

## Research Topics

The topics listed here represent research undertaken during the year. For further details on any area, please contact the authors directly, or write to Linda Clutter, 100 Bureau Drive Stop 8562, Gaithersburg, MD 20899-8562

### Materials Science

#### A New Phase of Silver Fluoride?

R. Harlow<sup>39</sup>

#### A Ring/Plug Reference Specimen for Residual Stress Measurements

T. Gnäupel-Herold<sup>188</sup>, P. C. Brand<sup>98</sup>, D. Balzor<sup>105</sup>, A. V. Clark<sup>105</sup> and H. J. Prask<sup>98</sup>

#### Acid Sites in Zeolite ZSM-5

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#### Aerogels Investigated by SANS with Contrast Masking Solutions

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#### Amorphous Content Determination Methodology

J. K. Stalick<sup>98</sup>, R. Senesi<sup>142</sup> and B. Toby<sup>98</sup>

#### A Structural Study of the Ruddlesden-Popper Calcium Manganate $\text{Ca}_4\text{Mn}_3\text{O}_{10}$

M. Greenblatt<sup>135</sup> and I. Fawcett<sup>135</sup>

#### Ceramic Mixed Conducting Membrane Materials

H. Prask<sup>98</sup> and E. Drescher-Krasicka<sup>106</sup>

#### Characterization of Microcracking in Iron Titanate by SANS

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#### Characterization of Standard Reference Specimens for Residual Stress Measurements as Part of VAMAS

T. Gnäupel-Herold<sup>188</sup>, P. C. Brand<sup>98</sup>, H. J. Prask<sup>98</sup> and G. A. Webster<sup>57</sup>

#### Charge, Orbital and Magnetic Ordering in the Manganate Perovskites

P. Woodward<sup>20</sup> and T. Vogt<sup>20</sup>

#### Chemical Ordering in Ni-Mn-Ga Heusler Alloys

R. Overholser<sup>188</sup>, M. Wuttig<sup>188</sup> and D. A. Neumann<sup>98</sup>

#### SANS from Oil Bearing Sedimentary Rocks

A. Radlinski<sup>13</sup> and G. Wignall<sup>115</sup>

#### Comparison of Residual Stress Measurement Techniques

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#### Complex Oxide Structures

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#### 'CONV' and 'STRESS': New Codes for Data Reduction in Neutron Diffraction Residual Stress Measurements

P. C. Brand<sup>98</sup> and T. Gnäupel-Herold<sup>188</sup>

#### CPD Round Robin on Quantitative Phase Analysis

J. K. Stalick<sup>98</sup>

#### Crystal Chemistry of Protonic Centers in Zeolites

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#### Determination of Residual Stresses in an Al plate for Helicopter Applications

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#### Fast Ion Conductors

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#### Hydrogen Location in Graphite Nano-Fibers

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#### Identification Of A Hydrogen-Induced Tetragonal Phase In $\text{Ti}_{1-x}\text{Al}_x\text{Nb}_2\text{Cr}$ Alloys.

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#### **Quality Assurance Improvements for NAA**

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#### **Quality Assurance Programs**

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#### **Reactor Characterization for NAA**

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