

## Conference Review: 17<sup>th</sup> Confocal Raman Imaging Symposium

Ulm, Germany  
October 7, 2021

**This year's Confocal Raman Imaging Symposium, held online, achieved a new level of engagement with a record number of participants from around the world. Over 500 registrants signed up to view and discuss a field of 55 posters grouped under the topics: Advanced Materials Analysis; Environmental and Geo Science; and Life Sciences, Biomedical and Pharma Research. Attendees were treated to five featured talks presented by esteemed researchers, everyone was encouraged to offer ratings that were compiled to determine the winner of the 2021 Best Poster Award, and more than 80 researchers registered to take part in virtual equipment demonstration sessions.**

During the one-week virtual Symposium, participants were invited to explore the conference platform and on-demand oral presentations. A good starting point was the thorough introduction to Raman spectroscopy and microscopy provided by Prof. Sebastian Schlücker (University of Duisburg-Essen, Essen, Germany). Prof. Barbara Cavalazzi (University of Bologna, Bologna, Italy) described how she uses 3D Raman imaging in her work on microbial paleontology, including the detection of the oldest fossilized methanogens ever found. Prof. Dominique Lunter (Eberhard Karls University, Tübingen, Germany) shared details of her investigations of skin penetration by pharmaceutical ingredients and the impact of penetration enhancers. WITec's own Dr. Ute Schmidt covered recent developments in studies of transition metal dichalcogenides and Prof. Laurene Tetard (University of Central Florida, Orlando, USA) presented 3D Raman analyses of thermal barrier coatings in jet engines.

Along with the featured speakers, the 55 contributed posters provided a wealth of scientific content. In the end, one poster received the highest rating from fellow attendees and that honor belongs to Jessica Caldwell from the Adolphe Merkle Institute at the University of Fribourg, Switzerland. She won the Best Poster Award for her contribution: Detection of Various Nanoplastics via Gold Nanoparticle-Based Surface Enhanced Raman Spectroscopy (SERS) Substrates. Together with Patricia Taladriz-Blanco, Barbara Rothen-Rutishauser and Alke Petri-Fink, she explored one of the most resonant topics in contemporary science: the detection of micro- and nanoplastic particles.

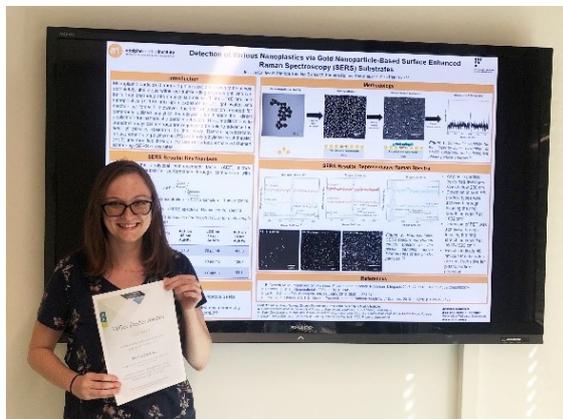
Equipment demonstrations had previously been offered onsite in our laboratories on the final day of the Symposium. This year morning and afternoon sessions were hosted online every day of the conference to accommodate over 80 registrants. WITec application scientists showed the instruments in action with demos of confocal Raman imaging, Raman-AFM, topographic Raman imaging, and Raman-based particle analysis coupled to a spectral database.

The 17<sup>th</sup> Confocal Raman Imaging Symposium flourished in its transition to a virtual event. Given recent disruptions, it was reassuring to see the spectroscopic imaging community persist in convening to share, discuss and celebrate new techniques and discoveries. We look forward to seeing everyone in person again when possible.

The 18<sup>th</sup> Confocal Raman Imaging Symposium will take place from September 26<sup>th</sup> – 28<sup>th</sup>, 2022. Details including the list of invited speakers and reviews of previous symposia can be found on the Confocal Raman Imaging Symposium homepage: [www.raman-symposium.com](http://www.raman-symposium.com).

## Downloads

Conference Book of Abstracts: [www.raman-symposium.com/assets/Uploads/Review2021/WITec-AbstractBook-RamanSymposium2021-web.pdf](http://www.raman-symposium.com/assets/Uploads/Review2021/WITec-AbstractBook-RamanSymposium2021-web.pdf)



Best Poster Award Winner Jessica Caldwell presents the certificate in front of her poster about detecting nanoplastics using gold nanoparticle-based SERS substrates. © Jessica Caldwell, Adolphe Merkle Institute, University of Fribourg, Switzerland.

Download link for high-resolution image: [www.witec.de/assets/Uploads/Symposium-2021/BestPosterAward2021-JessicaCaldwell-AdolpheMerkleInstitute-UniversityOfFribourg.jpg](http://www.witec.de/assets/Uploads/Symposium-2021/BestPosterAward2021-JessicaCaldwell-AdolpheMerkleInstitute-UniversityOfFribourg.jpg)



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## About WITec

WITec GmbH pioneered 3D Raman imaging and correlative microscopy and continues to lead the industry with a product portfolio that offers speed, sensitivity and resolution without compromise. Raman, AFM and SNOM microscopes, select combinations thereof, and WITec-developed Raman-SEM (RISE) instruments can be configured for specific challenges in chemical and structural characterization through a modular hardware and software architecture with built-in capacity for expansion. Research, development and production are located at WITec headquarters in Ulm, Germany, and the WITec sales and support network has an established presence in every global region. In September 2021, WITec became a member of the Oxford Instruments Group, bringing technology leadership in Raman microscopy to its extensive portfolio of businesses.

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