



 **May 27 – 28, 2026**

 **Graz University of Technology**

Program & General Information



Dear participant!

Welcome to the 21st edition of the Young Analysts Forum and welcome in Graz!

We're excited to have you here for two days of analytical chemistry, exchanging ideas, and good conversations. This forum brings together students, researchers and professionals in the field of analytical chemistry, including chromatography, spectroscopy, sensor technologies and applications in food and environmental analysis.

A highlight of the conference will be our **social event, held at the venue**, where you can continue the exchange over locally sourced sausages, freshly tapped beer and a selection of styrian wines and juices.

Don't forget to use your **vote for the best poster and best talk award!** You will find two voting cards in your welcome bag, which you can fill out and insert into the voting box at the venue.

Have a look through the program and don't hesitate to reach out to the organizing team if you need anything.

Enjoy the forum!

The organizing committee

Venue

The address of the forum is:

Graz University of Technology

Stremayrgasse 9

8010 Graz

Austria

The venue can be reached easily by public transport, using the tram line 6 to the station “Neue Technik”, which is right in front of the building.

All presentations will be held in *HS H – Ulrich Santner* on the ground floor. The poster session, sponsor exhibition, food and drinks can be found in the foyer, surrounding the lecture hall. Every site can be accessed barrier – free.



Keynote Speakers

Andrea Hochegger

Andrea Hochegger graduated in Chemistry from Graz University of Technology, Austria in 2017. Afterwards, she did her PhD in the field of analytical chemistry, focusing on packaging related food safety aspects and analytical contributions to the characterization of food and food contact materials. The main research interests include the analysis of mineral oil hydrocarbons (MOH) and the characterization and safety evaluation of food contact materials. In 2024 she was appointed to a women's tenure track position at TU Graz and founded the new "Food Safety" working group.



Leo Krammer

Leo Krammer studied Chemistry at the University of Graz and University of Vienna. In 2024 he received his PhD in Technical Chemistry for work at the Institute of Organic Chemistry at Graz University of Technology under the guidance of Prof. R. Breinbauer. In 2025 he joined the team at Institut Dr. Wagner Lebensmittel Analytik GmbH working now in the field of pesticide and contaminant analysis in various food matrices.

Wednesday, May 27

08:30 – 09:30

Registration

09:30 – 09:45

Opening

ASAC - Christian Klampfl

Session 1: Chromatography 1

Chair: Christian Klampfl

09:45 – 10:30

Keynote 1: The Story of MOSH and MOAH: A Journey from Analytical Challenges to Toxicological Relevance

Andrea Hochegger

Graz University of Technology

10:30 – 10:50

T01: Feature Based Molecular Networking Approach for Exploring the Chemical Profile and Quantification of polyphenols in Stevia rebaudiana, Bert.f using HR-LC-ESI-Orbitrap-MSn

Livhuwani Mafhala

Constructor University Bremen

10:50 – 11:10

T02: Chemical composition of modern alternative nicotine products available in Slovenia

Matjaž Rantaša

University of Maribor

11:10 – 11:40

Coffee Break

Session 2: Chemical Sensors & Biosensors

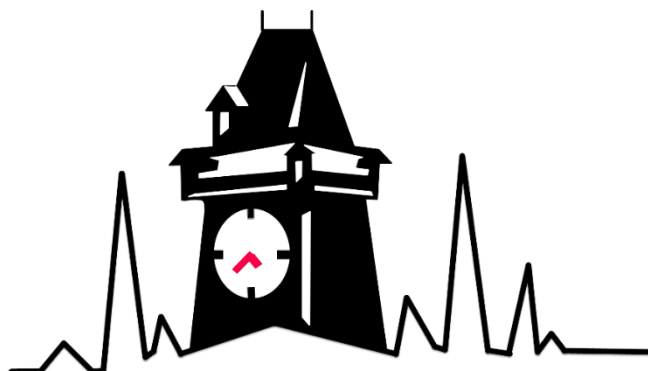
Chair: Torsten Mayr

11:40 – 12:00	<p>T03: Glucose and lactate optical biosensors for microfluidic cell culture monitoring</p> <p>Iga Malicka <i>Graz University of Technology</i></p>
12:00 – 12:20	<p>T04: Integrated In-Line Optical Sensing of Electrochemical H₂O₂ Production in a Microfluidic Reactor</p> <p>Desislava Yordanova Apostolova <i>University of Ljubljana</i></p>
12:20 – 12:40	<p>T05: Covalent Immobilisation of pH-Sensitive Azo Dyes on Cellulose Substrates for Colourimetric Response Studies</p> <p>Iva Karneluti <i>University of Zagreb</i></p>
12:40 – 13:00	<p>T06: Luminescent Surface-Anchored Metal-Organic Frameworks as a Novel Material for Gas Sensing Applications</p> <p>Theresa Mautz <i>Graz University of Technology</i></p>

