

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/356507702>

# MICROSTRUCTURES IN COVID VACCINES: ¿inorganic crystals or Wireless Nanosensors Network?

Presentation · November 2021

CITATIONS

0

READS

39

1 author:



Pablo Campra  
Universidad de Almería

45 PUBLICATIONS 895 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Albedo effect for global warming adaptation [View project](#)



Toxicidad, farmacocinética y farmacodinámica del dióxido de cloro y del clorito. [View project](#)

# MICRO-STRUCTURES IN COVID VACCINES

¿Inorganic crystals  
or  
Wireless Nanosensors Network?

FILES Dr. Campra

Prof. Dr. Pablo Campra Madrid

ASSOCIATE UNIVERSITY PROFESSOR

PhD in Chemical Sciences

Degree in Biological Sciences

November 25th/2021

# IMPORTANT NOTES

- Here we show some objects of frequent geometries that could be observed in sealed vials from different random samples of COVID19 mRNA vaccines, using optic microscopy with bright or dark field, using low magnifications between 100x y 600X.
- AS A WORKING HYPOTHESIS, some of these objects have been proposed as possible elements of a **WIRELESS NANOSENSORS NETWORK (WNSN)**, whether as **nano-sensors, as nano-routers, or as nano-antennae**:

<https://corona2inspect.blogspot.com/2021/09/redes-nanocomunicacion-inalambrica-nanotecnologia-cuerpo-humano.html>

<https://corona2inspect.blogspot.com/2021/11/identificacion-patrones-vacunas-coronavirus-nanorouters.html>

- Most of these object appear after room temperature drying of samples, staying embedded in the remaining hydrogel.
- As far as we know, neither the identity of these objects, whether mineral crystals or nanotechnological devices, has not been stated by the manufacturers, nor they hay been properly characterized by independent labs.

# IMPORTANT NOTES

- The characterization of these objects is out of the scope of this report. Our intention is just making these images of public use for technical discussion by experts in the field of crystallography or nano-communications engineering.

-THESE PHOTOGRAPHIES ARE PROTECTED BY COPYRIGHT LAW. PRINTING A COPY OF AN IMAGE OR POSTING IT ONLINE WITHOUT PERMISSION OR WITHOUT PROPERLY CITING THEIR AUTHORSHIP IS A VIOLATION OF COPYRIGHT.

Please, cite as:

*Campra, P. [MICROSTRUCTURES IN COVID VACCINES: ¿inorganic crystals or Wireless Nanosensors Network?](#). RESEARCHGATE presentation, November 2021.*

- AUTHOR: Pablo Campra, PhD. Almería, Spain
- CONTACT: [pcampra@ual.es](mailto:pcampra@ual.es)

A microscopic view of a tablet surface. The central feature is a large, embossed logo consisting of a stylized 'P' and 'F' intertwined. This logo is surrounded by a circular pattern of small, evenly spaced perforations. The surface has a fine, granular texture. The word 'PFIZER' is printed in a white box at the top center of the image.

