

2017 CALENDAR



Featuring 2016 Winning Images





January 2016 Winner



February 2016 Winner



March 2016 Winner



April 2016 Winner



May 2016 Winner



June 2016 Winner



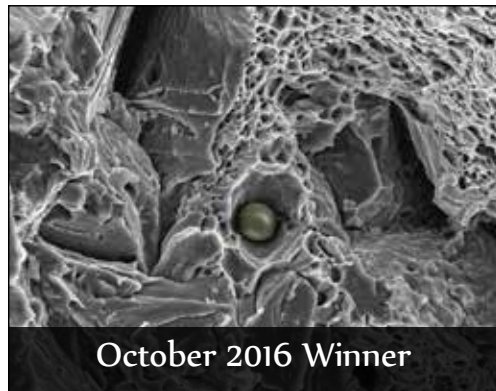
July 2016 Winner



August 2016 Winner



September 2016 Winner



October 2016 Winner



November 2016 Winner



December 2016 Winner

2017 CALENDAR

Featuring 2016 Winning Images

JEOL USA would like to thank all of our customers who have submitted images to our 2014, 2015, and 2016 Image Contests. We have received many outstanding images that are posted in a gallery on our website at www.jeolusa.com/winners.

We invite JEOL SEM, TEM, and EPMA users to enter the JEOL USA 2017 image contest. A prize will be awarded for each month, with a Grand Prize TEM and SEM or EPMA image announced at the end of the year. Contest guidelines are on our website.



Honorable Mention

2016

“Tree”

Mosquito leg gold coated and imaged in SEI at 800X, stitched, Photoshop color and edits.
Sheri Neva, EAG Laboratories,
JSM-6610LV



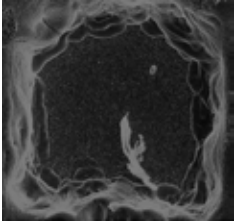
“Sweet Donut”

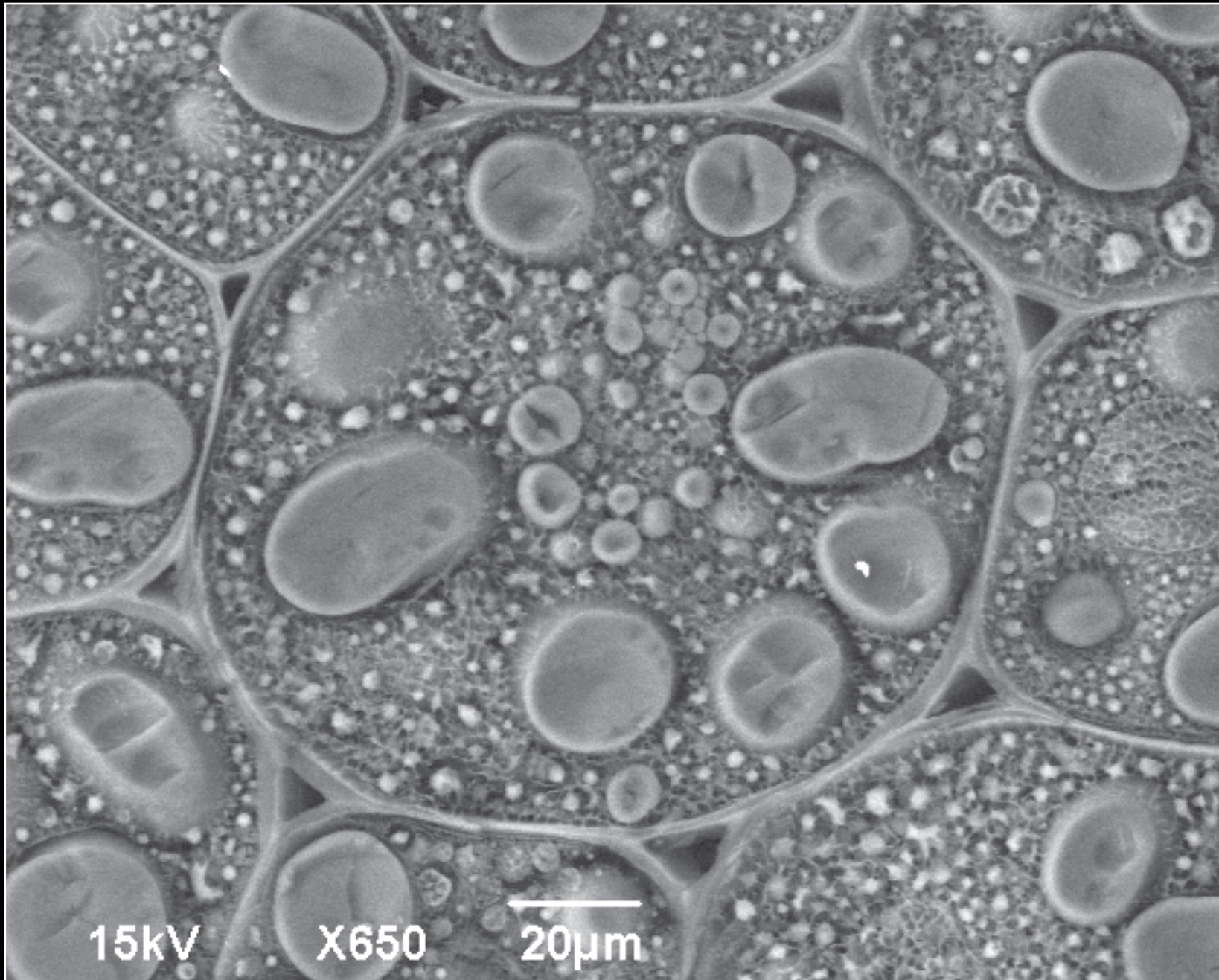
Testate Amoebae of the specie *Centropyxis discoides* from the lake Muyil, Quintana Ro, México.

Dr. Samuel Tehuacanero-Cuapa, Central Microscopy Laboratory, Institute of Physics and Institute of Geology, UNAM, México.

