

Volume 28, Number 4 August 2022

# Microscopy AND Microanalysis

The papers included in this issue are principally those developed from the Atom Probe Tomography and Microscopy (APT&M) meeting held virtually from 16th to 18th November 2020 hosted by University of Oxford.

Guest Editor: Arun Devaraj

The balance of the manuscripts are developed from the meetings of the Microscopy Society of Ireland held in Trinity College Dublin in 2020, and held virtually at Queen's University Belfast in 2021.

Guest Editors: Lewys Jones  
and Michele Conroy



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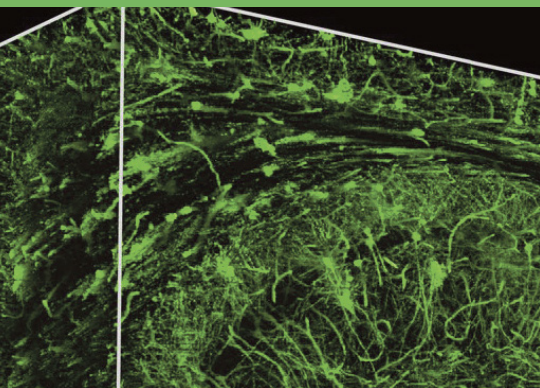


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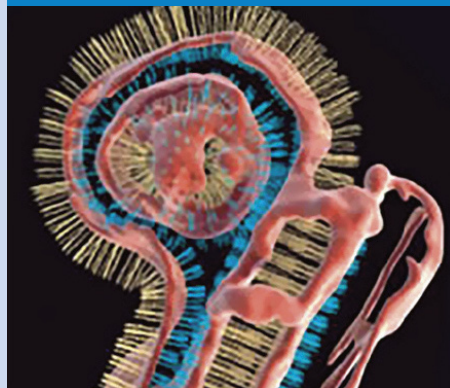
## NEUROSCIENCE



Micro-Optical Sectioning Tomography to Obtain a High-Resolution Atlas of the Mouse Brain Anan Li, Hui Gong, Bin Zhang, Qingdi Wang, Cheng Yan, Jingpeng Wu, Qian Liu, Shaoqun Zeng, Qingming Luo

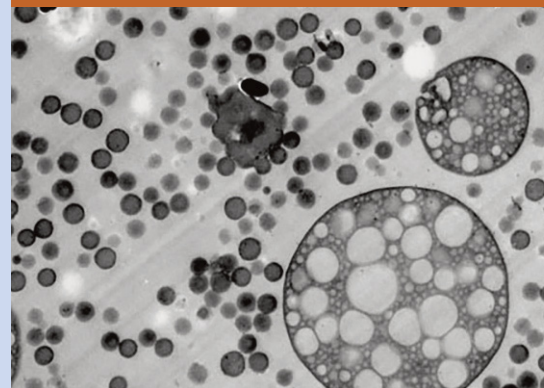
Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics—Huazhong University of Science and Technology, Wuhan 430074, P. R. China.

## CRYO



A single slice of a tomogram of an aldehyde fixed and sucrose infiltrated cryosection with a 3D reconstruction. Erik Bos and Peter J. Peters, Netherlands Cancer Institute, Amsterdam. (see: J. Lefman, P. Zhang, T. Hirai, R.M. Weis, J. Juliani, D. Bliss, M. Kessel, E. Bos, P.J. Peters, S. Subramaniam: Three-dimensional electron microscopic imaging of membrane invaginations in *Echerichia coli* overproducing the chemotaxis receptor Tsr. *J. Bacteriol.* 2004 Aug; 186(15): 5052-61.)

## MATERIALS



ABS, stained with OsO<sub>4</sub>, sectioned at room temperature with the ultra sonic knife, section thickness 50nm. Note the almost perfect spherical shape of the large rubber particles and the preservation of the inclusions inside. Also the smaller dense rubber particles are well preserved. B.Vastenout, Dow Benelux N.V. Terneuzen, The Netherlands.