PFIZER

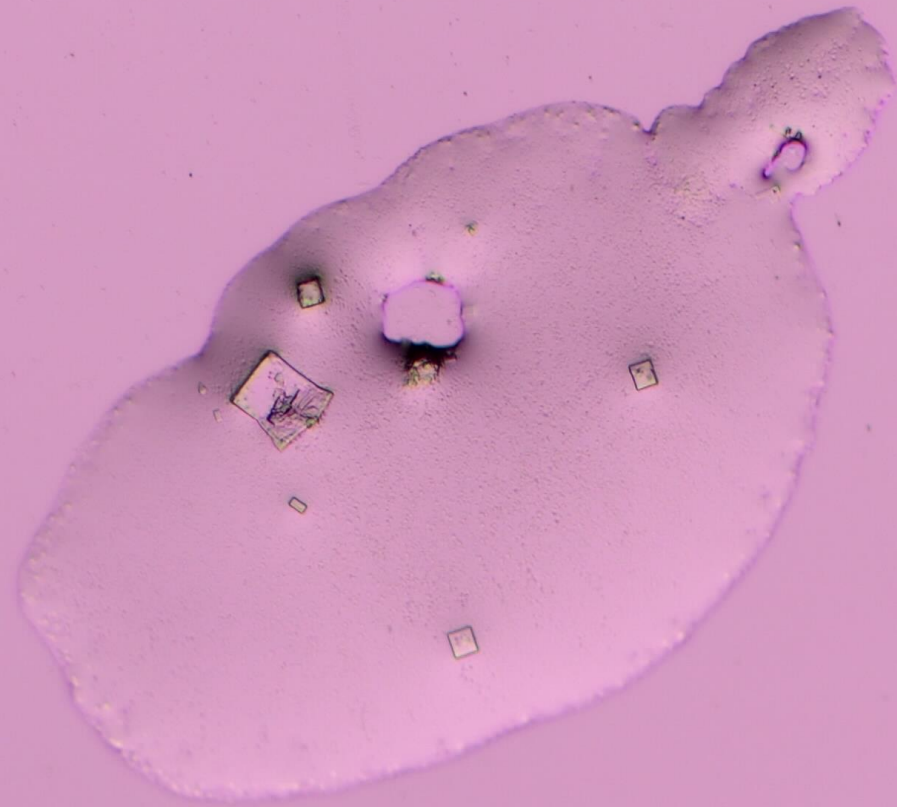
©Dr. Campra 2021

PFIZER



©Dr. Campra 2021

PFIZER



©Dr. Campra 2021

PFIZER



©Dr. Campra 2021

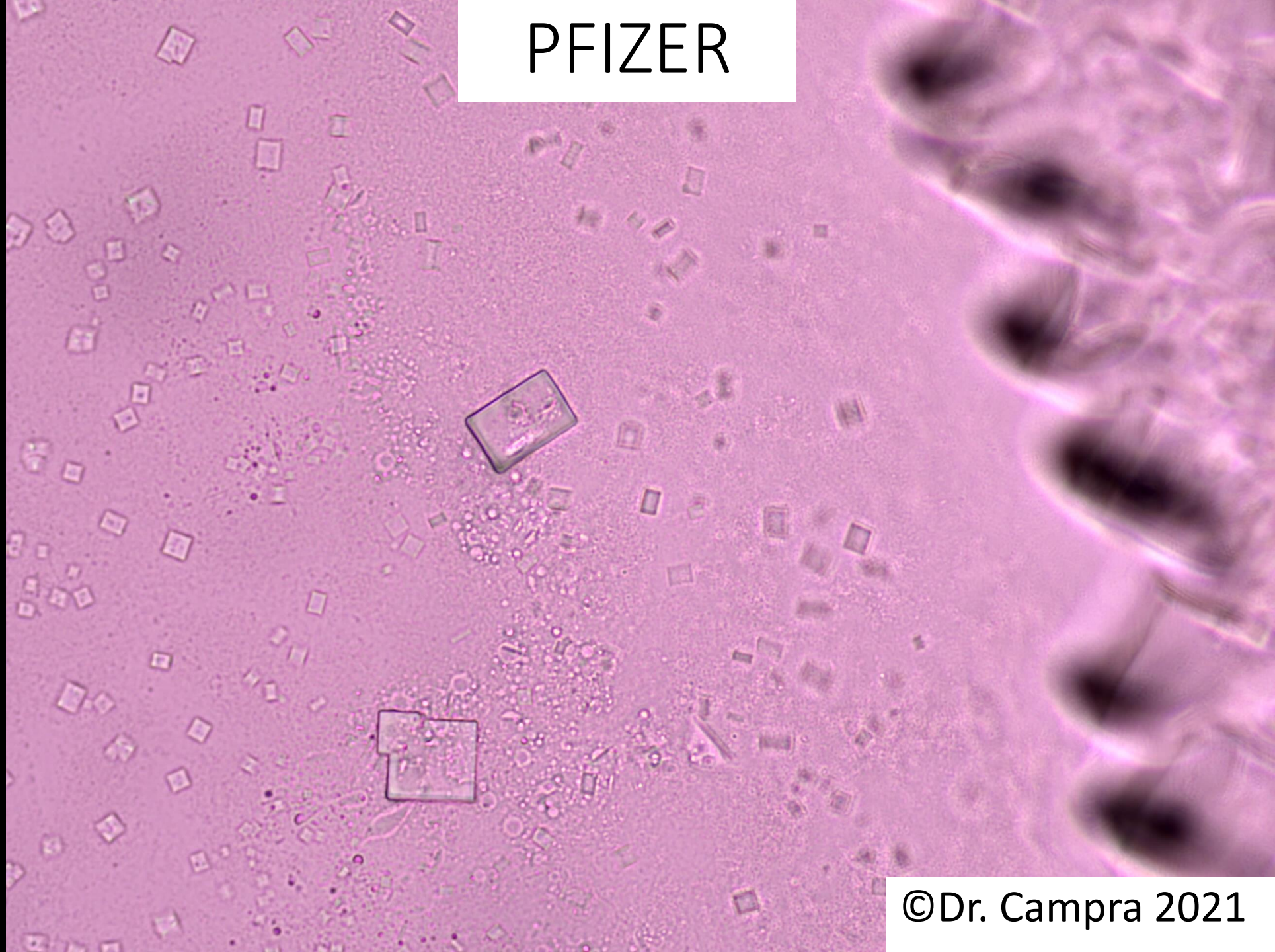


PFIZER



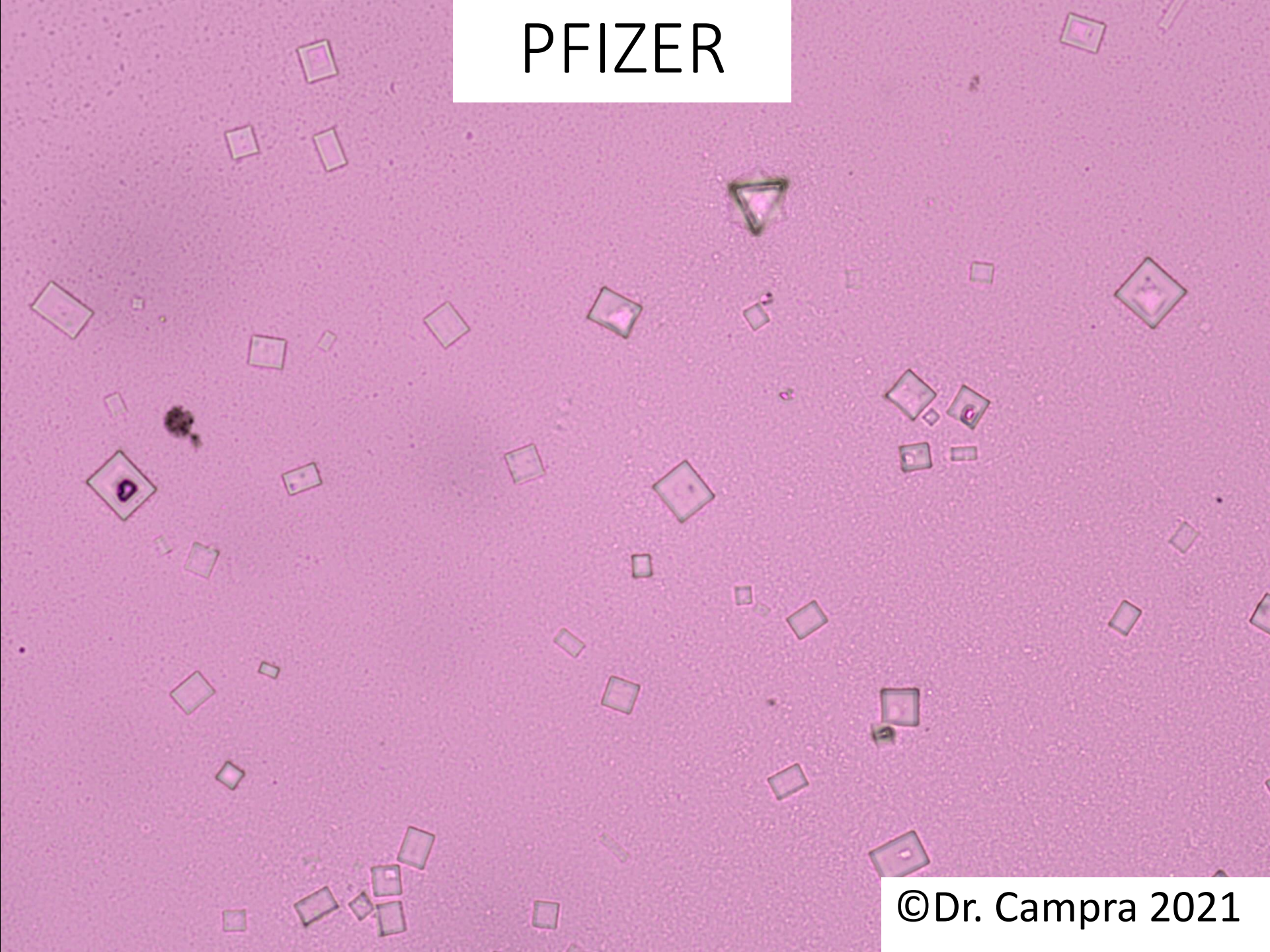
©Dr. Campra 2021

PFIZER



©Dr. Campra 2021

PFIZER



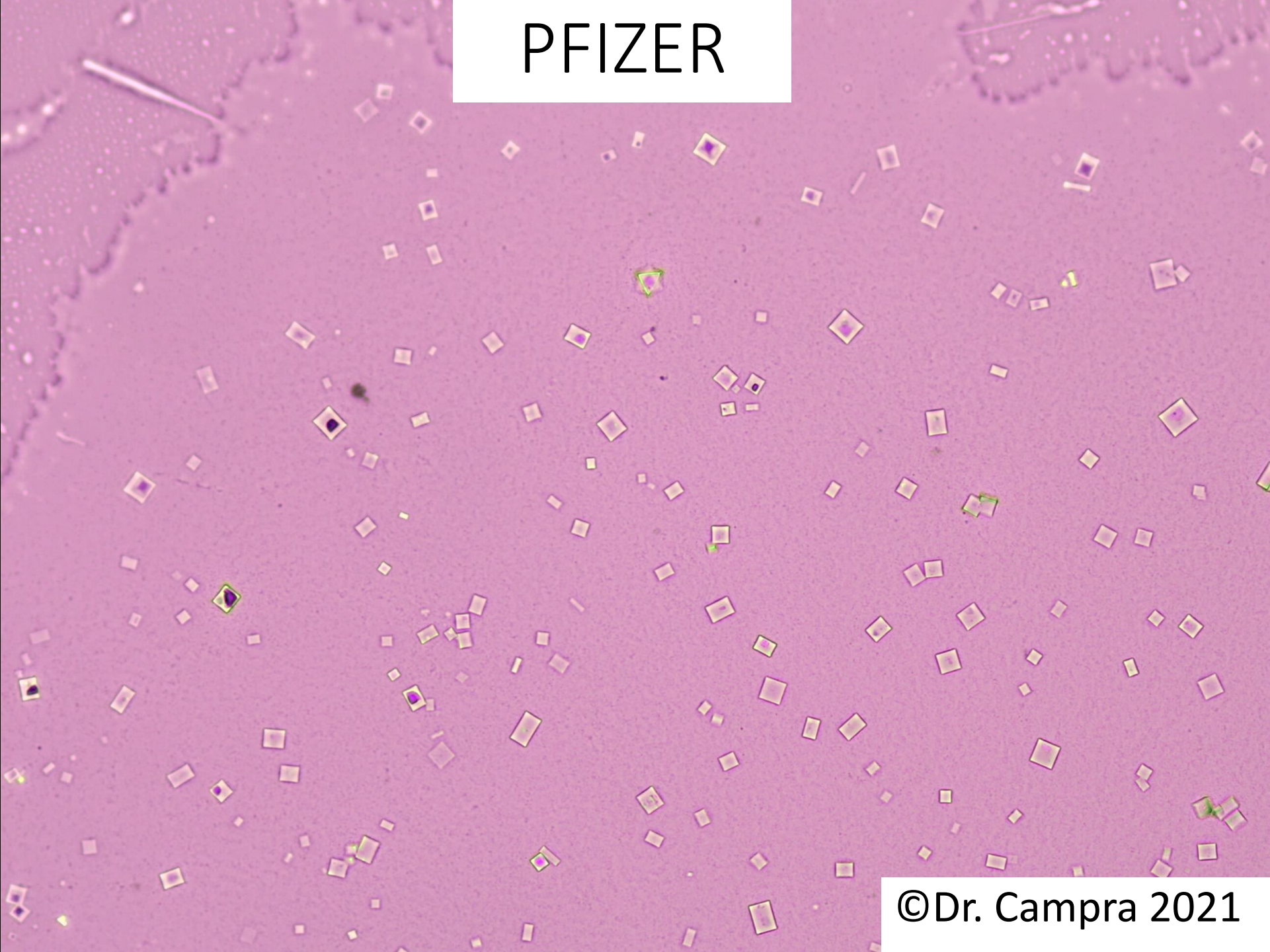
©Dr. Campra 2021

A microscopic image showing a dense field of small, light-colored, rectangular or square-shaped crystals. The crystals are scattered across the field of view, with some appearing more prominent than others. The background is a uniform, light purple or pinkish hue. A white rectangular box is positioned at the top center of the image, containing the word "PFIZER" in black, uppercase, sans-serif font.