Institut für Geosysteme und Bioindikation (IGeo), TU-Braunschweig, Germany; Lower electron detector and Gentle Beam - JEOL JSM-7800F SEM

January

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
New Year's Day 1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	Martin Luther King, Jr. Day 16	17	18	19	20	21
22	23	24	25	26	27	Chinese New Year 28
29	30	31			<p>"Night Sky Observed from a Cave" A 3-D ceramic square lattice with a trapped flaky particle; Dr. Lisa Kleiminger, Imperial College London, UK; JSM-6400 SEM</p> 	



"Hydrated Lentil"

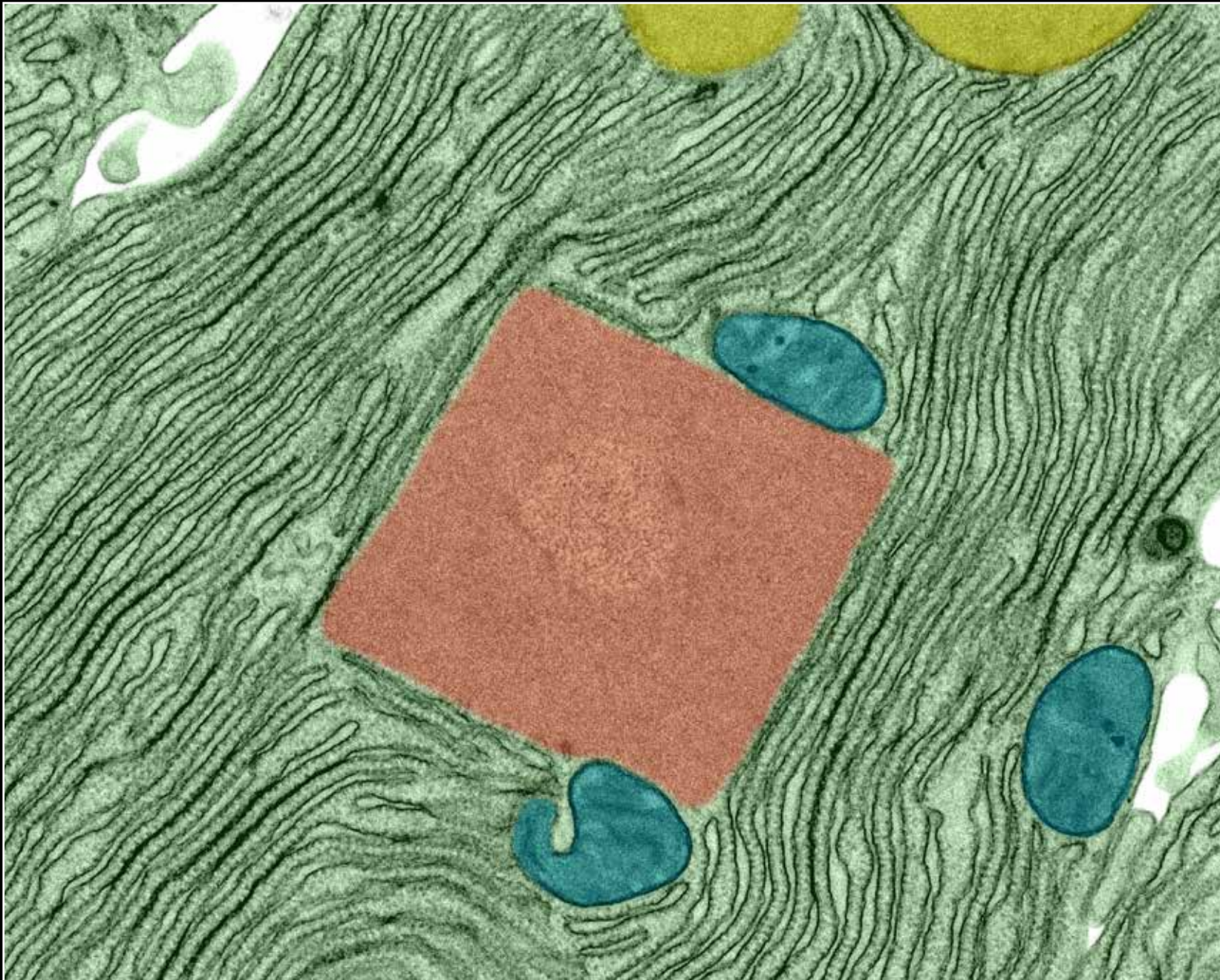
Cooked, fully-hydrated lentil showing starch microstructure.

Scott Payne, North Dakota State University Electron Microscopy Core Facility; JEOL JSM-6490LV; Brass cryo-puck; frozen in liquid nitrogen, fractured using a pre-cooled razor blade. Puck transferred cold to SEM in LVmode (30 Pa); allowed to sublime for 10 minutes to remove any frost. BSE shadow mode at 15 kV.



February

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday			
	"3D nanoflowers"; TiO ₂ nanoflowers synthesized via hydrothermal method; Neha Desai, Department of Chemistry, Shivaji University, Kolhapur; JSM-6360A.		1	2	3	4			
5	6	7	8	9	10	11			
Biophysical Society New Orleans, LA Sponsor 2/12-2/14	12	Nano-Tailored Semiconductor Devices (NTSD) Sao Paulo, Brazil 2/13-2/17	13	Valentine's Day	14	15	16	17	18
19	President's Day	20		Flag Day (Mexico)	21	22	23	24	25
	PANIC NMR Hilton Head, SC 2/20-2/23								
26	27	Advanced Lithography San Jose, CA 2/28-3/1	28			"Iceberg"; Surface morphology of gallium arsenide; Sergey Simchenko and Snezana Salikova, Berdyansk State Pedagogical University; JSM-6490			




