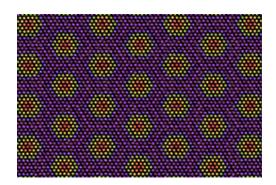


## **JEO***Link* Newsletter



January 2020 | ISSUE #89



# HEXAGONAL LATTICE OF MAGNESIUM Grand Prize TEM Image 2019

Lawrence Whitmore - University of Salzburg

Congratulations to Dr. Lawrence Whitmore for winning the Grand Prize TEM image for 2019. His image shows a hexagonal lattice of magnesium highlighted by the spectrum colors. Lattice aligned to [0001] zone axis and artifical color applied to emphasize the hexagonal symmetry. Microscope: JEOL F200 TEM. See all the images for 2019 and previous years at this link.



MXENE BEE

Grand Prize SEM Image 2019

Armin VahidMohammadi - Auburn University

Congratulations to Dr. <u>Armin VahidMohammadi</u> for yet another Grand Prize SEM image winner. His image shows a fully oxidized two-dimensional (2D) vanadium carbide MXene particle, which through the addition of fake colors bears resemblance to a bee. Microscope: JEOL <u>JSM-7000F</u> SEM. See all the images for 2019 and previous years at this link.



BREAKING NEWS FOR TRANSMISSION ELECTRON



BREAKING NEWS FOR SCANNING ELECTRON MICROSCOPES

#### **MICROSCOPES**

## JEOL Acquires IDES: Unique Technologies for TEM

1/17/2020 News Release

IDES's unique technology will upgrade JEOL TEM systems to ultrafast time-resolved TEMs capable of capturing still and dynamic images in nano seconds (one billionth (10<sup>-9</sup>) of a second) to femtoseconds (one quadrillionth (10<sup>-15</sup>) of a second) and recording them with nanometer-scale spatial resolution.

Read the full announcement.

## <u>Special Time-Limited Offer on</u> Variable Pressure SEMs

January - March 2020 Pricing

Looking for a compact, versatile, easy to use SEM for your imaging and analysis applications?

Ask us about our special offer and how you can get the latest SEM technology for your lab: Fully embedded EDS system with Live

Analysis, Zeromag Navigation, unsurpassed low kV performance, High vacuum to expanded pressure in low vacuum mode, large specimen chamber with multiple ports (IT500).

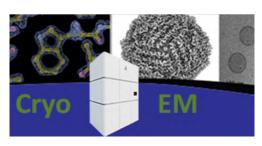
#### PRODUCT PROFILES

## JEOL's Field Emission SEMs - Simpler and Faster, More Powerful Imaging and Analysis



NeoEngine. ZeroMag. EDS with Live Analysis. JEOL's FE-SEM offers a truly revolutionary approach to address users' high-resolution microscopy and microanalysis needs. In a single platform JEOL combined the best electron optics with fully embedded EDS microanalysis and the powerful AI algorithms of NeoEngine to achieve the ultimate ease of use and streamlined workflow. Read More.

## CryoARM 200 and CryoARM 300 for Single Particle Analysis



Atomic level structural analysis of viruses and proteins derived by cryo-EM using SPA workflows requires high stability hardware and software. JEOL cryo-TEMs facilitate this development in cryo-EM with the CRYO ARM™ 300 Field Emission Cryo-electron
Microscope. The CRYO ARM™ 300 achieves

unprecedented resolution and stability thus allowing for the automatic and unattended acquisition of image data for Single Particle Analysis. Read More.

#### REALab CUSTOMER PROFILE

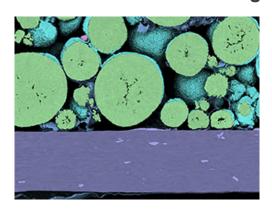
### **Lichen Labs - Sue Okerstrom Pursues Passion for Biomimicry**



"Looking at nature from a materials scientist's standpoint is very different from how a biologist looks at it," Sue Okerstrom says. After 25 years of looking at polymers, metals, and ceramics at Medtronic, she retired early to pursue her passion for biomimicry innovation inspired by nature. Sue established Lichen Labs to help industry, architects, and students explore how nature can guide us to innovative new materials, processes, structures and textures to solve human challenges on all scales. Read More.

#### APPLICATIONS SPOTLIGHT

#### Lithium-Ion Batteries Imaging and Analysis



Performance, quality, and safety of Lithium-ion batteries is an ongoing concern. We provide the tools that assist in morphological (surface) and compositional characterization of battery materials without any air exposure. JEOL offers special holders and specimen loading devices that allow seamless transition between a sample preparation device such as a cross-section polisher and an imaging platform (SEM). Download our "LIB Note" or Read More about JEOL microscopy for energy applications.

#### JEOL USA Service and Support - Expect M.O.R.E.



The JEOL service department is dedicated to providing optimal solutions that support customer innovation. Our professionalism, knowledge, and integrity allow JEOL to achieve the highest level of quality and customer satisfaction. <a href="Expect M.O.R.E.">Expect M.O.R.E.</a>.

- Interested in getting top priority service? View our Service Level Agreements page
- To request service on your instrument, please visit our service request page

### **2020 SEM Training Schedule**



Need basic training or want to sharpen your skills on your JEOL SEM? See our most current training schedule for the NeoScope benchtop SEM, the IT100 and IT200, and more. We will continue to update our 2020 training schedule as additions or changes occur. Read More.

## See Us at These Upcoming Conferences and Shows



JEOL USA will be exhibiting at numerous trade shows and sponsoring conferences throughout 2020. Please include us in your plans! Coming soon: See us for demos of the NeoScope benchtop SEM and the IT200 SEM at Pittcon in March. We'll will be adding the schedule for the second half of the year shortly. Read More.

#### **Posters and Calendars**



labs enjoy displaying near their microscopes. We have a small inventory of <u>posters for your wall</u>, and we also offer a 2020 Image Contest Calendar featuring winning images from 2019. <u>Get your copy while supplies last</u>, or download the pdf, or enter the <u>2020 Image Contest</u>.

JEOL has also created a <u>Periodic Table App</u> for the iPhone and Android devices. Check out our Resources Section on our website for more details about our printed and downloadable materials including applications notes.

## **Upcoming Events**

Want to see a demonstration of our instruments or talk with one of our experts in applications and technology? Or join us at one of our upcoming conferences or meetings? Check out our schedule of events.

#### **Coming Soon**



See us in Booth #3425, March 3-5, Chicago, IL. <u>Contact us for a demonstration</u> of the <u>NeoScope Benchtop SEM</u> and the <u>JSM-IT200 Compact Variable Pressure SEM</u>.

**More information** 

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