PFIZER

©Dr. Campra 2021

PFIZER



©Dr. Campra 2021

PFIZER

©Dr. Campra 2021

PFIZER

©Dr. Campra 2021

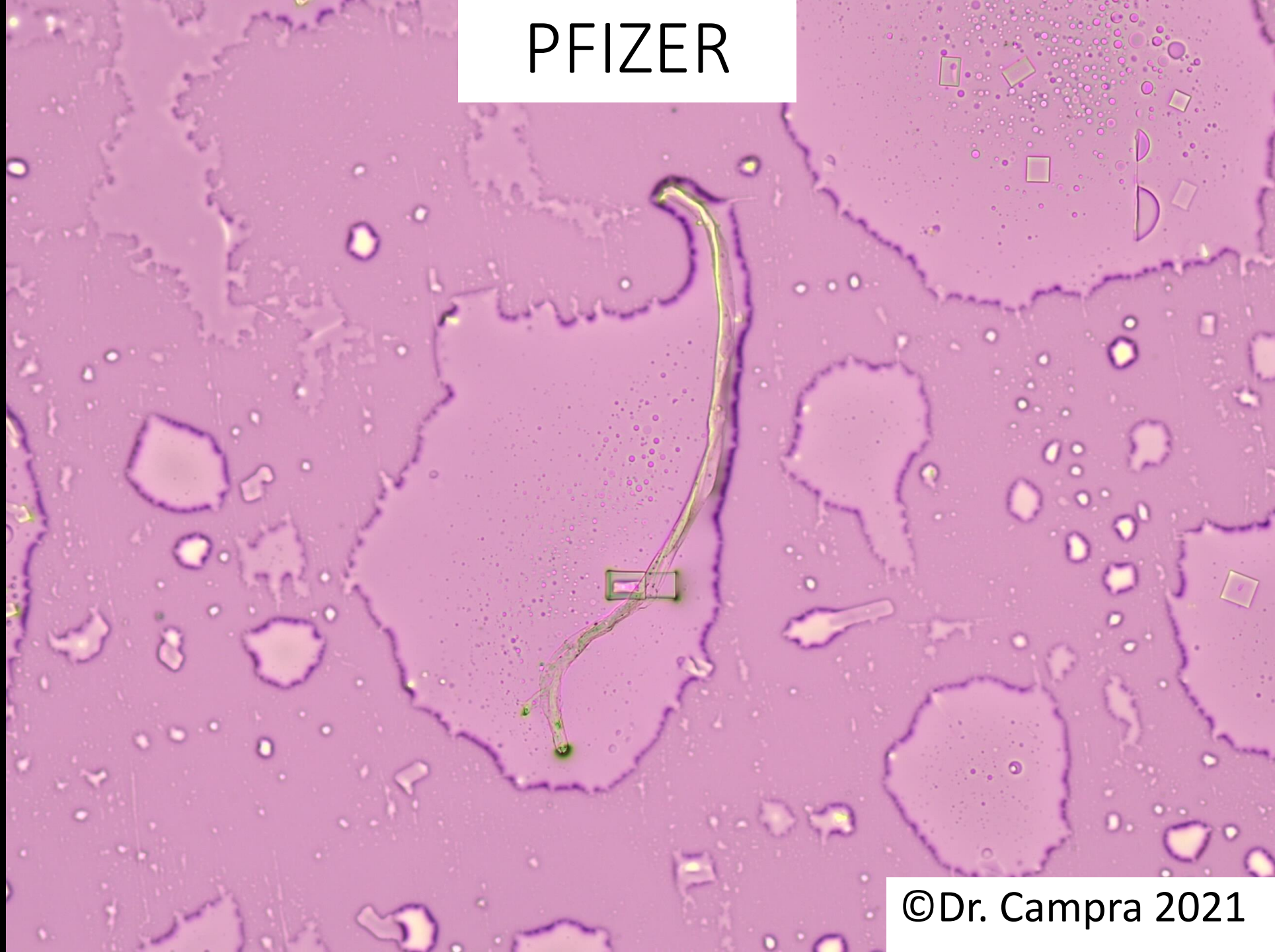
PFIZER



©Dr. Campra 2021



PFIZER



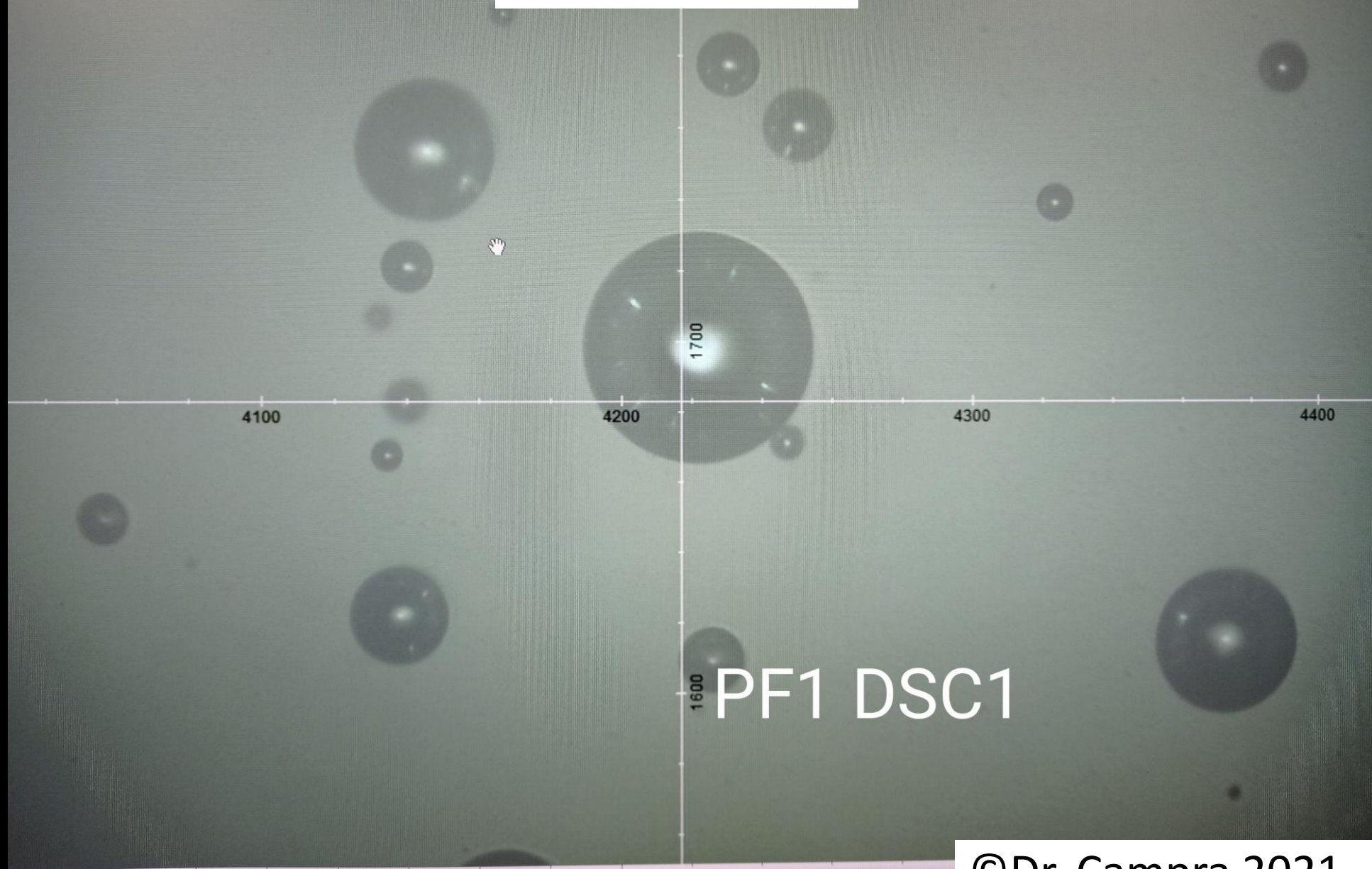
©Dr. Campra 2021

A high-magnification microscopic image of a perforated metal surface. The surface is covered with numerous small, circular holes. Several larger, irregularly shaped holes are visible, each containing a distinct embossed pattern. The patterns appear to be a grid or a series of parallel lines, possibly representing a specific manufacturing process or a design element. The overall appearance is that of a precision-machined metal component.