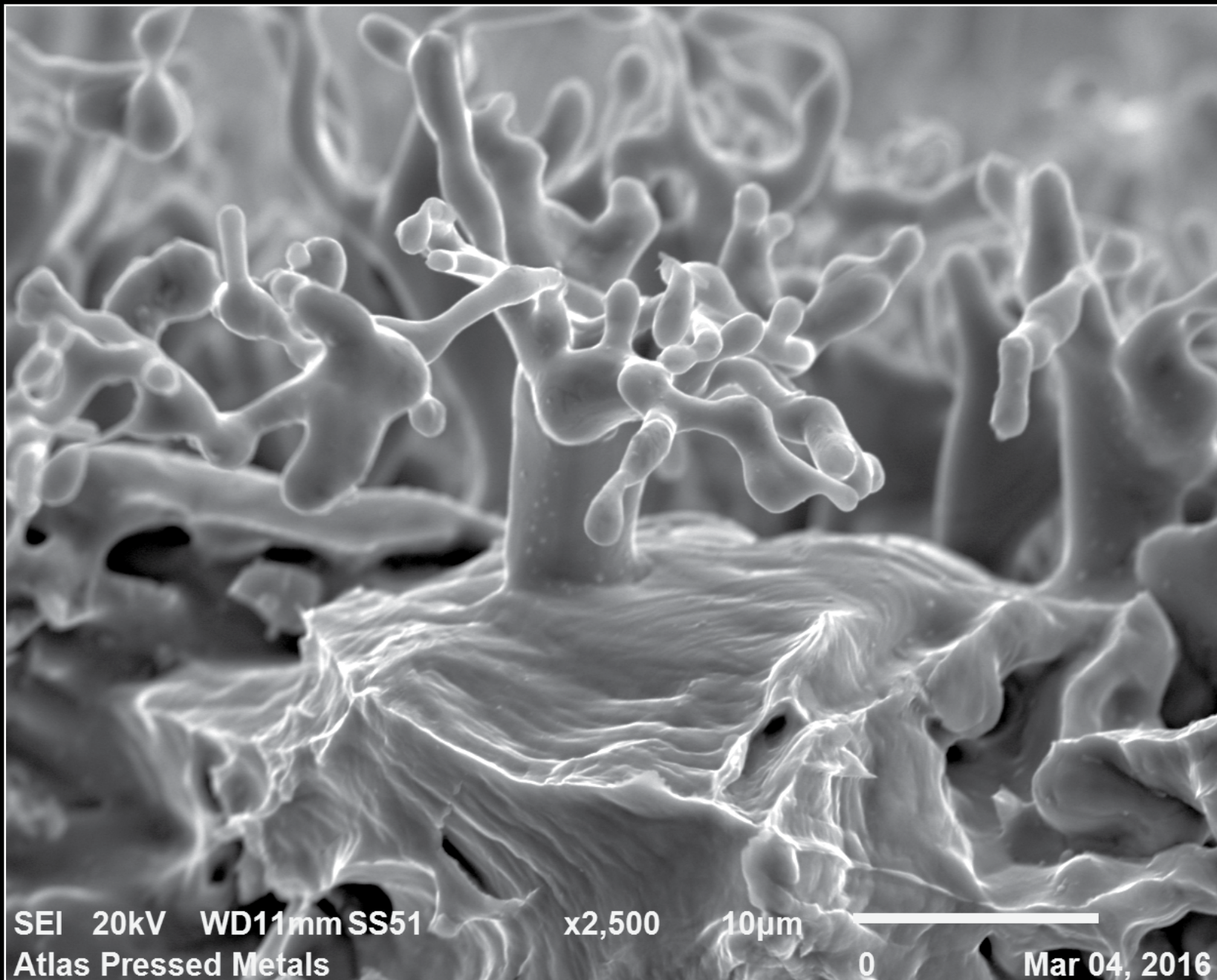
“Hip to Be Square”

Pseudocolored TEM image of mouse pancreatic acinar cell. (Red = Paracrystalline inclusion body; Yellow = secretory granules; Blue = mitochondria; Green = cytoplasm filled with rough endoplasmic reticulum.) Patrick Nahirney, University of Victoria; JEM 1400 Image captured at 25,000 times magnification with a Gatan Orius SC1000 camera



March

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
	<p>"Beauty of Natural Designs" - Detail of microscopy glands in the body of an insect of the genus Petrusa; Jose Almodovar, University of Puerto Rico, Mayaguez Campus; JEOL 5410 LV</p>		Ash Wednesday 1	2	3	4	
5	PITTCON Chicago, IL 3/6-3/9	6	7	8	9	10	11
Daylight Savings Begins 12	13	14	15	16	St. Patrick's Day 17	18	
19	Spring Begins 20	21	22	23	24	25	
ENC Pacific Grove, CA 3/26-3/31 26	27	28	29	30	31		



"Tiny Forest of Metal Trees"
Iron-Copper-Carbon growth on a powder metallurgy component
Craig Stringer, Atlas Pressed Metals; JSM-6010Plus/LA

