publicly available on project webpage)
- Research visits (transfer of experience):
  - **in NPL (finished):** Adam Tatar (GUM), Recep Orhan (TÜBİTAK), Vitor Cabral (IPQ), Helge Malmbekk (JV), Javier Díaz de Aguilar (CEM)
  - **in PTB (planned):** Martin Šíra (CMI), Damir Illic (FER), Javier Díaz de Aguilar (CEM), Vitor Cabral (IPQ), Bostjan Voljc (SIQ)

# Everyone is welcome to collaborate



**Project timeline:** 2015 – 2018

**Partners:** CEM, BEV, CMI, FER, GUM, INRIM, IPQ, JV, NPL, PTB, SIQ, TUBITAK

**Collaborators:** BIPM, SUPRACON

**Project coordinator:** Javier Díaz de Aguilar, [jdiaz@cem.minetur.es](mailto:jdiaz@cem.minetur.es)

**Website:** <http://acqpro.cmi.cz/>

**Everyone is welcome to collaborate:**

suggestions for the best practice guide, participate on the creation of working group, comment the comparison, ...