PFIZER

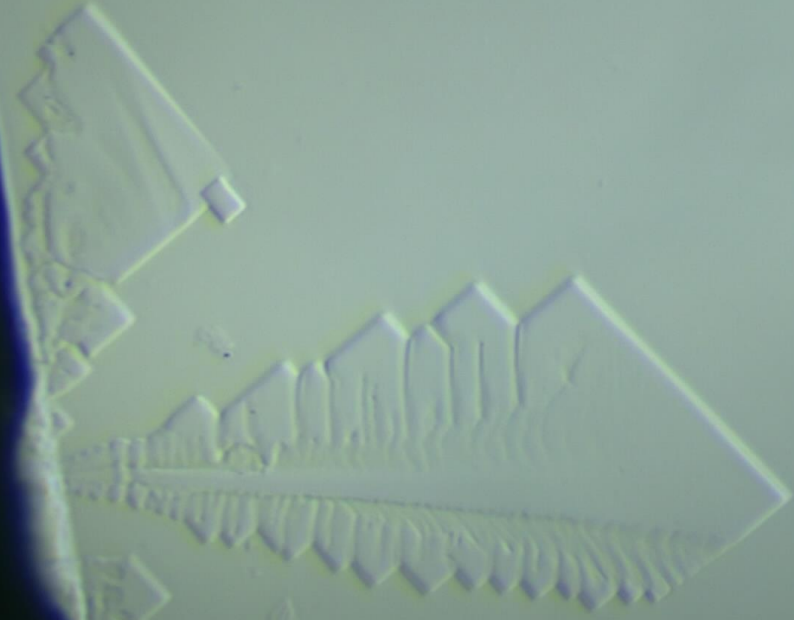
©Dr. Campra 2021

PFIZER



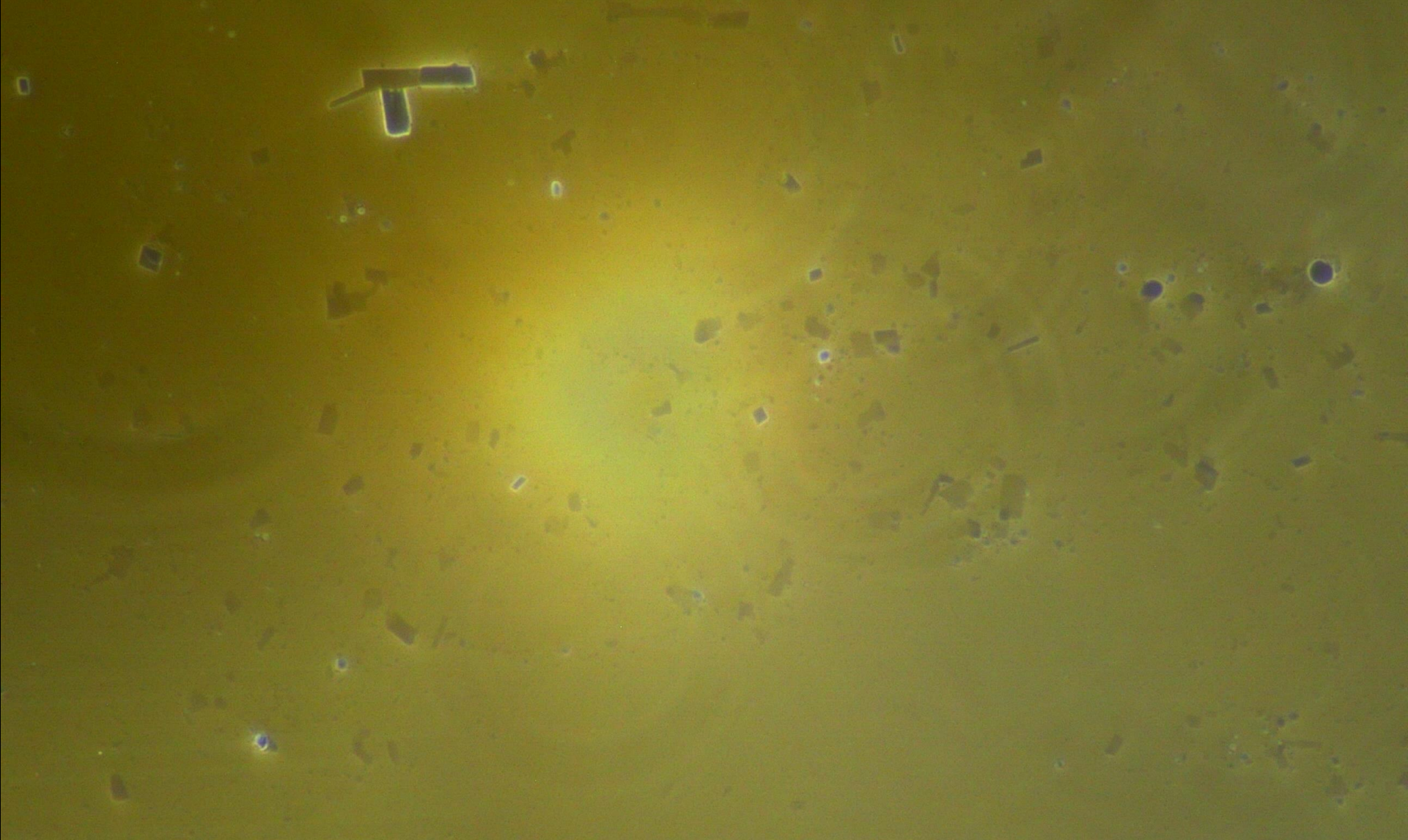
©Dr. Campra 2021

PFIZER



©Dr. Campra 2021

PFIZER



©Dr. Campra 2021



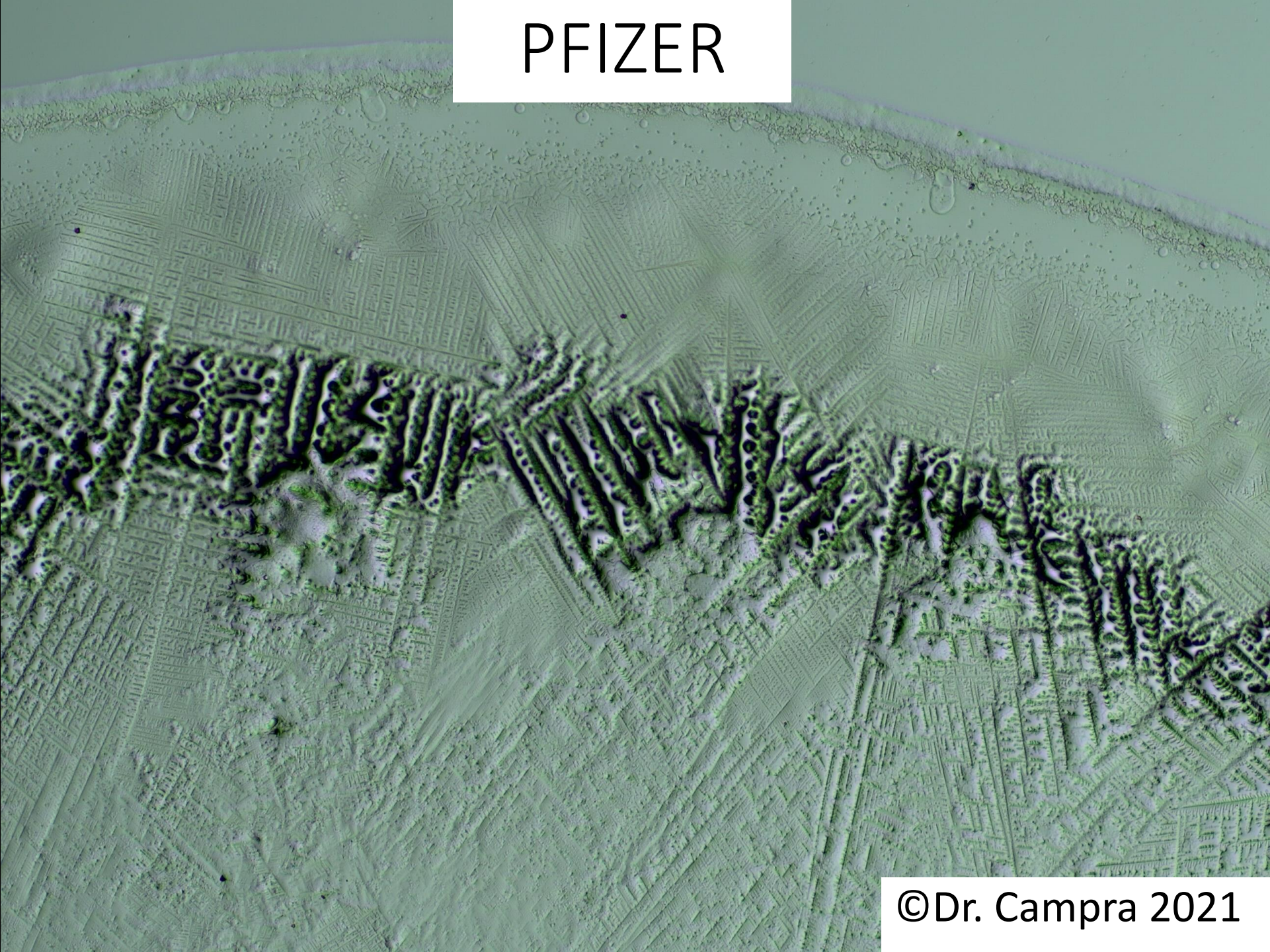
PFIZER

©Dr. Campra 2021

PFIZER

©Dr. Campra 2021