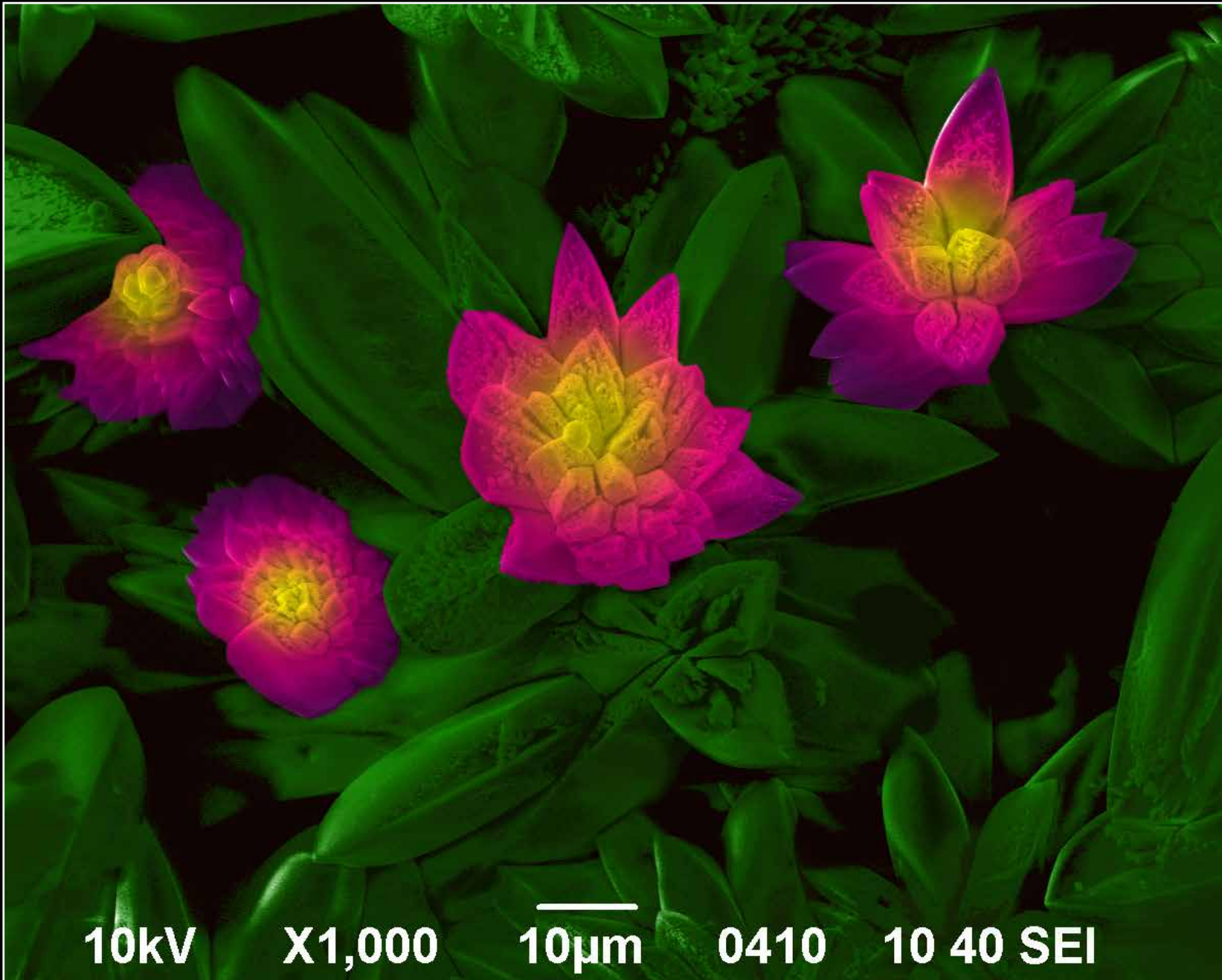


April

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday			
	Connecting cilium of a C57BL/6J mouse rod photoreceptor; Stefanie Volland, UCLA; JEM-1200-EX					1			
Spring ACS San Francisco, CA 4/2-4/4	2	3	4	5	6	7	8		
Palm Sunday	9	Passover Begins	10	11	12	13	Good Friday	14	15
Easter	16	Easter Monday (Canada)	17	18	19	20	21	Earth Day	22
23	24	Ceramic Expo Cleveland, OH 4/25-4/27	25	26	27	28	29		
30									



SEM



"Asters"

Gallium arsenide nanocrystalline surface

Sergey Simchenko, Berdyansk State Pedagogical University; JSM-6490



May

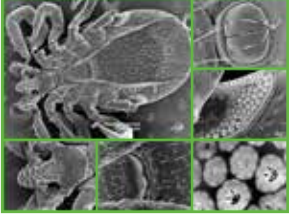
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	ASM Cleveland, OH 5/1-5/5	1	2	3	4	5 6 Cinco de Mayo Battle of Puebla Day (M) New England Society for Microscopy (NESM) Woods Hole, MA
7	8	9	10 Microscopical Society of Canada (MSC) Montreal, Quebec 5/10-5/11	11	12	13
Mother's Day 14	15	16	17	18	19	20
21	22 Victoria Day (Canada) Mid-Atlantic Association of Forensic Scientists (MAAFS) Pittsburgh, PA 5/22-25	23	24	25	26	27
28	29 Memorial Day	30 EIPBN Orlando, FL 5/30-6/2	31			Psuedo color STEM HAADF image of a single dislocation core in CdTe; Moon Kim, UT Dallas; JEM- ARM200F 

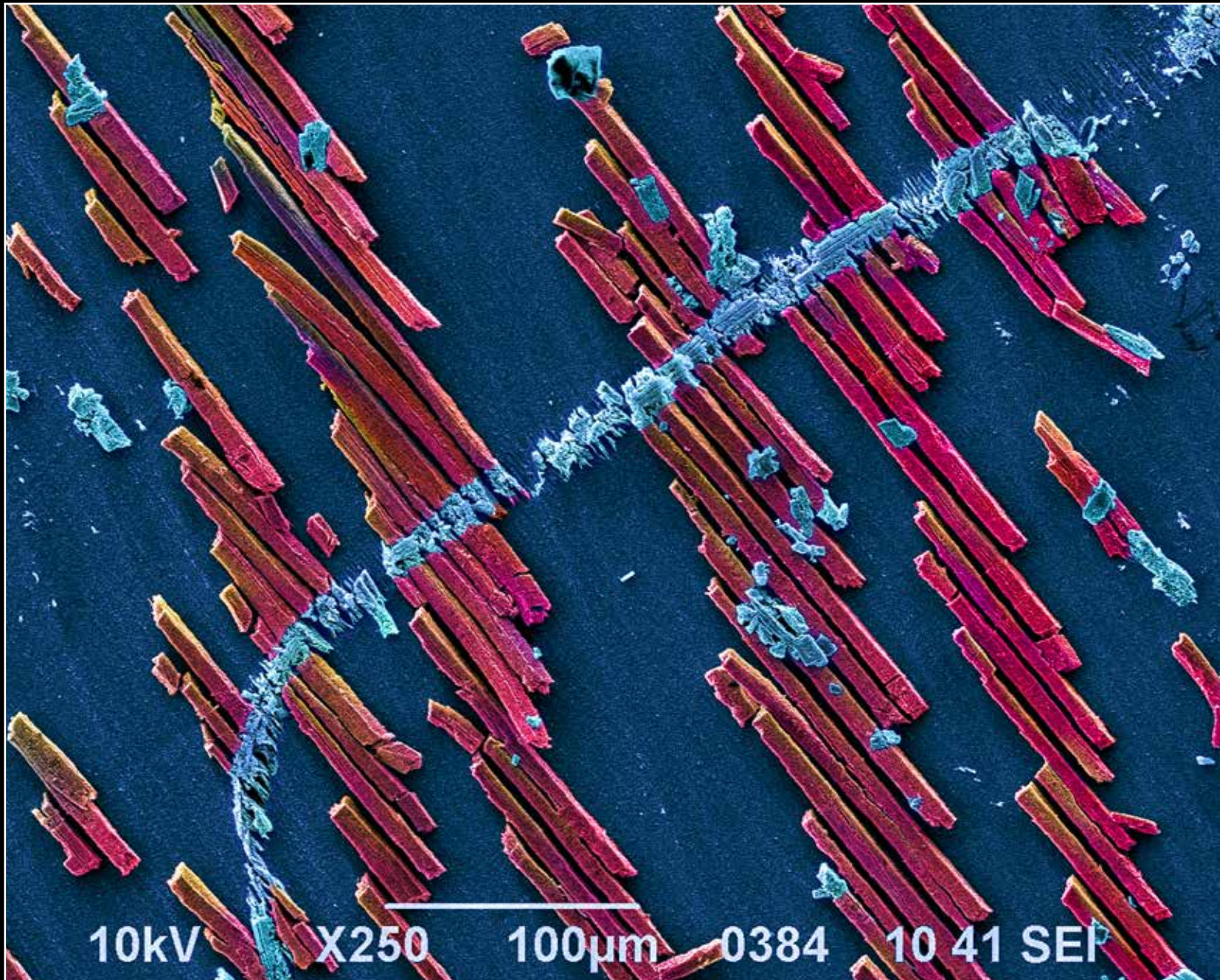


"Silicon Tree"

Co film-Si substrate sample synthesized through back-etching method.

