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National Physical Laboratory

CCM Medium Pressure Working Group

Summary

- Membership
- Comparisons CCM.P-K2 and K-6
- Requirements for new comparisons?
- Regional comparisons
- Technical projects

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Membership

Participant	Institute	Country
Jean-Claude Legras	LNE	France
Noel Bignell	NMIA	Australia
Archie Miiller/Jay Hendricks	NIST	USA
Wladimir Sabuga	PTB	Germany
Ian Severn	NPL	UK
Kwang Hwa Chung	KRISS	Rep Korea
Gianfranco Molinar	INRIM	Italy
Li Yanhua	NIM	China
Akira Ooiwa	NMIJ	Japan
Anil Agarwal	INMS-NRC	Canada
Peter Farar	SMU	Slovakia
Jorge Torres-Guzman	CENAM	Mexico
Youri Kisseliov	VNIIM	Russia
Nieves Medina	CEM	Spain

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CCM.P-K2 & K-6
10 kPa – 120 kPa

- Poor behaviour of transfer standard
  - Pilot results inconsistent
  - Several participants withdraw due to problems with standard
- Participant comments received
  - Virtually all incorporated into new draft A report
- Timescale for completion
  - New draft by end July incorporating new analysis of results
- Should this comparison be accepted?
  - Some participants are unhappy at this comparison being on KCDB
  - Others feel the uncertainties obtained reflect attainable mercury manometry uncertainties

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Regional Comparisons

Comparison	Range	Participants	Status
CCM.P-K2	10 kPa - 120 kPa (Absolute)	BIPM, BNM-INM, NMIA, INRIM, NIST, NPL, NRC, PTB, METAS	Draft A
CCM.P-K6	10 kPa - 120 kPa (Gauge)	NIM, NIST, NPL, NRC, NMi-VSL, PTB, METAS,	Draft A
APMP.M.P-K6	20 kPa - 120 kPa (Gauge)	CSIR-NML, NMIA, KRISS, MSL, NMIJ, NML-SIRIM, NPL-I, PTB, SCL, SPRING	Draft B in preparation
APMP.COO.EUR.M.P-K2.TRI	10 kPa - 120 kPa (Gauge & Absolute)	NPL, NMIJ, VNIIM	Protocol complete

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New comparisons

- Will consider whether CCM.P-K2 & K6 need repeating following revised draft A
- Low differential pressure generators
  - Require coordination of comparisons in this range
  - Start with EUROMET comparison (recently proposed)

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Technical Progress

- Increased use of low differential pressure generators
  - Characterisation of instruments
    - LNE, MIKES, CMI
- New mercury manometers
  - CENAM, CEM (design), NPL (assembly)
- Comparison of mercury manometers versus large diameter piston-cylinders
  - NIST, LNE

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