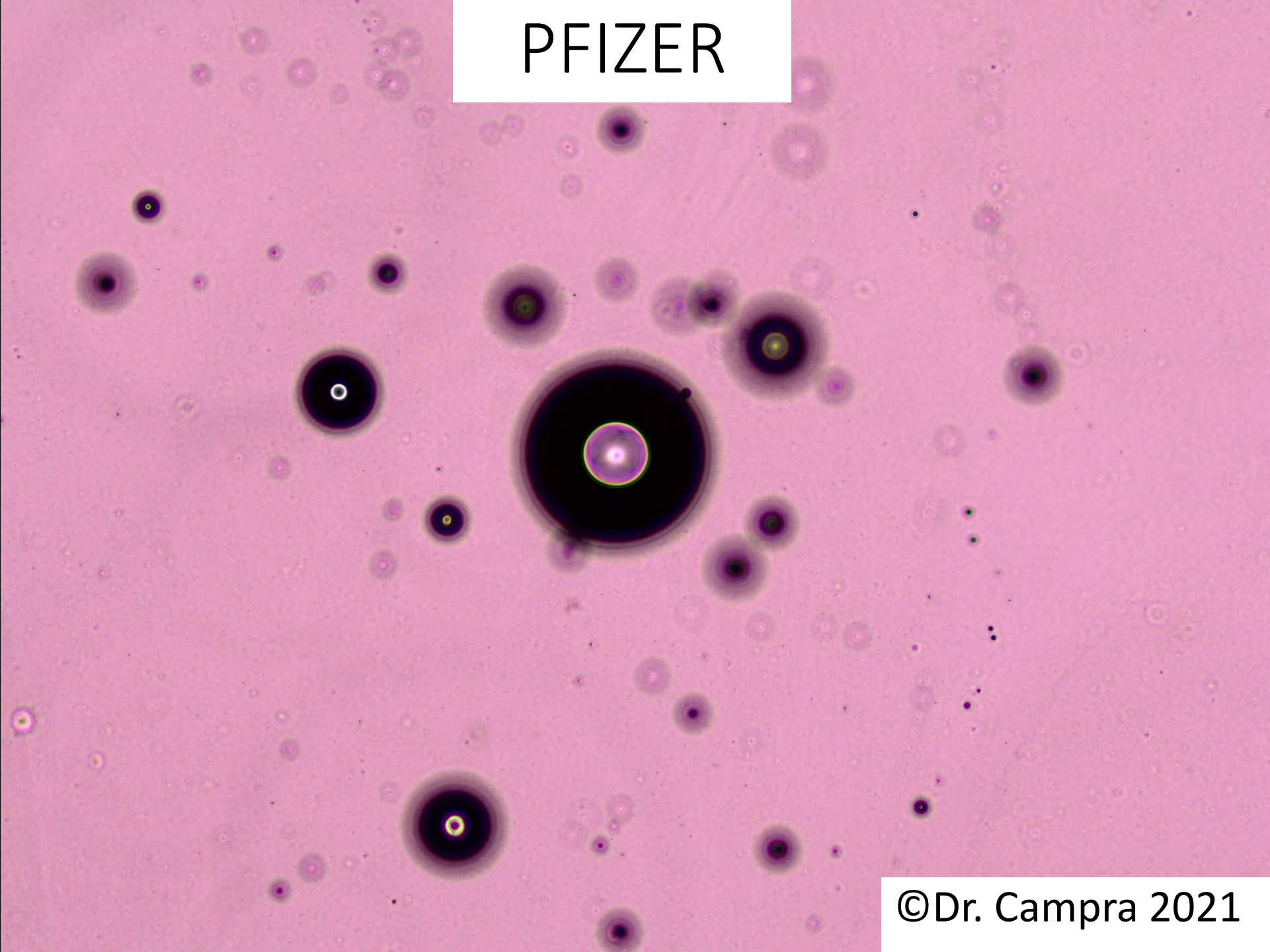
PFIZER



©Dr. Campra 2021

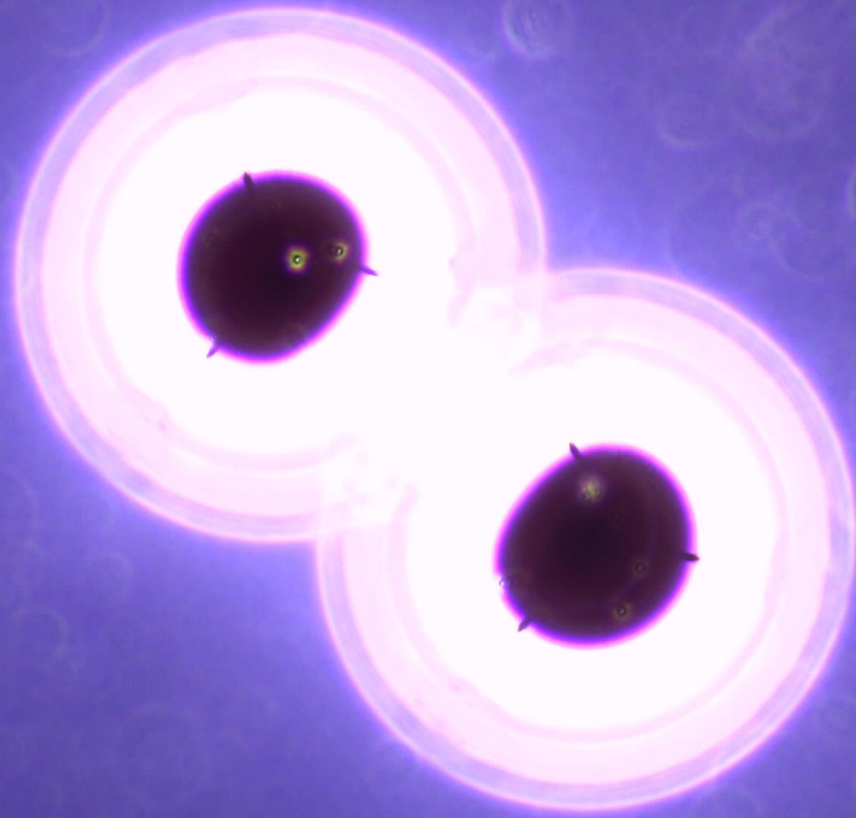


PFIZER



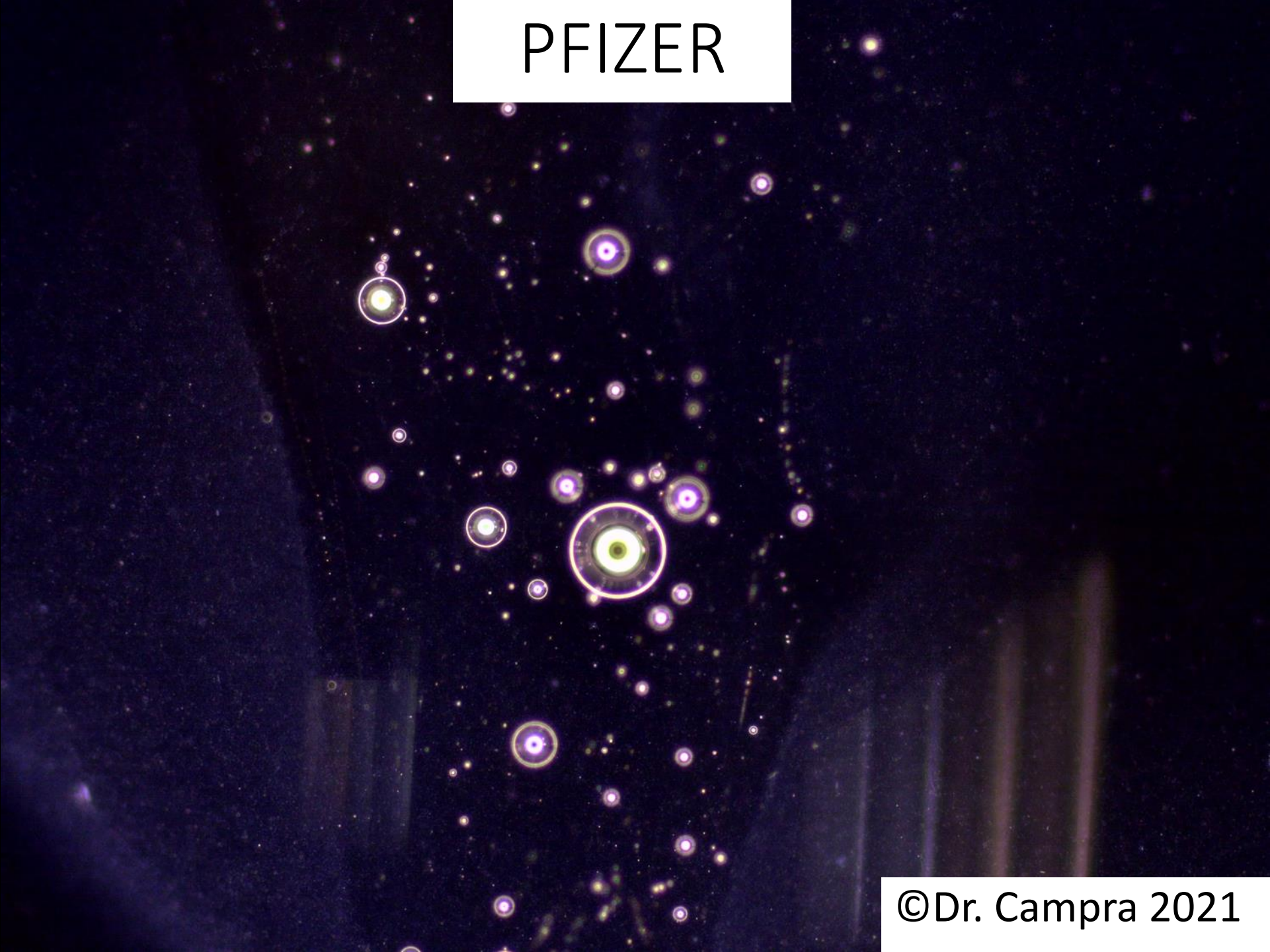
©Dr. Campra 2021

PFIZER



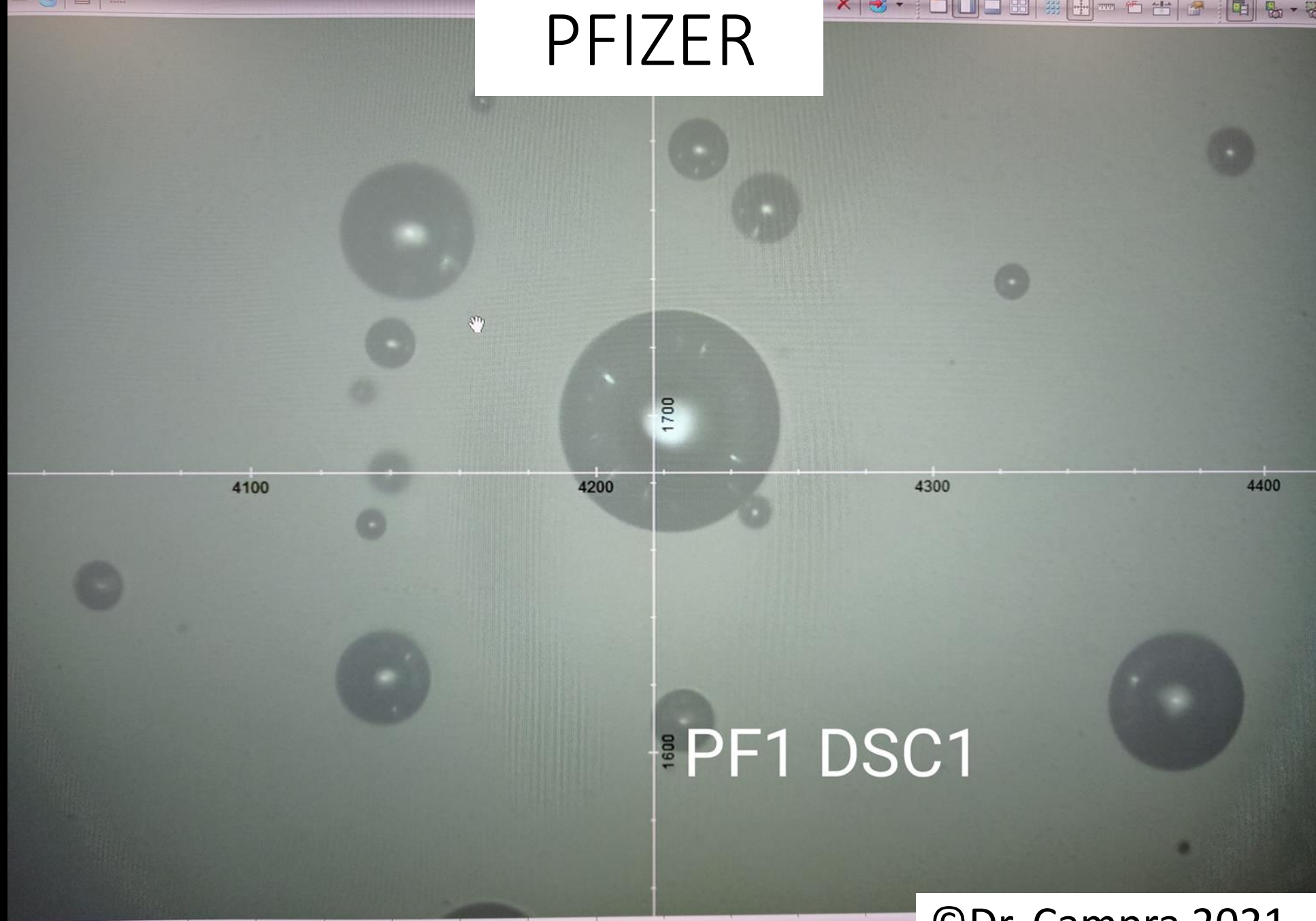
©Dr. Campra 2021

PFIZER



©Dr. Campra 2021

