

Personal

Name: JOHNSON, Jacqueline Anne
Address: The University of Tennessee Space Institute, Tullahoma, TN 37388-9700
Telephone: 931-393-7474
Fax: 931-393-7530
Email: jjohnson@utsi.edu

Education

1978-84 University of Liverpool
1981 B.Sc. (Hons.) Physics; 1st class.
1985 Ph.D. in Physics.
Thesis Title: Mössbauer spectroscopic studies of linear and non-linear magnetic excitations in crystals.
This included the experimental study of spin waves, solitary excitations, and superparamagnetism at low temperatures and high magnetic fields.
1988-89 City and Guilds Further and Adult Education Teachers Certificate.
1990-91 Certificate in Education (Post 16).

Professional Organizations

1993 Institute of Physics (UK), Fellow, C.Phys., Treasurer USA, IOP
1995 Institute of Water and Environmental Management
2000 American Crystallographic Society - Amorphous Materials Group Chair
2000- Materials Research Society Member
2000 American Physical Society Member
2000- American Ceramic Society Fellow

Appointments

1991-95 Associate Professor, Engineering, Liverpool John Moore's University.
1993-95 Adjunct Professor, Department of Physics, University of Liverpool.
1995-99 Scientist in Material Science Division, Argonne National Laboratory, USA.
1999-01 Assistant Division Director, Material Science Division at Argonne National Laboratory, USA.
2001-2007 Scientist, Energy Technology, Argonne National Laboratory, USA.
2007- Associate Professor, University of Tennessee Space Institute, Tullahoma, USA.
2007- Special Term Appointee, Nuclear Engineering Division, Argonne National Laboratory, USA.

Awards

2007	R & D 100 award
2010	Who's Who in America
2011	Patent: #, US 8,008,642: Computed Radiography System for Mammography
2011	Fellow of the Institute of Physics
2013	Fellow of the American Ceramic Society
2014	Research Fellowship UTK

Research Grants

1995	Engineering and Physical Sciences Research Council, \$190K. Mössbauer Measurements of Tin in Float Glass
1995	Liverpool John Moore's University Research Funding Application, \$40K Tin-Diffused and Tin-Coated Glass Surfaces
1995	Pilkington Glass PLC, \$100K Mössbauer Measurements of Tin in Float Glass
2002	Department of Energy-Cooperative Research and Development Agreement, \$60K Glass Design for High Energy Density Lasers
2002	Laboratory Directed Research and Development, \$15K Scratch-resistant coatings
2002	Department of Energy- Tribological Consortium Glue Money, \$20K
2003-05	National Institutes of Health-Improvements in Imaging Methods and Technologies, \$482K Advanced High-Resolution Two-dimensional X-ray Detector
2003-05	Laboratory Directed Research and Development, \$300K Advanced High-Resolution Two-dimensional X-ray Detector
2004	Department of Energy -Small Business Technology Transfer Research, \$96K Extended lifetime neutron chopper system
2004	Department of Energy, \$150K Grain rotation during deformation
2006	Laboratory Directed Research and Development, \$366K Anti-Thrombogenic Coatings for Caridovascular Implants
2006	Laboratory Directed Research and Development, \$75K Super solar cell efficiency using up- and down-conversion in fluorozirconate glass ceramics.
2006	Department of Energy-Cooperative Research and Development Agreement, \$50K Combined X-ray/Neutron/Gamma Detector.
2006	DoD, GaSb polishing project, 600K
2007	Advanced Multijunction Solar Cell & Concentrator System Development for DoD Terrestrial and Space Applications, 100K
2007	Laboratory Directed Research and Development, \$195K Superslick anti-fog transparent coating for broncoscope.
2007	Startup Funding UTSI, \$75K