13:00 – 14:00

Lunch Break

by Parks



Session 3: Spectroscopy

Chair: Helmar Wiltsche

14:00 – 14:20	T07: Silicon: Small Element, Big Analytical Challenge Christina Mühlthaler <i>Graz University of Technology</i>
14:20 – 14:40	T08: Combined optical and mass spectrometric analysis of single microparticles via in-line microscopy-SP ICP-MS Bernhard Grüner <i>University of Graz</i>
14:40 – 15:00	T09: Advancing UV Aging Studies of Immobilized Microplastics: Tracking the Photo-Oxidation-Behaviour at the Particle Level Jakob Lauß <i>University of Innsbruck</i>
15:00 – 15:20	T10: The Beauty and the Burden: Insights into Firework-derived Single Particles using ICP-TOFMS and AF4 Manuel Candussi <i>University of Graz</i>

15:20 – 15:50

Coffee Break

Many thanks to our sponsors!

Gold Sponsor

LECO

Session 4: Chromatography 2

Chair: Andrea Hochegger

15:50 – 16:10	T11: The separation of bicyclic boronate based β -lactamase inhibitors under SFC conditions Alina Spindler <i>Johannes Kepler University Linz</i>
16:10 – 16:30	T12: Shedding light on the arsenic metabolism in higher fungi – an investigation into the arsenic metabolome of edible mushrooms Lorenz Steiner <i>University of Graz</i>
16:30 – 16:50	T13: Benchmarking LC–HRMS NTA Workflows for Robust Phenolic Marker Discovery in Wine Authentication Santiago Souza Nava <i>FFoQSI - BOKU University</i>

17:00 – 18:00

Poster Session

17:00 – 20:00

Drinks & Sausages

by Mosshammer, Steinmetz, Rinner, Steirerkren, Gallier, Mausser, Lava Bräu, Fischerauer & Reischl

Silver Sponsors



Thursday, May 28

08:30 – 09:00

Registration

Session 5: Materials, Food and Environmental 1

Chair: Barbara Siegmund

09:00 – 09:45

Keynote 2: Pesticide Residue Analysis in Food: Daily Business and Future Challenges

Leo Krammer

Institut Dr. Wagner

09:45 – 10:05

T14: Investigating mixing dynamics and water-sediment-interaction in rivers of the Brazilian Amazon with DGT passive sampling

Antonia Siebenbrunner

Montanuniversität Leoben

10:05 – 10:25

T15: Hidden Fluorine in Gasoline: Multi-Technique Detection of Fluorinated Species in Alkylation Streams

Viktoria Müller

University of Graz

10:25 – 10:55

Coffee Break

Bronze Sponsor



Session 6: Materials, Food and Environmental 2

Chair: David Clases

10:25 – 10:45 T16: When Sampling Skews Reality: Evaluation of High- and Low-Volume PM_{2.5} Sampling Biases in Atmospheric Per- and Polyfluoroalkyl Substances Quantification
Andreas Roth
University of Graz

10:45 – 11:05 T17: Volatile chemical products as precursors of urban new particle formation and air pollution
Markus Tischberger
Vienna University of Technology

11:05 – 11:25 T18: Is arsenic essential?
Helen Lord
University of Graz

11:25 – 11:45 T19: Sampling-Related Variability in ICP-MS Multi-Element Analysis of Urban Leaf Samples — Evidence from Kampala, Uganda
Paul Töppmann
Montanuniversität Leoben

11:45 – 12:00

Final Vote Break

Don't forget to vote for your favorite talk & poster!

12:00 – 12:30

JunganalytikerInnen Preis

sponsored by FTC-Forensisch-Toxikologisches Labor BgmbH, Wien

Manuel Candussi

12:30

Closing & Prizes

Christian Klampfl

Poster Presentations

Chrom.	Chromatography
Spec.	Spectroscopy
Sens.	Chemical Sensors and Biosensors
Mat.	Materials, Food and Environmental
P01	Method Development for Arsenic Speciation and Routine Anion Measurements in Natural Freshwater and Mine Waste Waters
Chrom.	Matthias Rittberger <i>Montanuniversität Leoben</i>
P02	Development of an ICP-MS/MS Approach for Fluorine Analysis: Comparative Evaluation of the [BaF] ⁺ and [SrF] ⁺ Methods
Spec.	Franziska Peer <i>University of Graz</i>
P03	Influence of Ozone and UV Light on the Degradation of PFAS in aqueous solutions
Mat.	Florian Taferner <i>University of Graz</i>
P04	Planarized Microfluidic Electrode Rails Enable Low-Retention Maxwell–Wagner–Sillars Impedance Detection of Gold Nanoparticles
Sens.	Günther Hiebl <i>Vienna University of Technology</i>
P05	Printing Regimes and Their Influence on Potential Migrants in Food Contact Material
Chrom.	Lara Skef <i>Graz University of Technology</i>

P06 Mat.	Biochemical characterisation of cellulase adsorption to cotton and polyester Lukas Gruber <i>Josef Ressel Centre ReSTex, University of Applied Sciences Wiener Neustadt</i>
P07 Spec.	Characterization of patient-derived leukocytes using machine learning-assisted Surface-Enhanced Raman Spectroscopy Jasmin Antony <i>University of Applied Sciences Wiener Neustadt</i>
P08 Mat.	Cell History Effects on Fluoride Release and Electrolyte Degradation during Low-Temperature LIB Recycling Tina Carola Spirk <i>University of Graz</i>
P09 Sens.	Printed Hydrogel-Based Sensing Platforms on Textile Substrates for Dual pH and Urea Detection Ivana Perković <i>University of Zagreb</i>
P10 Spec.	AI-Driven Analysis of Abiotic Stress Responses in Soybean Using LC-MS/MS-Based Proteomics and Raman Spectroscopy Katrin Herbst <i>University of Applied Sciences Wiener Neustadt</i>
P11 Chrom.	Identification of sulfur compounds in reaction aroma – comparison of two different systems based on comprehensive GCxGC David Asen <i>Graz University of Technology</i>
P12 Mat.	It's raining PFAS? Temporal trends of PFAS in rainwater samples using LC-ESI-MS/MS and CIC Lili Anna Boros <i>University of Graz</i>

P13 Sens.	Ratiometric pH Sensing with Dually Emissive Umbelliferone Dyes Matthias Schwar <i>Graz University of Technology</i>
P14 Mat.	Influencing factors in protein determination using the Bradford assay for the measurement of cellulases in the context of textile recycling Paul Haager <i>Josef Ressel Centre ReSTex, University of Applied Sciences Wiener Neustadt</i>
P15 Spec.	Aerosol Characterisation for Single Particle Analysis Paul Michael Stüger <i>University of Graz</i>
P16 Chrom.	Comparative evaluation of enantioselective LC-MS/MS workflows for the quantification of D- and L-2-hydroxyglutarate in finger sweat Michael Wolf <i>University of Vienna</i>
P17 Spec.	Determination of Phosphorus Purity from the Thermochemical Treatment of Sewage Sludge Ash: The Challenges of Scaling Up Sydney Simbürger <i>Montanuniversität Leoben</i>
P18 Mat.	From Superfood to Safety: Acrylamide, HMF, and Furan Formation in Roasted Lupin-Based Foods Medina Cehic <i>Graz University of Technology</i>
P19 Spec.	Development of optical spectrometric methods to characterise single particles Sabrina Hörmann <i>University of Graz</i>

P20 Sens.	Exploiting the heavy atom effect: A Se-functionalized Zn(II) Schiff base as a TADF-based temperature sensor Lukas Sommerauer <i>Graz University of Technology</i>
P21 Mat.	PFAS accumulation and trophic transfer in invertebrates from a semi-urban area Marianna Elisabetta Pace <i>University of Graz</i>
P22 Spec.	Minimally Invasive Sampling for Elemental and Isotopic Analysis of Historical Metal Artefacts: The Medieval Rupertus Cross from Bischofshofen, Austria Zoya Ayesha Raza <i>Montanuniversität Leoben</i>
P23 Chrom.	Arsenic Speciation Analysis in Mushrooms: Current Challenges and how to address them Julia Truschner <i>University of Graz</i>
P24 Mat.	The Impact of Dyes on Textile Recycling Anna Rechberger <i>Josef Ressel Centre ReSTex, University of Applied Sciences Wiener Neustadt</i>
P25 Chrom.	Recycled Plastics and Food Safety: Insights from Analytical Characterization Elise Hecht <i>Graz University of Technology</i>
P26 Mat.	Screening of cellulase formulations and pretreatments for enzymatic separation of polyester/cotton blended textiles Martina Demuth <i>Josef Ressel Centre ReSTex, University of Applied Sciences Wiener Neustadt</i>

P27 Spec.	Towards mycotoxin detection in an industrial setting using near-infrared spectroscopy Aikaterini Kouser <i>BOKU University</i>
P28 Mat.	Assessment of PFAS in Atmospheric Deposition Using Low-Volume Filter Sampling Eleftheria Motso <i>University of Graz</i>
P29 Sens.	Multi-Resonance Emitters as Self-Referenced Optical Temperature Sensors Lisa Eiber <i>Graz University of Technology</i>
P30 Spec.	Combining NIR and Raman spectroscopy by machine learning tools for the characterisation of cotton-polyester blended textiles Leon Otto Gasteiger <i>Josef Ressel Centre ReSTex, University of Applied Sciences Wiener Neustadt</i>