PFIZER



1600 PF1 DSC1

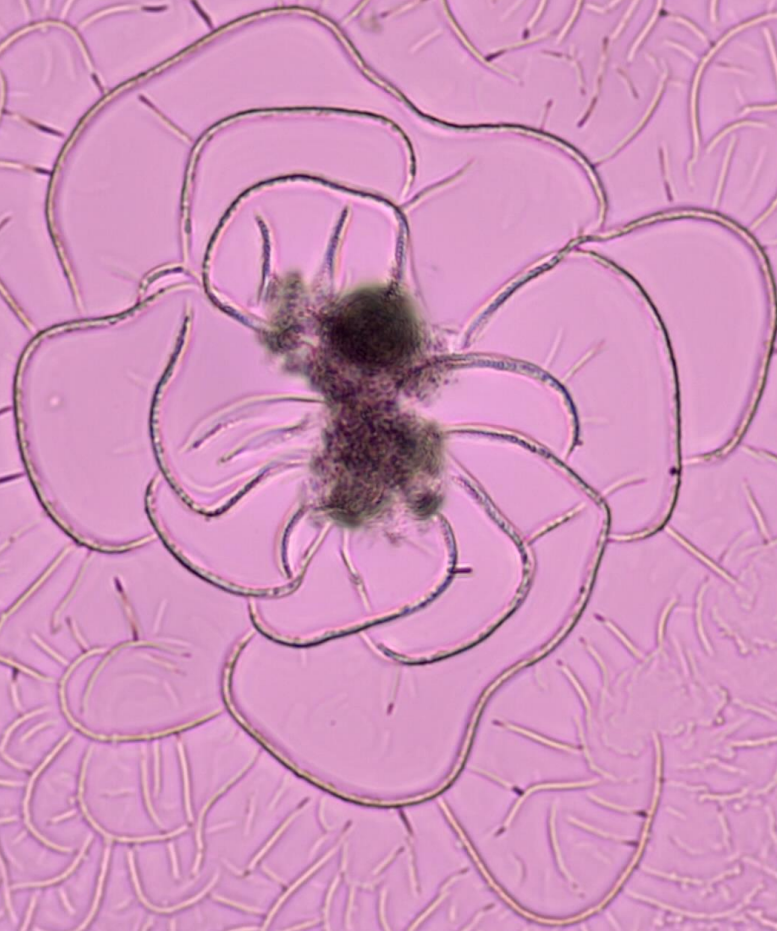
©Dr. Campra 2021



JANSSEN

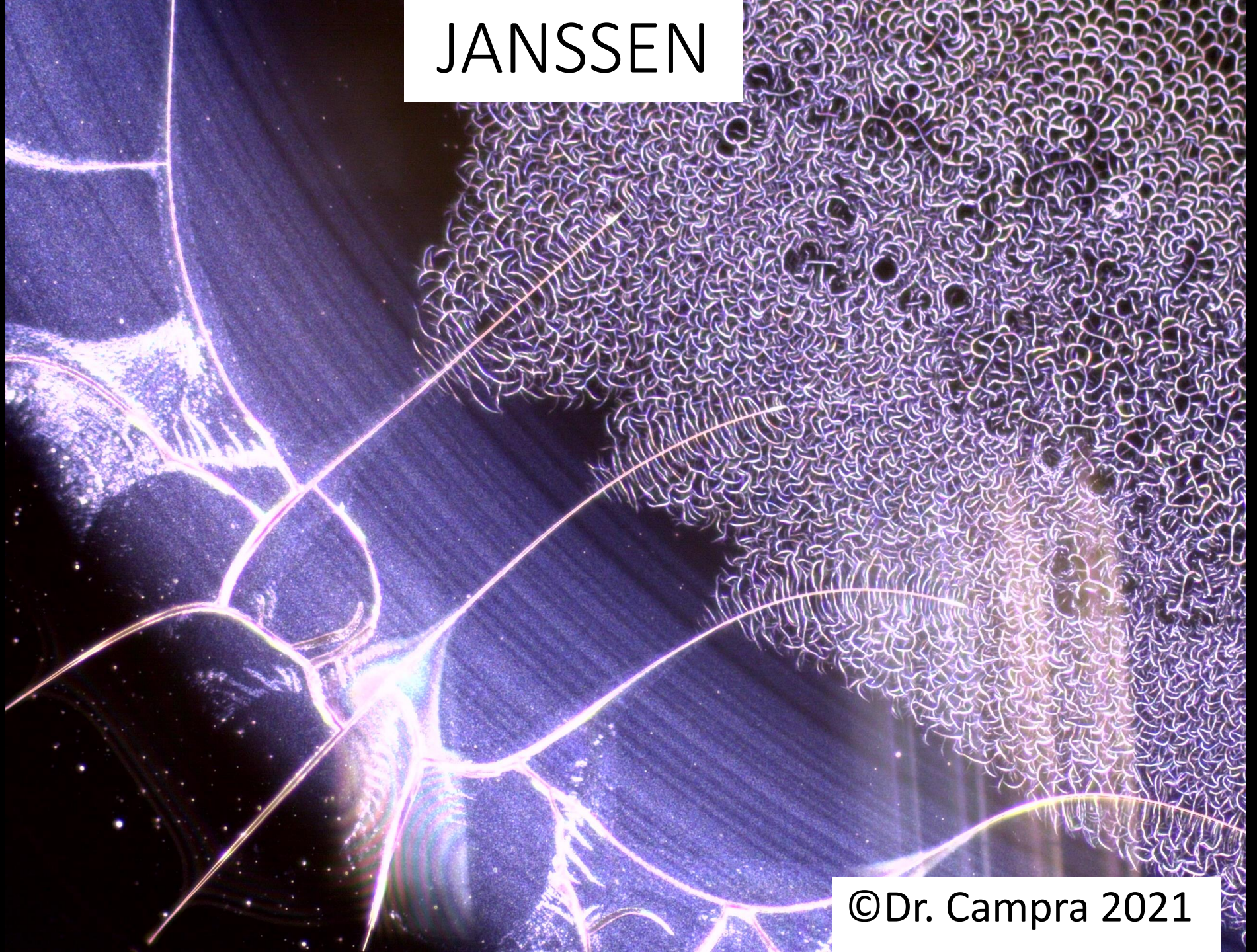
©Dr. Campra 2021

JANSSEN



©Dr. Campra 2021

JANSSEN



©Dr. Campra 2021

JANSSEN



©Dr. Campra 2021



JANSSEN



©Dr. Campra 2021

A microscopic image showing a network of plant cells. The cell walls are highlighted with a bright blue fluorescence, while the internal cytoplasm of the cells shows a green fluorescence. The overall appearance is a complex, interconnected pattern of glowing structures.

JANSSEN

©Dr. Campra 2021