Boopathy Kombaiah, Prof. Greg Rohrer group, Carnegie Mellon University; JEOL 2000EX TEM Bright Field Image

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
	Tick nymph (Arachnidae); Janez Zavašnik, Jožef Stefan Institute; JSM-5800			1	2	3	
ASMS Indianapolis, IN 6/4-6/8 26° Congresso Brasileiro de Microscopia Rio de Janeiro 6/4-6/7	4	5	6	7	8	9	10
11	12	13	Flag Day 14	15	16	17	
Father's Day 18	19	20	Summer Begins 21	22	23	St. Jean Baptiste Day (Que.) 24	
25	26	27	28	29	30		



"Cinnamon"

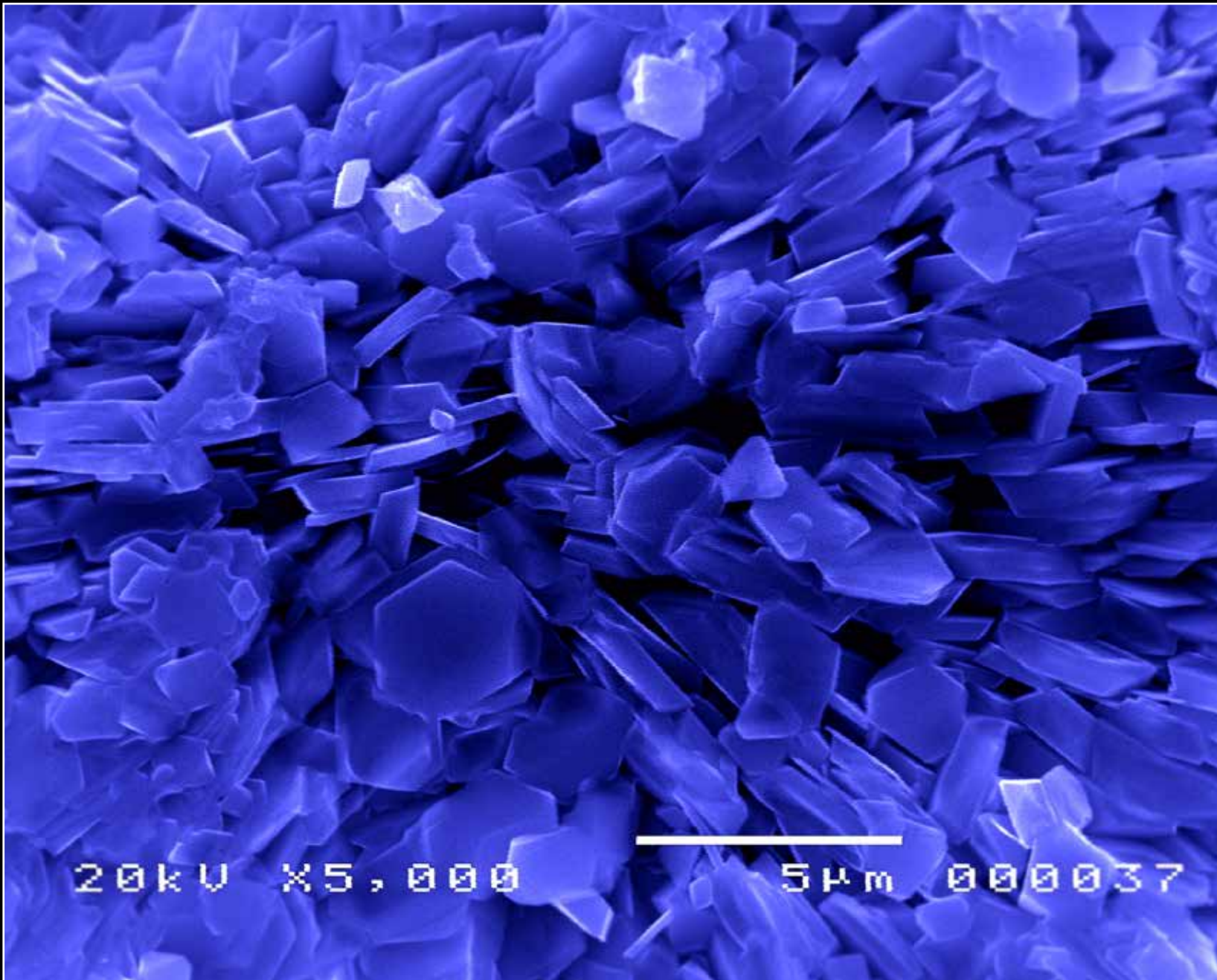
Morphology of the Nanoporous InP Plate

Yana Suchikova and Sergei Kovachev, Berdyansk State Pedagogical University; JSM-6490 SEM