- 2008 NIH, BMIT, \$1,768,879 (2008-\$534,671); (2009-\$492,857); (2010-\$376,385); (2011-\$364,766) No cost extension until 07/31/2013
Advanced High-Resolution Two-Dimensional X-ray Detector for Mammography
- 2008 NIH, SBIR subcontract, \$24,999
Nanophase Glass Ceramic X-ray Imaging Materials.
- 2009 DOE – EERE, \$1M - *Money had to stay at Argonne – pay me as a consultant for synthesis and characterization.
Dual Purpose Advanced Heat Transfer Fluids with Enhanced Thermal Properties and Thermal Energy Storage Capabilities.
- 2010 NSF SBIR Project 1013481, Ultool, \$100,000 (\$12,000 to UTSI).
Environmentally-benign High-Rate Deposition of Alloy Coatings for Electrolytic Hard Chrome Replacement.
- 2010 NSF, DMR, Award # 1001381 \$289,108
Study of the Evolution of Nanoparticle Crystallization and Optical Properties in Glass Ceramics.
- 2010 NIH, SBIR Phase II 261201000113C-0-0-1, MDI, \$998,000 (\$30,000 to UTSI). No cost extension until 08/31/2013
Nanotechnology Imaging and Sensing Platforms for Improved Diagnosis of Cancer.
- 2012 NSF, DMR, Award # 1001381 \$6,111 *Supplement to 2010 NSF grant for workshop participation at NSF headquarters.
Study of the Evolution of Nanoparticle Crystallization and Optical Properties in Glass Ceramics.
- 2013 DOE Y12, \$300,000 Large Area, High Resolution Storage Phosphor Detectors for High Energy (MeV) Digital Radiography.
- 2013 NIH NIDCR, \$138,392, Advanced Image Plates for Dental X-ray Diagnostics.

Conferences and Symposia organized

- 2000 Battery Materials: American Crystallographic Association.
Minneapolis, USA
Supported by NIST (\$1.5K), PRF (\$2K), NSF (\$2K), ACA (\$2K), NASA (\$2K)
- 2002 International Focused Workshop: Materials in Extreme Environments.
Denali National Park, USA
Supported by NSF (\$63K)
- 2002 New Directions in Glass Structure and Dynamics.
Pittsburgh, USA
Supported by ACA (\$1K), AcerS (\$1K), NSF (\$11K)
- 2005 Low Friction Coatings on Glass and Ceramics.
Baltimore, USA
Supported by ACerS (\$1.8K), NSF (\$5.5), NIH (\$5.2K)
- 2008 Career Options, 2nd International Congress on Ceramics
Verona, Italy

2008	Session chair, American Society of Mechanical Engineers Boston, USA
2009	Panel Member, American Society of Mechanical Engineers San Francisco, USA
2011	Session chair, American Vacuum Society Nashville, USA
2014	Advisory Board for Brain Tumors: Biology & Therapy Meeting Stockholm, Sweden
2016	Scientific Organizing Committee PNCS XIV Niagara Falls, USA

Award Committees

Committee Member for the Selection of the Warren Award Recipient for the American Crystallographic Association (2002).

Poster judge for the Glass and Optical Materials Division (ACerS) Annual Meeting (May 2006).

Alfred R. Cooper Award nominations committee (ACerS) 2012-2015

Poster judge for the Institute of Biomedical Engineering (iBME) symposium, Knoxville (April 2014).

Editorial Boards

Editorial Board of International Scholarly Research Notices (ISRN)

Editorial Board for ScienceJet Journal

Editorial Board for Journal of Biomedical Technology and Research, Elyns Publishing Group

Advisory Board for Brain Tumors: Biology & Therapy Journal

Editor-in-chief/organizing committee member for International Journal of Aeronautical Science & Aerospace Research (IJASAR).

Conference Committees

Local Organizing Committee, Applied Diamond Conference, ANL (May 2005).

International Program Committee (IPC) for the IASTED International Conference on Solar Energy (SOE 2010) Banff, Canada (July 2010).

International Program Committee (IPC) for the IASTED International Conference on Power and Energy Systems and Applications (PESA 2011) Pittsburg, USA (November 2011).

Organizing Committee, Physics of Non-Crystalline Solids (PNCS) XIV, Niagara Falls, USA (2016).

Federal Funding Review Panels

NSF Panel for the Division of Materials Research, Washington, DC (February 2003).

Panelist to Review the Materials Research Science and Engineering Center at Cornell University (April 2003).

NIH Panel for the Division of Biomedical Imaging and Bioengineering, Washington DC (October 2003).

NSF Panel for the Division of Materials Research, Washington, DC (February 2004).

NSF Panel for the Division of Materials Research, Washington, DC (January 2005).

NSF Panel for the Division of Materials Research, Washington, DC (January 2006).

NIH Panel for the Small Business Medical Imaging Study Section, Washington DC, (October 2006).

NIH Panel for the Biomedical Imaging Study Section (BMIT), San Diego, CA (February 2007).

