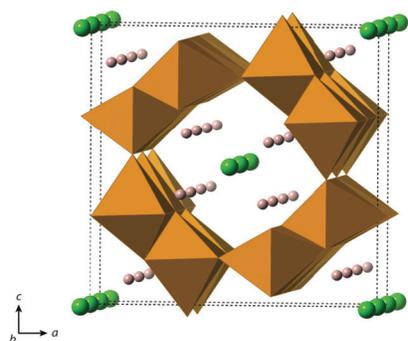
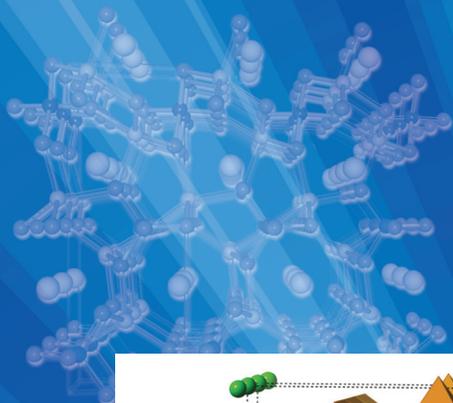
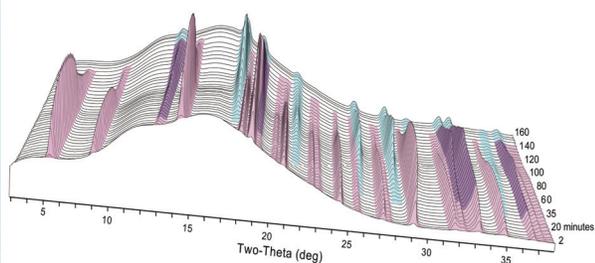


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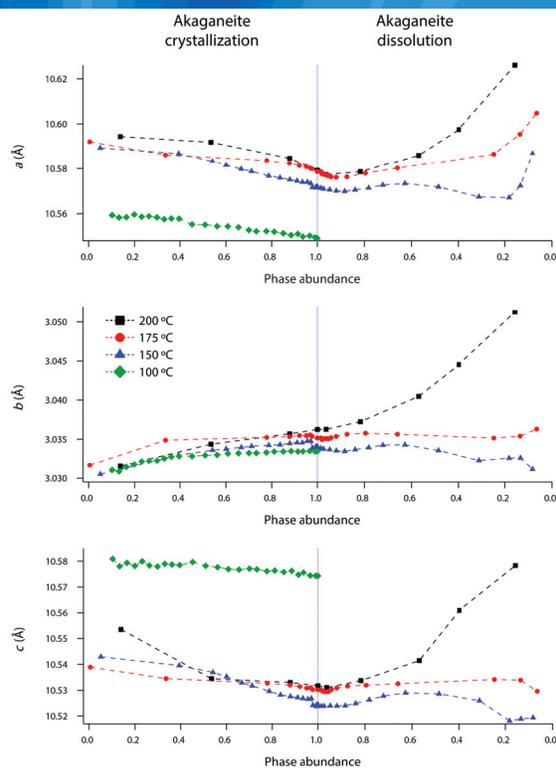
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Crystal structure of akaganeite,  $\beta$ -FeO(OH,Cl) showing Cl<sup>-</sup> (green) and H<sup>+</sup> (pink)



Time series at 150 °C . Akaganeite peaks are pink, and hematite peaks are blue



Lattice parameter changes at 100 °C (green), 150 °C (blue), 175 °C (red) and 200 °C (black)