July

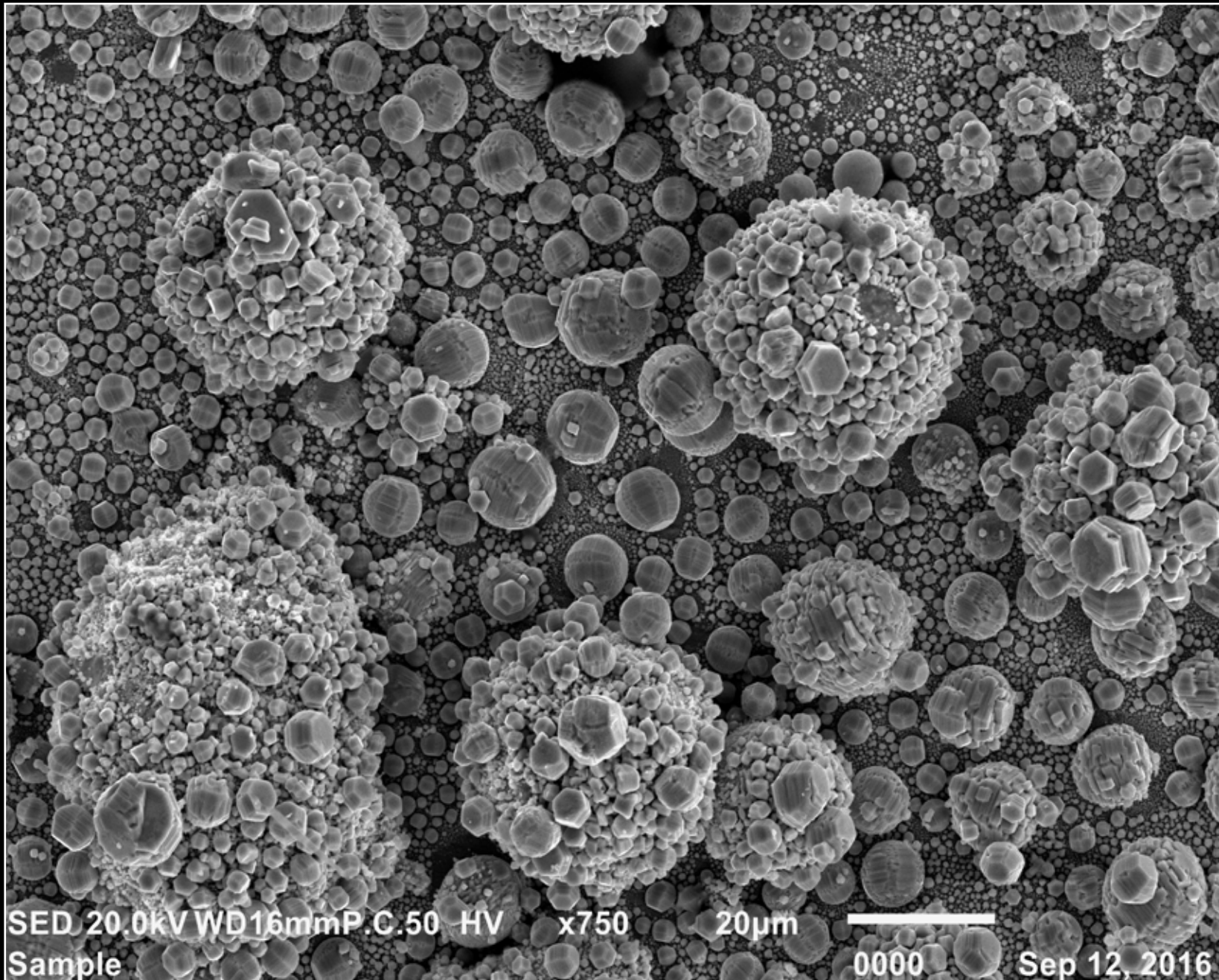
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
 <p>"Island" – Catalyst on silicon surface (111); Sergey Simchenko and Snezana Salikova, Berdyansk State Pedagogical University; JEOL JSM-6490</p>						Canada Day (Canada) 1
2	3	Independence Day 4	5	6	7	8
9	10	SEMICON West San Francisco, CA 7/11-7/13 11	12	13	14	15
16	17	18	19	20	21	22
ISMAR Quebec City 7/23-7/28 23	24	25	26	27	28	29
30	31					



“Spacetime Evolving Nanoparticles”

ZnO nanostructures formed by wet oxidation in water with zinc chloride.
Christian Mak Pelicano, University of the Philippines Diliman; JSM-5300

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	<p>"Flames"- Hairs on the surface of an insect; Jose R Almodovar, University of Puerto Rico, Mayaguez Campus; JSM-5410 LV</p>	1	2	3	4	5
6	<p>Civic Holiday (Canada)</p> <p>Microscopy & Microanalysis St. Louis, MO 8/7-8/10</p>	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	<p>Fall ACS Washington, DC 8/20-8/22</p> <p>XXVI International Materials Research Congress Cancún, México 8/20-8/25</p>					
27	28	29	30	31		