NIH Panel for the Small Business Medical Imaging Study Section, Washington DC, (October 2007).
NIH Panel for the Small Business Medical Imaging Study Section, San Diego, CA (February 2008).
NIH Panel for the Small Business Medical Imaging Study Section, Washington DC (June 2008).
NIH Panel for the Biomedical Imaging Study Section (BMIT), Dana Point, CA (February 2009).
NSF Panel for MRI/IMR (Major Research Instrumentation and Instrumentation for Materials Research), Washington, DC (May 2009).
NIH Panel for the Small Business Medical Imaging Study Section, Washington, DC (June 2009).
Proposal Reviewer for Italian Ministry of Health (September 2009).
NSF Panel for MRI-R²/IMR (Major Research Instrumentation and Instrumentation for Materials Research), Washington, DC (October 2009).
NIH Panel for the Small Business Medical Imaging Study Section, Washington, DC (October 2009).
NIH Panel for the Small Business Medical Imaging Study Section, San Diego, CA (February 2010).
Reviewer for Lytmos/Florida Department of Health (2010).
NIH Panel for the Small Business Medical Imaging Study Section, Washington, DC (June 2010).
NSF Panel for MRI (Major Research Instrumentation), Washington, DC (June 2010).
Proposal Reviewer for Italian Ministry of Health (September 2010).
NIH Panel for the Small Business Medical Imaging Study Section, Santa Monica, CA (February 2011).
NSF Panel for MRI (Major Research Instrumentation), Washington, DC (May 2011).
NIH Panel for the Small Business Medical Imaging Study Section, Washington, DC (June 2011).
NIH Panel for the Small Business Medical Imaging Study Section, Washington, DC (October 2011).
Reviewer for RFA CA 11-011 and 012 Research Answers to Provocative Questions
NIH Panel for the Small Business Medical Imaging Study Section, Los Angeles (February 2012).
Proposal Reviewer – Romanian Research Council
NIH Panel for the Small Business Medical Imaging Study Section, Washington, DC (October 2012).
NIH Panel for the Small Business Medical Imaging Study Section, Los Angeles (February 2013).
Scientific Advisory Board, SNS/HFIR, Oak Ridge National Laboratory (2013-2016).
Reviewer for the Defense Threat Reduction Agency (DTRA) (April 2013).
Reviewer for the Ministry of Business, Innovation & Employment (MBIE), New Zealand (April 2013).
Reviewer for the National Institute of Standards and Technology (NIST), Center for Neutron Research (May 2013).
Reviewer for Smart and Connected Health (NSF/NIH) (August 2013).
NIH Panel for the Small Business Medical Imaging Study Section, Los Angeles (February 2014).
NSF Panel for MRI (Major Research Instrumentation), Washington, DC (May 2014).
Scientific Advisory Board, SNS/HFIR, ORNL, Disordered Materials Committee co-Chair (April 2014).
Reviewer for the National Institute of Standards and Technology (NIST), Center for Neutron Research (March 2014).

Thesis Committees

Doctoral Thesis Committee, Kyle Williams, Liverpool University (1995)
Doctoral Thesis Committee, Paul Appleyard, Liverpool University (2000)
Doctoral Thesis Committee, Jackson Hu, Monash University, Australia (2005).
Master's Thesis Committee, Deepak Rajput, UTSI (2008).
Master's Thesis Committee, Lee Leonard, UTSI (2010).
Master's Thesis Committee, Manh Vu, UTSI (2011).

Master's Thesis Committee, Sharon Gray, UTSI (2012).
Master's Thesis Committee, Chris Foerster, UTSI (2012).
Doctoral Thesis Committee, Michel Akiki, UTSI (2012).
Doctoral Thesis Committee, Lee Leonard, UTSI (2012).
Doctoral Thesis Committee, Carlos Alvarez, Northwestern University (2012).
Master's Thesis Committee, Ahmad Algohary, UTK (2013).

Argonne National Laboratory Committees

Strategic Planning Retreat for the Advanced Photon Source, Geneva, WI (August 2004).
Outreach Committee, Argonne National Laboratory, IL (from October 2005).
Named Postdoctoral Committee, Argonne, IL (November 2005).
Reviewer for Laboratory Direct Research Directorate (LDRD) Argonne National Laboratory (2012).
Reviewer for Laboratory Direct Research Directorate (LDRD) Argonne National Laboratory (2013).