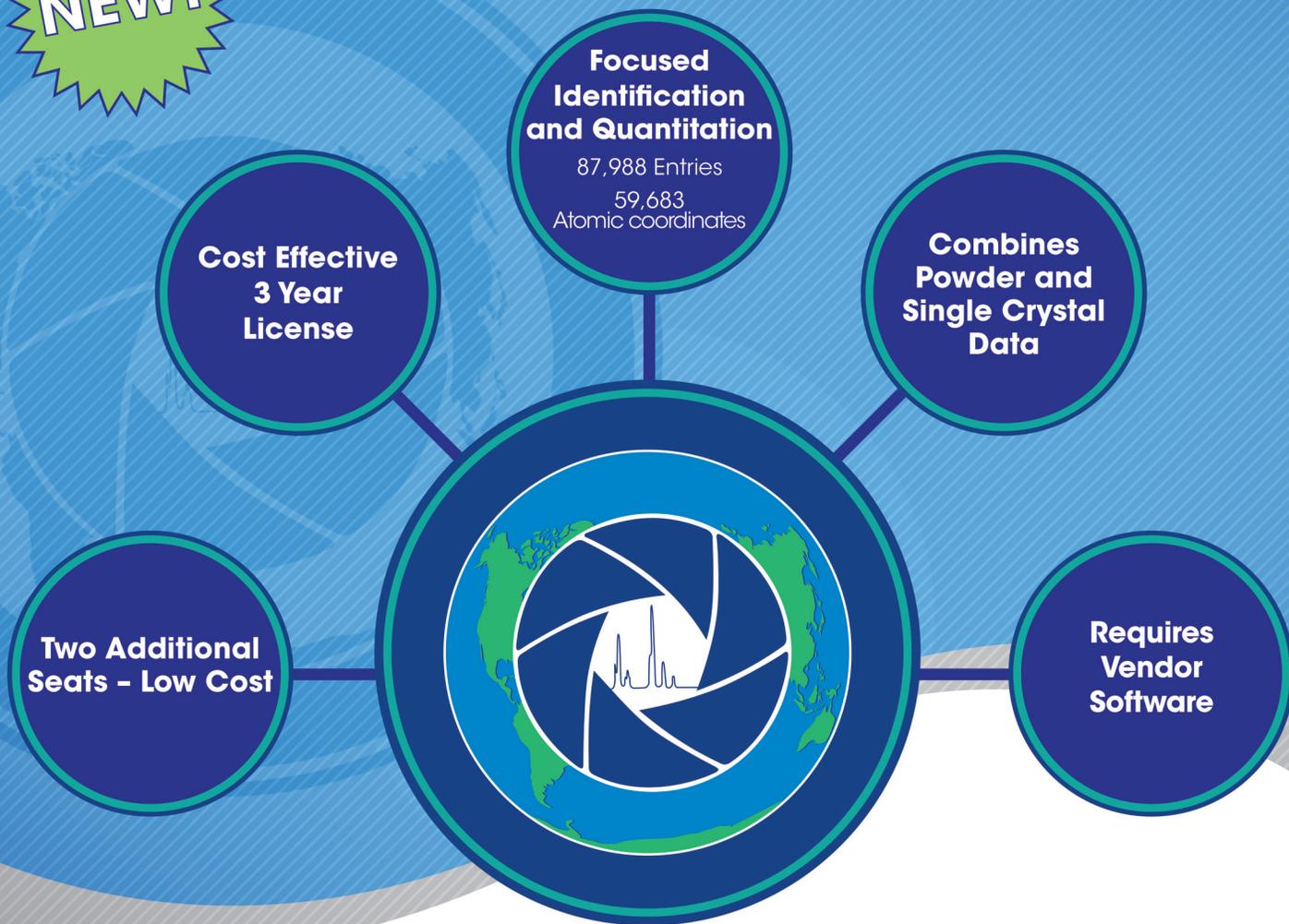
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# Powder Diffraction

An International Journal of Materials Characterization

## Editor-in-Chief

Camden Hubbard  
Applied Diffraction Services  
110 Crestview Lane  
Oak Ridge, Tennessee 37830, U.S.A.  
camden.hubbard@me.com

## Managing Editor

Nicole M. Ernst Boris  
International Centre for Diffraction Data  
12 Campus Boulevard  
Newtown Square, Pennsylvania 19073-3273, U.S.A.  
boris@icdd.com

## Editors for New Diffraction Data

Soorya Kabekkodu  
International Centre for Diffraction Data  
12 Campus Boulevard  
Newtown Square, Pennsylvania 19073-3273, U.S.A.  
kabekkodu@icdd.com

Stacy Gates-Rector

International Centre for Diffraction Data  
12 Campus Boulevard  
Newtown Square, Pennsylvania 19073-3273, U.S.A.  
gates-rector@icdd.com

## Associate Editor for New Diffraction Data

Frank J. Rotella  
Argonne National Laboratory (Retired)  
Chicago, Illinois, U.S.A.  
fjrotella1949@gmail.com

## Editors

Xiaolong Chen  
Institute of Physics  
Chinese Academy of Sciences  
No. 8 Nanshanjie, Zhongguancun, Haidian District,  
Beijing 100190,  
China  
xlchen@iphy.ac.cn

José Miguel Delgado  
Universidad de Los Andes  
Facultad de Ciencias  
Departamento de Química  
Lab. de Cristalografía  
Mérida 5101  
Venezuela  
miguel@ula.ve

Norberto Masciocchi  
Università dell'Insubria  
Dipartimento di Scienza e Alta Tecnologia  
via Valleggio 11  
Como 22100  
Italy  
norberto.masciocchi@uninsubria.it

## Editors for Crystallography Education

James Kaduk  
Poly Crystallography Inc.  
423 East Chicago Avenue  
Naperville, Illinois 60540-5407, U.S.A.  
Kaduk@polycrystallography.com

Brian H. Toby  
Argonne National Laboratory  
Advanced Photon Source  
9700 S. Cass Ave., Bldg. 401/B4192,  
Argonne, Illinois 60439-4856, U.S.A.  
brian.toby@anl.gov

## International Reports Editor

Winnie Wong-Ng  
Materials Measurement Science Division  
National Institute of Standards and Technology  
100 Bureau Drive, Mail Stop 8520  
Gaithersburg, MD 20899-8520, U.S.A.  
winnie.wong-ng@nist.gov

## Calendar of Meetings and Workshops Editor

Gang Wang  
Institute of Physics  
Chinese Academy of Sciences  
No. 8 Nanshanjie, Zhongguancun, Haidian District,  
Beijing 100190,  
China  
gangwang@iphy.ac.cn

On the Cover: This Issue's cover shows three Figures from the manuscript "Evolution in the structure of akaganeite and hematite during hydrothermal growth: An *in situ* synchrotron X-ray diffraction analysis" by Kristina M. Peterson, Peter J. Heaney and Jeffrey E. Post. Their paper reports the temperature-time resolved studies of hydrothermal precipitation of akaganeite (b-FeOOH) as it is precipitated and then transformed to hematite (Fe<sub>2</sub>O<sub>3</sub>) using time resolved synchrotron X-Ray diffraction as a function of temperature.

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