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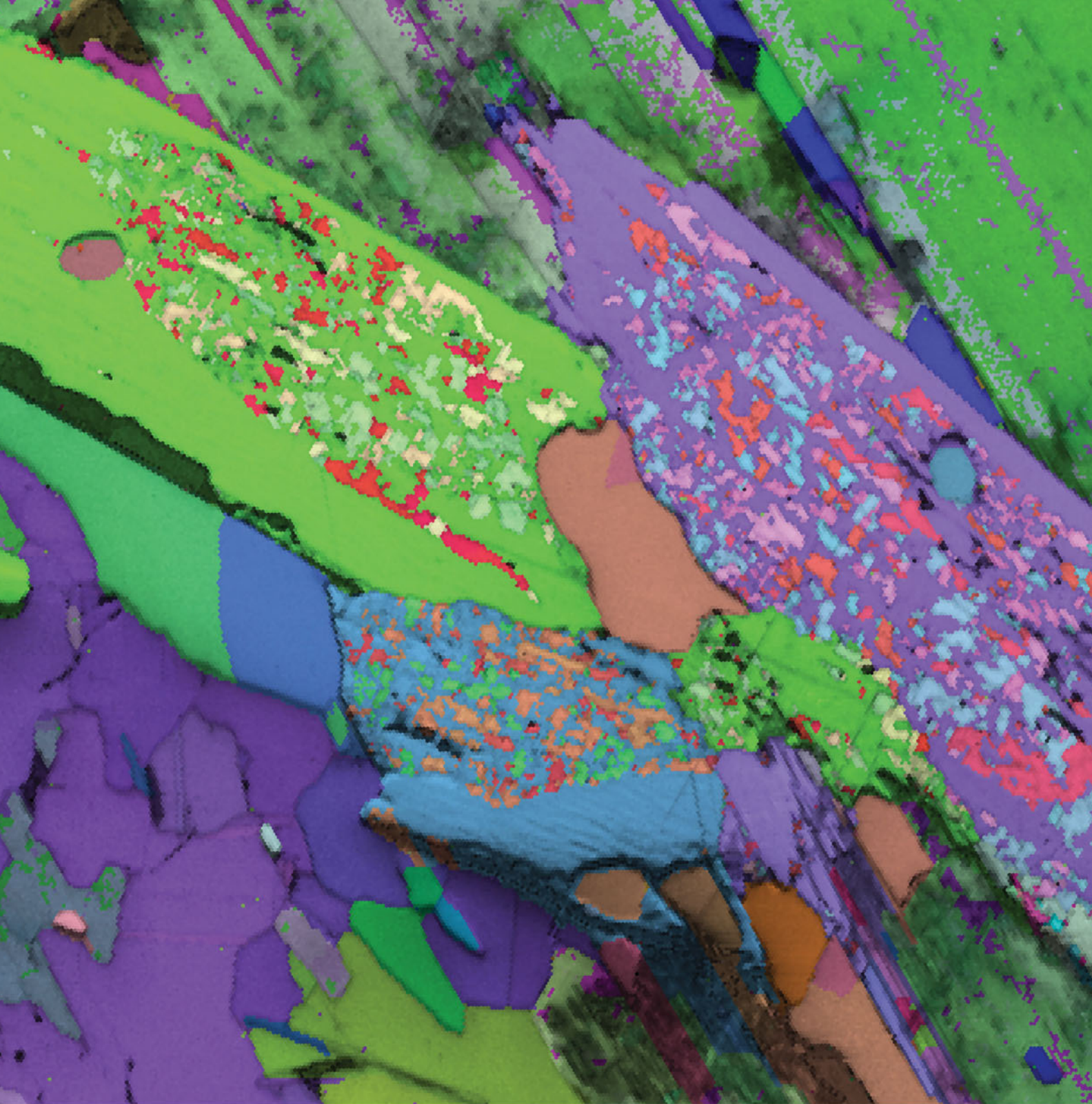
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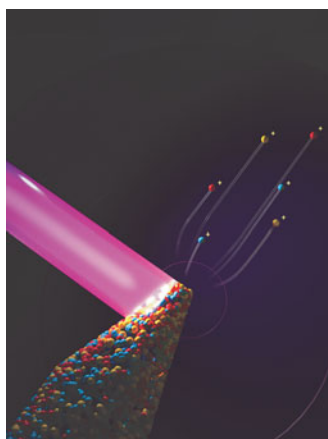


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Guest Editor: Arun Devaraj, Pacific Northwest National Laboratory.  
The manuscripts in the Atom Probe Tomography and Microscopy section are prefaced by an obituary memorializing Professor Hans Nordén, Chalmers University of Technology in Gothenburg, Sweden, who passed away on January 17th, 2021, at the age of 88.



**On the Cover:** Atom Probe Tomography allows 3D nanoscale visualization of atomic arrangements in materials with sub-nanometer spatial resolution. Cover art from PNNL, Arun Devaraj and Nathan Johnson (Graphic designer).

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