UTSI/UTK Committees

Search Committee for new faculty positions in Materials Science and Engineering at UTSI (2007-2008).
UTSI Fellowship Selection Committee (2007 - 2010).
Vision and Mission Statement Committee, UTSI (July – Sep 2008).
Strategic Goal II - Increasing Research Funding Dollars Committee, UTSI, 2008.
Strategic Planning Committee, UTSI (2009).
Committee for Student Affairs, UTSI (2009).
UTSI Nominations Committee (2010 - present)
Student recruiting leader for UTSI from FY 2010 -2011.
UTSI Faculty Search Committee member: Flow-Structure Interactions, 2011.
Search Committee, Information Technology Administrator, UTSI, 2012.
Search Committee, Department Head, MABE, UTK/UTSI, 2013.
Faculty Proposal Review Committee, 2013 onwards.
Search Committee, H. H. Arnold Chair, MABE, UTK/UTSI, 2013.
UTSI Graduate Admissions and Recruiting Committee, 2013.
Search Committee: AE faculty, Flight Test Engineering, 2013.

Consultancies

Pilkington Glass (1992).
Bewater Europe (1994).
Lord Bissell Brook (2001).

Book Reviews

The Ecology of Biological Sewage Treatment Processes (1994).
Chapman and Hall Publishers.
Review for book proposal "Nano-Glass Ceramics"; Micro and Nanotechnology books, Elsevier (2014).

Journal Reviewer

Carbon; Materials Research Bulletin; Physics and Chemistry of Glasses; Nuclear Instrumentation and Methods; Physics Status Solidi; Materials Chemistry and Physics; Journal of the American Ceramic Society; Journal of Sensors; PloS One; ASME Journal of Tribology; Surface and Coatings Technology; Wear; Hypertension; Applied Physics Letters; Optical Materials; Applied Optics; British Journal of Medicine and Medical Research

Career Break

I was not conducting research in the years 1985 - 1993 or 1999 - 2001.

As an Instrument Scientist there is also limited time for research, 1995 - 1997.

Experience

High Baird Further Education College

Predominantly a teacher to adults returning to education - a great experience in imparting information in a way that it can be clearly understood.

Liverpool John Moores University

Taught a variety of undergraduate degree courses in physics, mathematics, and engineering, along with laboratory classes. I also supervised undergraduate students for final year projects.

University of Liverpool (Adjunct position)

Supervised two graduate students, namely Kyle Williams – graduated, 1995; Paul Appleyard – graduated, 2000.

Argonne

Regularly supervised graduate and postgraduate students.

University of Tennessee Space Institute (current position)

Graduate students - Lee Leonard, Manh Vu, Sharon Gray, Christian Foerster, Jason Hah, Julie King, Michelle Wharton.

Courses

Course: 576 Special Topic: Nanomaterials, Nanostructures, and Nanosensors – Spring 2008

Course: 576 Special Topic: Physics of Thin Films – Fall 2008

Course: 676 Special Topic: Luminescent Materials – Spring 2009

Course: 676 Special Topic: All Things Carbon – Fall 2009

Course: 474/578 Biomaterials – Spring 2010

Course: 512 Fundamentals of Materials Science and Engineering IV – Fall 2010

Course: 511 Fundamentals of Materials Science and Engineering I – Spring 2011

Course: 503 Seminar – Spring 2011

Thin Film Lecture Series - University of the South, Sewanee, TN – Spring 2011

Course: 610 Biomedical Imaging – Fall 2011

Course: 595 Biomedical Engineering Seminar – Fall 2011

Course: 610 Biofunctionalization of Nanomaterials – Spring 2012

Course: 595 Biomedical Engineering Seminar – Spring 2012

Course: 599 Data Interpretation for Engineers I – Fall 2012

Course: 590 Selected Problems in Biomedical Engineering – Fall 2012

Course: 595 Biomedical Engineering Seminar – Fall 2012

Course: 595 Biomedical Engineering Seminar – Spring 2013

Course: 610 Mechanics for Dental Materials – Spring 2013

Course: 599 Data Interpretation for Engineers II – Summer 2013

Course: 610 Luminescent Materials – Fall 2013

Course: 595 Biomedical Engineering Seminar – Fall 2013

Course: 610 Biomedical Imaging – Spring 2014

Course: 595 Biomedical Engineering Seminar – Spring 2014

Recruiting Presentations

Tennessee Technical University, Cookeville TN, 09/23/2010

East Tennessee State University, Johnson City TN, 09/27/2010

University of the South, Sewanee TN, 09/28/2010

Coe College, Cedar Rapids IA, 10/05/2010

Berea College, Berea KY, 10/08/2010

King College, Bristol TN, 10/11/2010

Middle Tennessee State University, Murfreesboro TN, 10/28/2010

Christian Brothers University, Memphis TN, 11/02/2010

Memphis University, Memphis TN, 11/03/2010

Rhodes College, Memphis TN, 11/04/2010

Union University, Memphis TN, 11/05/2010

Western Carolina University, Cullowhee NC, 01/28/2011

Tennessee State University, Nashville TN, 02/15/2011

Centre College, Danville KY, 03/02/2011

Mississippi University, Oxford TN, 03/10/2011

Western Kentucky University, Bowling Green KY, 04/01/2011

University of the South, Sewanee TN, 11/16/2011

Austin Peay, Clarksville TN, 02/02/2012

Xavier University, New Orleans LA, 03/01/2012

University of North Georgia, Dahlonega GA, 09/18/2013

University of Alabama, Huntsville AL, 03/18/2014

Publications

1. A Mössbauer study of the variation in Néel temperature in iron-rare earth layer compounds.
J.A. Birch (now Johnson) and M.F. Thomas
J. Mag. Mag. Mat. **36**, 141-50 (1983).
2. A Mössbauer effect study of the magnetic phase diagram and spin wave excitations in the antiferromagnet $\text{Cs}_2\text{FeCl}_5\cdot\text{H}_2\text{O}$.
J.A. Johnson, C.E. Johnson, and M.F. Thomas.
J. Phys. C: Solid State Physics **20**, 91-109 (1987).
3. Phase transitions in doped antiferromagnets.
J. Chadwick, D.H. Jones, J.A. Johnson, C.E. Johnson, and M.F. Thomas.
Hyperfine Int. **42**, 1039-42 (1988).
4. Magnetic behavior of the doped antiferromagnet $\text{K}_2\text{Fe}_{1-x}\text{Ga}_x\text{F}_5$.
J. Chadwick, D.H. Jones, J.A. Johnson, C.E. Johnson, and M.F. Thomas.
J. Phys.: Condens. Matter **1**, 6731-6744 (1989).
5. Tin silicate glasses.
D. Holland, M.M. Karim, C.E. Johnson, K. Williams, and J.A. Johnson.
Fundamentals of Glass Science and Technology, Supp. to Revista della Stazione Sperimentale del Vitro, **XXIII**, 223-228 (1993).
6. Mössbauer spectra of tin in float glass.
J.A. Johnson, C.E. Johnson, K. Williams, D. Holland, and M.M. Karim.
Hyperfine Interactions **95** (1-4), pp 41-51 (1993).
7. A novel high efficiency plant for oxygen transfer.
J.A. Johnson, C. Dyson, and D.A. Phipps.
Water Pollution III: Modeling, Measuring and Prediction, pp 347-354 (1995).
Computational Mechanics Publications.
8. Mössbauer spectra of tin in binary Si-Sn oxide glasses.
K.F.E. Williams, C.E. Johnson, J.A. Johnson, D. Holland and M.M. Karim.
J. Phys.:Condens. Matter **7**, 9485-9497 (1995).
9. Home Energy Performance Fails to Meet Objectives.
J.A. Johnson.
The Natural Environment: Interdisciplinary Views, pp 130-138 (1995).
10. Tin oxidation state, depth profiles of Sn^{2+} and Sn^{4+} and oxygen diffusivity in float glass by Mössbauer spectroscopy.
C.E. Johnson, K.F.E. Williams, J. Greengrass, B.P. Tilley, D. Gelder and J.A. Johnson.
Journal of Non-crystalline Solids **211** 164-172 (1997).
11. Oxidation states of tin and iron in clear and tinted float glass by Mössbauer spectroscopy.
K. Williams, M.F. Thomas, C.E. Johnson, J. Greengrass, B. Tilley, and J.A. Johnson.
Fundamentals of Glass Science and Technology, pp 127-134 (1997).
12. Determination of the sign of the quadrupole coupling constant (e^2qQ) of Sn^{2+} in silicate glasses by Mössbauer spectroscopy.

