PRESENTATION

Since its very first edition in October 1994 the AIVELA Conference on Vibration Measurements by Laser Techniques has established itself as the international forum where research ideas and technological innovation on Laser Vibrometry were presented and exchanged. Ancona, an ancient and fascinating Italian town situated on the Adriatic coast, became the biennial destination of the international laser vibrometry community, hosted by AIVELA at the premises of the local university (today Università Politecnica delle Marche).

The event was initially focused on Vibration Measurements by Laser Techniques and it immediately met large consensus among the International Research Community. In 2010 the Scientific Committee decided to widen the topics of the event by including also other noncontact techniques and the name of the event was changed to International Conference on Vibration Measurements by Laser and Noncontact Techniques.

The Conference aims at creating an active and stimulating forum where current research results and technical advances can be exchanged and the development of new systems for laboratory use, field testing and industrial application can be promoted. For this reason, experts in vibration and acoustics, manufacturers and authorities in the field of optical and non- invasive instrumentation and industrial users of such measurement devices have come from all over the world to present their activities and innovative approaches to vibration measurements.

TOPICS

Papers are sought on every aspect of Vibration Measurements by Laser and Noncontact Techniques; the following list of topics is given as guidance:

MEASUREMENT TECHNIQUES

LASER DOPPLER VIBROMETRY
FULL FIELD INTERFEROMETRIC TECHNIQUES
HOLOGRAPHIC TECHNIQUES
ELECTRONIC SPECKLE PATTERN INTERFEROMETRY (ESPI)
SHEAROGRAPHY
SPECKLE TECHNIQUES
FIBER BRAGG GRATING (FBG)
VISION BASED TECHNIQUES
OPTICAL SENSORS
RADAR LASER
MICROWAVE INTERFEROMETRY
ULTRASONIC TECHNIQUES
THERMOELASTICITY
PHOTOELASTICITY
SIGNAL PROCESSING TECHNIQUES
MICROSCOPIC LASER-DOPPLER VIBROMETRY
MULTI-CHANNEL LDV
NEW COMPONENTS FOR LDV
PHOTONICS INTEGRATED CIRCUITS FOR LDV
TECHNIQUES TO AVOID SPECKLE EFFECTS
PARAMETER IDENTIFICATION FROM LDV-DATA (LDV SPECTROSCOPY)
VIBRATION DETECTION IN OPTICAL COHERENCE TOMOGRAPHY
TECHNICAL SOLUTIONS FOR SUB-FEMTOMETER LDV

APPLICATION AREAS

ACOUSTICS
ACTIVE AND PASSIVE NOISE & VIBRATION CONTROL
VIBRO-ACOUSTICS AND NOISE, TESTING, NOISE
VIBRATION HARSHNESS NVH AND CONTROL
MODAL ANALYSIS
METROLOGY, CALIBRATION AND STANDARDS
NON DESTRUCTIVE TESTING AND DAMAGE DETECTION
INDUSTRIAL DIAGNOSTICS AND QUALITY CONTROL
CIVIL STRUCTURES AND INFRASTRUCTURES
LASERS IN ART CONSERVATION
LASER MEASUREMENTS IN MICROSYSTEMS & NANO TECHNOLOGIES
TRANSPORT: NOISE VIBRATION HARSHNESS NVH
COMFORT SAFETY
SECURITY
ROTATING MACHINERY
VULCANOLOGY, HEARTHQUAKE ENGINEERING
NOISE & VIBRATION IN AGRICULTURE
FOOD PROCESSING
INDUSTRIAL PROCESSING MONITORING AND CONTROL
ELECTROMOBILITY
GRAVITATIONAL WAVE DETECTION
CAVITY OPTOMECHANICS

LANGUAGE

The official language of the Conference is English.

CALL for PAPERS

Extended abstracts on the topics of the conference must be sent to the Conference Secretariat not later than ***10th May 2025***. Abstracts should include:

1. Title of paper;
2. Full names of all Authors (the name of the Presenting Author must be underlined) and Affiliation;
3. Text (about 500 words plus supporting figures).

Abstracts must be sent by e-mail to: **aivela@univpm.it**.

Authors will be notified their abstract acceptance and given proper instructions for presentation by 12th May 2025.

IMPORTANT DEADLINES

Abstract submission	**10 May 2025**
Abstract acceptance	12 May **2025**
Early registration (discounted fee)	**20 May 2025**

SPECIAL SESSIONS

The submission of proposals for the organisation of special sessions focusing on specific innovative and cutting-edge applications and developments relevant to the Conference is welcome. Authors willing to develop a special session are invited to contact the Conference Secretariat.

PROCEEDINGS

The Conference proceedings will be published in electronic format after the event by an internationally renowned Publishing House and indexed in the leading databases of scientific & engineering literature, including SCOPUS, ISI Web of Science, etc.

INVITED LECTURES & TUTORIALS

The Conference Programme includes Invited Lectures delivered by leading personalities in the field of vibration measurements by laser and non-contact techniques as well as Tutorials held by leading instrumentation manufacturers.

HANDS-ON DEMOs

Hands-on DEMOs will be given by leading manufacturers of laser vibrometer systems and optical and non-invasive instrumentation.

EXHIBITION

An exhibition is planned to enable participating organisations to bring their products directly to the attention of potential customers. Leading manufacturers of laser vibrometer systems, non-contact instrumentation and systems for vibro-acoustic testing will exhibit. Additional information can be obtained by returning the Pre-Registration Form.

VENUE

The event will be held in Ancona, a fascinating Dorian town on the Adriatic coast in central Italy, surrounded by the breathtaking scenery of the Conero Riviera.

CONTACT INFORMATION

For information, please contact:
A.I.VE.LA. c/o Dept of Industrial Engineering and Mathematical Sciences - Università Politecnica delle Marche, Ancona, IT
e-mail: aivela@univpm.it,
https://www.aivela.org

16th International Conference on

VIBRATION MEASUREMENTS
by LASER and NONCONTACT TECHNIQUES
& EXHIBITION

Pre-registration Form

Please, return to:
A.I.VE.LA. Conference Secretariat
aivela@univpm.it

Title(Mr, Ms, Dr.) _____
First Name _____
Surname _____
Company _____
Section _____
Address _____
Post code/ City _____
Country _____
Telephone _____
Fax _____
E-mail _____

Cross one or more entries:

- ❑ I am interested in the Conference
- ❑ I am interested in exhibiting products and would like to have information on Exhibition facilities and fees
- ❑ I would like to present a paper

Subject or title of the paper

_____
_____
_____
_____

Suggested session

_____
_____
_____

Date_____Signature _____

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Call for papers

16th Intl CONFERENCE on VIBRATION MEASUREMENTS BY LASER AND NONCONTACT TECHNIQUES & EXHIBITION



Ancona, Italy
24th – 26th June 2025

Organised in collaboration with:

UNIVERSITÀ POLITECNICA DELLE MARCHE

and the support of:

CARMELO
CENTER FOR ADVANCED RESEARCH ON MEASUREMENTS FOR ENGINEERING AND LIFE OPTIMIZATION

https://www.aivela.org/16th_conference/