



NIR 2023

August 20-24, 2023
Austria

21ST INTERNATIONAL CONFERENCE
ON NEAR INFRARED SPECTROSCOPY

GOOD VIBRATIONS, SMOOTH CONTOURS

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Welcome to NIR 2023 Innsbruck!

It is our great pleasure to cordially invite you to participate in the **International Conference on Near Infrared Spectroscopy (NIR 2023 Innsbruck)**, which will be held from Sunday through Thursday, **August 20-24, 2023**, at the Congress Innsbruck, Austria.

The **NIR symposium** series is known as the world's leading biannual conference on this fast growing technology, which usually attracts well over 500 participants.

The program will span from fundamentals of spectroscopy, over methodological and technological advances to the integration of the wide range of applications. The symposium will feature workshops, tutorials, plenary, keynote and research lectures from leading and upcoming scientists in the field.

Lectures and poster presentations will be selected from submitted abstracts to make sure that participants find ample opportunities to share and to discuss their latest findings with the audience in a stimulating atmosphere.

As an integral part of **NIR2023** Innsbruck a representative exhibition of the leading vendors in the field will be organized to round up the concept of the symposium and to complement the programme.

2023 will be the first time that the NIR symposium series will come to Austria and Innsbruck, the capital city of the county of Tyrol, in the heart of the Alps. It is world famous for its location, it is a hot spot for science, tradition, culture and sports.

After the pandemic, we can't wait to meet in person once again. We are very much looking forward to welcoming you to Innsbruck, Austria.

"Good Vibrations, Smooth Contours!" is our motto symbolizing the location and the emulation of science, stimulating atmosphere and personal contacts.

Very much looking forward to welcoming you in Innsbruck, we remain with best regards.

Christian W. Huck

Chairperson

Christian W. Huck, Austria

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Consultant

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Conference Organisation

PCO Tyrol Congress

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Exhibition & Sponsorship

S12! studio 12 GmbH

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Venue

Congress Innsbruck

Rennweg 3, 6020 Innsbruck, Austria



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Topics to be addressed at the NIR2023 Innsbruck Symposium

Fundamentals and Instrumentation:

Novel theoretical attempts and sensor design

Chemometrics:

Recent developments in quantum mechanics, neuronal networks and non-linear regression, two-dimensional correlation spectroscopy (2D-COS)

Hyperspectral Imaging:

Strategies for potent sample measurement combined with efficient algorithms

Impacts in Pharma, Diagnostics and Biotechnology:

Latest and novel spectroscopic attempts to increase sample throughput, selectivity to make NIR the method of choice

Agriculture, Dairy and Food:

Increasing world population and food incidents are demanding for novel more efficient strategies

Water, Soil and Environment:

How NIR can support environment and soil and water can tell the NIR spectroscopist

Consumables and Life-Style Products:

How to bring novel NIR methodologies to a daily routine quality control tool

PAT:

Recent advances of automated on-line, at-line, and in-line quality control

Allergens:

NIR spectroscopic contributions towards the increasing number of allergens appearing on a global scale

Future Trends:

What is completely new and might pop up asap

In tackling the mix of all these various topics we hope to inspire this way the audience to interact well with each-other thus implementing the NIR technique as highly competitive and innovative instrument in the field of pure and applied Analytical Sciences.



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As part of the programme half-day workshops with the following topics will be offered:

The workshops will be held on August 20th, 2023 at Congress Innsbruck.

There will be three morning workshops (09:00 - 12:30) and three afternoon workshops (13:00 - 16:30).

You need to register for the workshops separately during the congress registration process.

1) Miniaturization of handheld vibrational spectrometers: Quality control and protection against product counterfeiting

Heinz W. Siesler

Professor at Department of Physical Chemistry

University of Duisburg-Essen, Germany

Hui Yan

Professor at the School of Biotechnology

Jiangsu University of Science and Technology, China

2) Theoretical NIR spectroscopy and quantum chemistry

Krzysztof Bec and Justyna Grabska

Institute of Analytical Chemistry and Radiochemistry

University Innsbruck, Austria

3) PAT – Process analytical technology in NIR spectroscopy

Rudolf and Waltraud Kessler

Hochschule Reutlingen, Germany

4) Chemometrics workshop

Tom Fearn

University College, London, GB

5) NIRS for Quality Control and Authentication including on-site analysis

Dolores Perèz-Marin

Department of Animal Production, University of Cordoba, Spain

6) Hyperspectral NIR imaging

José Manuel Amigo

University of the Basque Country



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Please visit our Website for further information:

[NIR2023.AT](https://www.nir2023.at)