- P. Appleyard, J.A. Johnson, C.E. Johnson, M.F. Thomas, D. Holland and A. Sears.
J. Phys: Condens. Matter **9**, 7477-7483 (1997).
13. Polyselenides and their radical ions.
A. J. Goldbach, J. A. Johnson, M. L. Saboungi, L. A. Curtiss, A. R. Cook and D. Meisel.
Abstracts of papers of the American Chemical Society **213** Phys. Part: 2 146 (1997).
 14. Identification and characterization of polyselenides and their radical ions.
A. J. Goldbach, J. A. Johnson, M. L. Saboungi, L. A. Curtiss, A. R. Cook and D. Meisel.
IS&T 50th Annual Conference, final program and proceedings, Page 63 (1997).
 15. Characterization of the tin at the surface of float glass.
K.F.E. Williams, C.E. Johnson, O. Nikolov, M.F. Thomas, J.A. Johnson, and J. Greengrass.
Journal of Non-crystalline Solids **242**, 183-188 (1998).
 16. Atomic structure of solid and liquid polyethylene oxide.
J.A. Johnson, M.L. Saboungi, D.L. Price, S. Ansell, T. Russell, J.W. Halley and B. Nielsen.
J. Chem. Phys. **109** (16) 7005-7010 (1998).
 17. Selenium nanoparticles: A small angle neutron scattering study.
J.A. Johnson, M.L. Saboungi, P. Thiyagarajan, and R. Csencsits.
Journal of Physical Chemistry B **103**(1) 59-63 (1999).
 18. Transition metal ions in ternary sodium silicate glasses, a Mössbauer and neutron study.
J.A. Johnson, C.E. Johnson, D. Holland, A. Mekki, P. Appleyard and M.F. Thomas.
Journal of Non-Crystalline Solids **246**, 104-114 (1999).
 19. On the constituents of Aqueous Polyselenide Electrolytes: A Combined Theoretical and Raman Spectroscopic Study.
A. Goldbach, J. Johnson, D. Meisel, L.A. Curtiss and Marie-Louise Saboungi,
Journal of the American Chemical Society Vol. **121**, 18, 4461-4467, (1999).
 20. The structure of sodium iron silicate glass - a multi-technique approach.
D. Holland, A. Mekki, I. Gee, C.F. McConville, J. A. Johnson, C.E. Johnson, P. Appleyard, and M.F. Thomas.
Selected paper given at *Int. Congress on Glass: ICG98* San Francisco, July 1998.
Journal of Non-Crystalline Solids **253**, 192-202 (1999).
 21. Tin and iron in float glass surfaces.
K.F.E. Williams, M.F. Thomas, C.E. Johnson, J.A. Johnson, and J. Greengrass.
Proceedings of the Int. Congress on Glass: ICG98, San Francisco, July 1998, (CD-ROM) **B7**, 29-35 (1999).
 22. Ternary alkali stannosilicate glasses: A Mössbauer and neutron study.
J.A. Johnson, C.E. Johnson, D. Holland, A. Sears, J.F. Bent, P. Appleyard, M.F. Thomas, and A.C. Hannon.
Journal of Physics: Condensed Matter **12**, 213-230 (2000).
 23. Oxidation of aqueous polyselenide solutions: A mechanistic pulse radiolysis study.
A. Goldbach, M.L. Saboungi, J.A. Johnson, A.R. Cook, and D. Meisel.
Journal of Physical Chemistry A **104** (17), 4011-4016 (2000).

24. Magneto-optic Kerr effect investigation of cobalt and permalloy nanoscale dot arrays: Shape effects on magnetization reversal.
J.A. Johnson, V. Metlushko, P. Vavassori, M. Grimsditch, B. Ilic, P. Neuzil, R. Kumar.
Applied Physics Letters **77** (26), 4410-4412 (2000).
25. Thermally poled silica samples are structurally heterogeneous: Electron diffraction evidence of partial crystallization.
C. Cabrillo, F.J. Bermejo, J.M. Gibson, J.A. Johnson, D. Faccio, V. Pruneri, and P.G. Kazansky.
Applied Physics Letters **78** (14), 1991-1993 (2001).
26. Magnetic stability of nano-particles: The role of dipolar instability pockets.
M. Grimsditch, A. Berger, J.A. Johnson, V. Metlushko, B. Ilic, P. Neuzil, and R. Kumar.
Europhys. Lett. **54** (6), 813-819 (2001).
27. Tin germanate glasses.
D. Holland, M.E. Smith, I.J.F. Poplett, J.A. Johnson, M.F. Thomas, and J. Bland.
Journal of Non-Crystalline Solids **293-295**, 175-181 (2001).
28. Cation coordination in oxychloride glasses.
J. A. Johnson, D. Holland, J. Bland, C. E. Johnson and M. F. Thomas.
J. Phys: Condensed Matter. **15** (6), 755-764 (2003).
29. Near-surface characterization of amorphous carbon films by neutron reflectivity.
J. A. Johnson, J. B. Woodford, A. Erdemir and G. R. Fenske.
Applied Physics Letters **83** (3), 452-454 (2003).
30. Structure of oxychloride glasses by neutron and x-ray difference and XPS.
J. A. Johnson, D. Holland, J. