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European Metrology Network for Advanced Manufacturing / Evans, 2. A.; Przyklenk, A.; Bosse, H.; Zeleny, V.; Czulek, D.; Balsamo, A.; O'Connor, D.; Yandayan, T.; Phillips, D.; Meli, F.; Ragusa, C. S.; Flys, O.. - (2021), pp. 28-29. (Intervento presentato al convegno 20th International Metrology Conference - CIM2021 tenutosi a Lyon (FR) nel 2021-09-07/09).

Availability:

This version is available at: 11696/72570 since: 2022-01-07T19:45:17Z

Publisher:

Published

DOI:

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ABSTRACTS

20th INTERNATIONAL METROLOGY CONGRESS

CIM 2021



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**ORAL
PRESENTATIONS**

Session N°6: Metrology and standards in a digital future

European Metrology Network for Advanced Manufacturing

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Abstract n°100:

The progress of Advanced Manufacturing, which has been identified by the European Commission as a Key Enabling Technology (KET) for future economic and societal progress is strongly reliant on the development of metrology capabilities. EURAMET, the association of metrology institutes in Europe, has established metrology research programs to address the metrology requirements across a spectrum of different thematic areas. In order to leverage the benefits of these developments on the wider industrial landscape, a high-level coordination of the metrology community supporting the Advanced Manufacturing landscape is required. This coordination is aimed to be achieved by the establishment of European Metrology Networks (EMNs), which are intended by EURAMET to provide a sustainable structure for stakeholder engagement and support. The joint networking project 19NET01 AdvManuNet funded by EMPIR for 4 years, started in June 2020 and aims to accelerate the process of establishing an EMN to strengthen Europe's position in Advanced Manufacturing. The AdvManuNet project aims to support the establishment of an EMN on Advanced Manufacturing via the following specific aims:

1. Creation of a single hub for stakeholder engagement across the landscape of various industrial sectors including relevant societies and standardization bodies.
2. Development of a Strategic Research Agenda (SRA) and roadmaps for Advanced Manufacturing metrology based on the stakeholder engagement activities, considering current gaps in metrological capabilities existing networks and roadmaps.
3. Establish a knowledge-sharing program for Advanced Manufacturing stakeholders, promoting the dissemination and exploitation of the results of the project, including those from previous EU funded research projects.
4. Development of a sustainable web-based platform and service desk for Advanced Manufacturing stakeholders to allow for easy access to European metrology capabilities and support the wider advanced manufacturing community with metrology-based requirements.
5. Develop a plan for a coordinated and sustainable European metrology infrastructure for Advanced Manufacturing via a European Metrology Network.

The project concept followed by the scope and definition of Advanced Manufacturing will be described. The analysis of the current capability of metrology for Advanced Manufacturing and the

preliminary concepts for the strategic research agenda will be presented with a focus on dimensional metrology. Acknowledgement The project JNP 19NET01 AdvManuNet has received funding from the EMPIR programme co-financed by the Participating States and from the European Union's Horizon 2020 research and innovation programme.