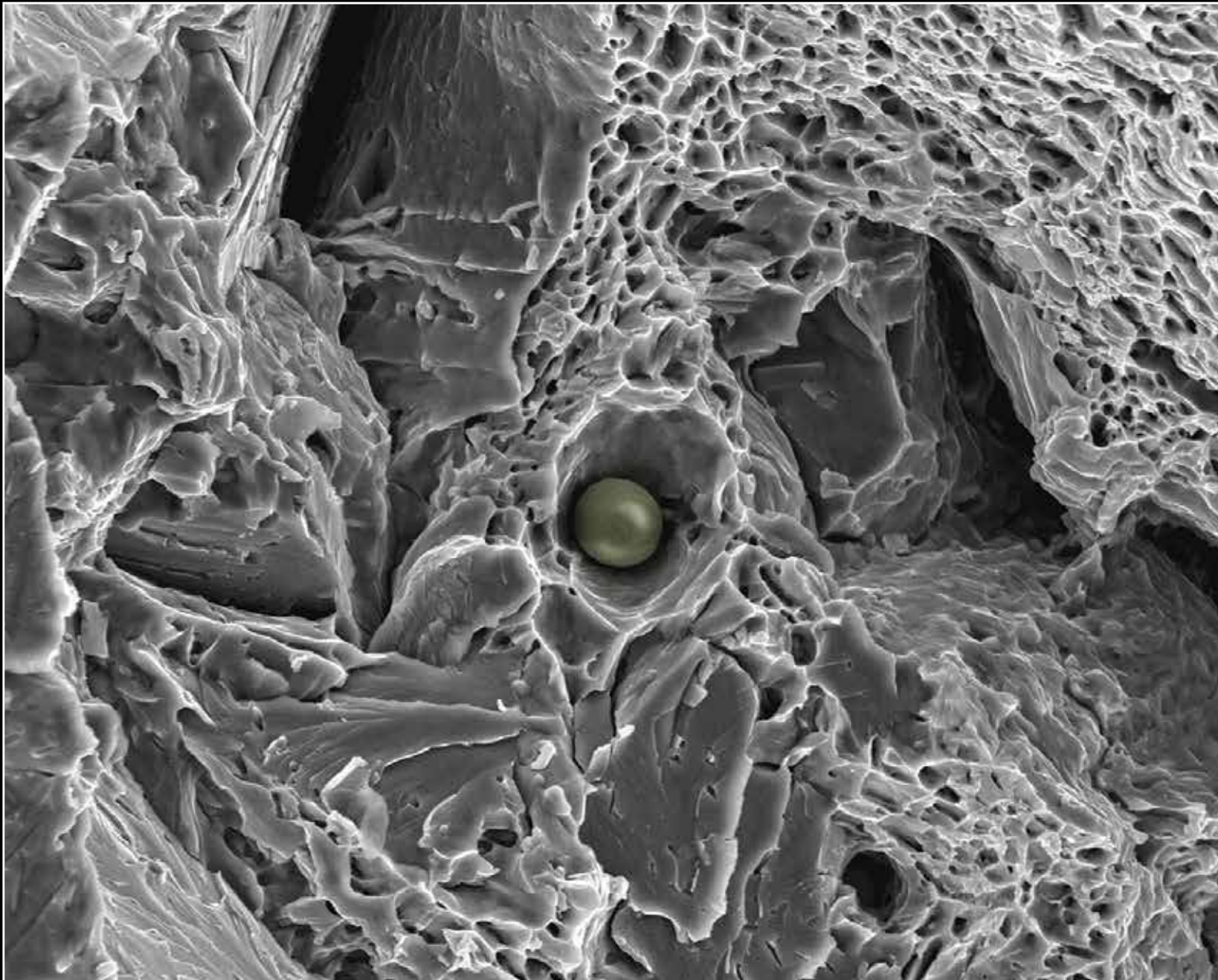


"Zinc Condensation Crystals"

Zinc coating condensed onto underlying bare steel

Joshua Solomon, General Motors; Method/Instrument: JSM - IT100

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday			
	<p>"Meteorite" – Drop of melted aluminium on the surface of heated copper wire, in a forensic case of fire investigation; Steven Vargas, Departamento de Ciencias Forenses, Organismo de Investigación Judicial; JSM 6610LV</p>				1	2			
3	Labor Day 4	5	6	7	8	9			
<p>XVI Brazil MRS Meeting Gramado Rio Grande do Sul 9/10-9/14</p>	10	<p>SOFT Boca Raton, FL 9/11-9/14</p>	11	12	13	14	15	<p>Independence Day (Mexico)</p>	16
17	18	19	<p>Rosh Hoshanah Begins</p> <p>Midwestern Association of Forensic Scientists (MAFS)/ Southern Association of Forensic Scientists (SAFS)/ American Society of Trace Evidence Examiners (ASTEE) Cincinnati, OH 9/20-9/22</p>	20	21	<p>Autumn Begins</p>	22	23	
24	<p>XIV CIASEM Congress Varadero, Cuba 9/25-9/29</p>	25	26	27	28	<p>Yom Kippur Begins</p>	29	30	

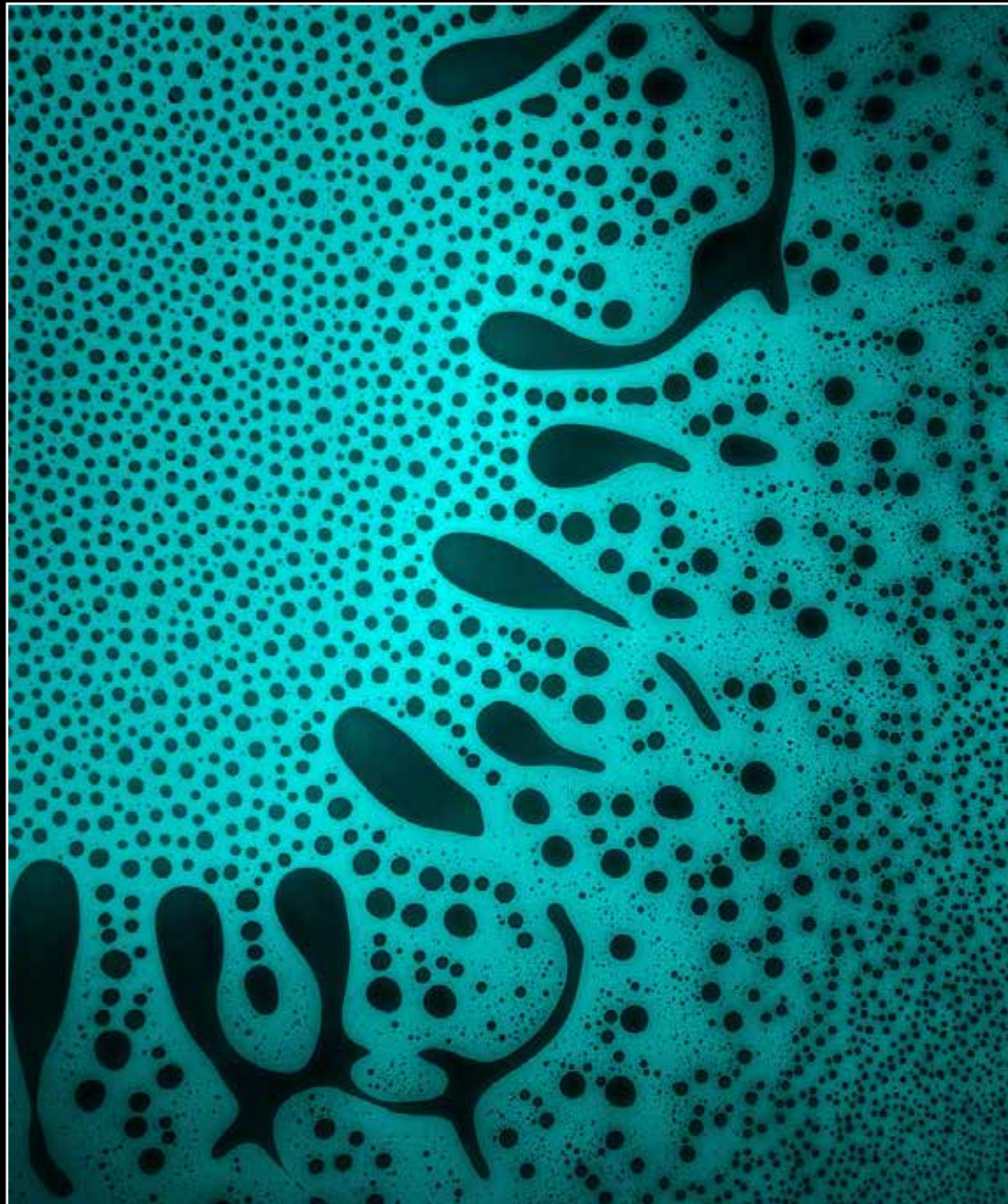


“Inclusion”

Throwing Knife – ductile and brittle fracture with an inclusion

Sheri Neva, EAG; JSM-6610LV

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	Gulf Coast Conference Houston, TX 10/3-10/4	3	4	5	6
8	Columbus Day Thanksgiving (Canada)	9	MS&T – Materials Science & Technology Pittsburgh, PA 10/11-10/12	10	11	12
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	Halloween	31		“Micro Moon” – Wear marks on PTFE ball bearing; Nicholas Seaton, University of Minnesota Characterization Facility	



"Jumping Copper"

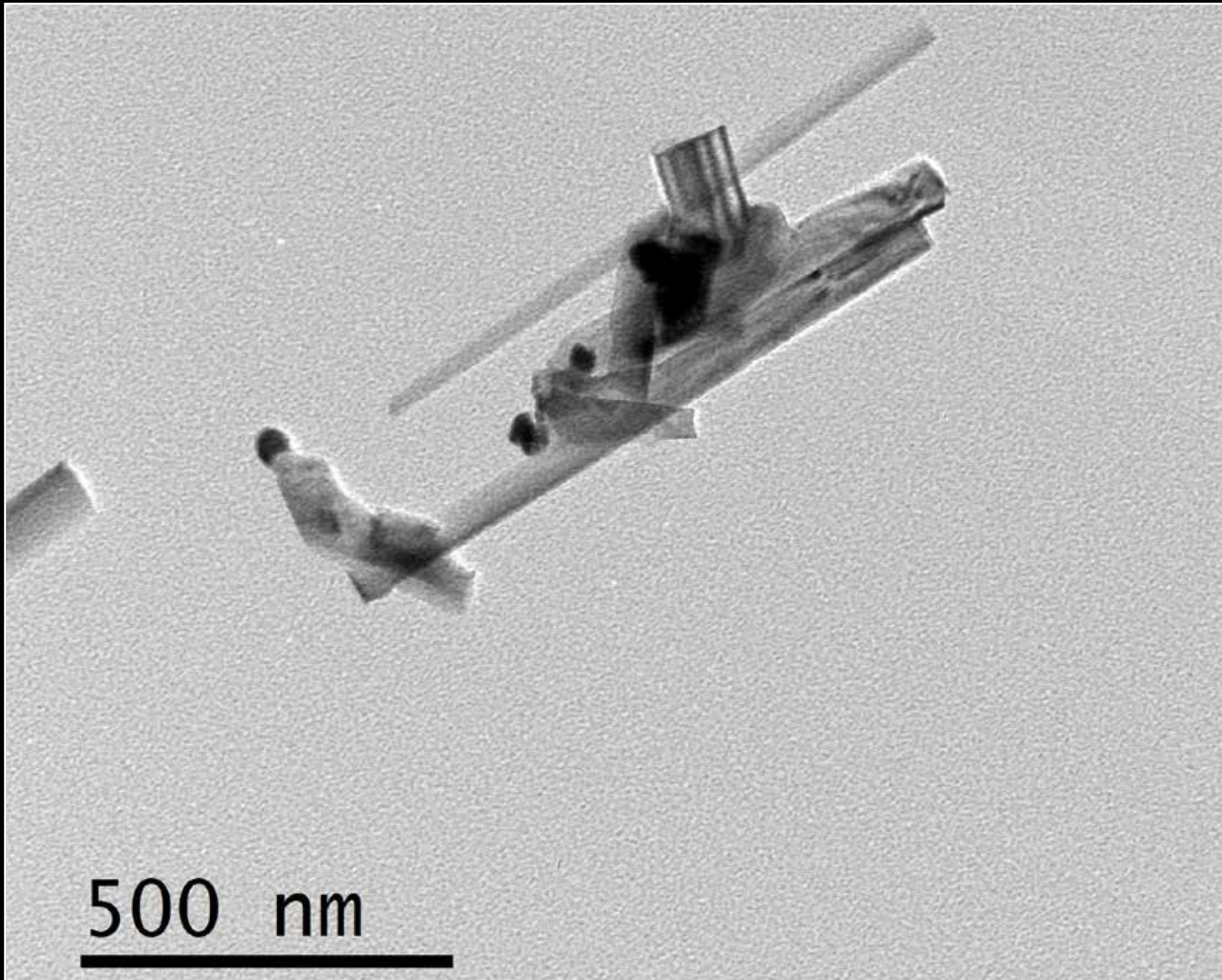
Copper nanoparticles synthesized in aqueous domains of a mineral oil /surfactant/water system.

Irene Heggstad, University of Bergen, Norway; JEM-1011

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday				
	<p>"Standing Alone" – Seta (bristle/hair) of a tick; Jeffrey Brookins, Michigan Technological University; JSM-6400.</p>		1	2	3	4				
<p>Daylight Savings Ends</p>	5	6	<p>ISTFA Pasadena, CA 11/7-11/8</p> <p>NEAFS Pocono Manor, PA 11/7-11/10</p>	7	<p>SERMACS Charlotte, NC 11/8-11/10</p>	8	9	10	<p>Veteran's Day</p> <p>Remembrance Day (Canada)</p>	11
12	<p>EAS – Eastern Analytical Symposium Plainsboro, NJ 11/13-11/15</p>	13	14	15	16	17	18			
19	<p>Revolution Day</p>	20	21	22	<p>Thanksgiving Day</p>	23	24	25		
26	27	<p>Fall MRS – Materials Research Society 11/29-12/1</p>	28	29	30	<p>"Iron Dew" – Iron droplets on an alumina substrate; Ezra Feilden, Imperial College London; JEOL 6010LA.</p>				



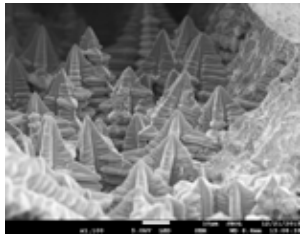
TEM



"Nano-Helicopter"

GaN Nanowires

Chih-Chiang Yang, National Chiao Tung University; ARM200F TEM

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	<p>"Christmas Tree Farm" – Melted surface mount capacitor containing barium titanate along with nickel, copper, and tin crystals; Susan Kent, Continental AG; JSM-7100F FE-SEM</p>				1	2
3	4	5	6	7	8	9
10	11	Hanukkah Begins 12	13	14	15	16
17	18	19	20	Winter Begins 21	22	23
Christmas Eve 24	Christmas Day 25	Boxing Day (Canada) 26 Kwanzaa Begins	27	28	29	30
31 New Year's Eve						

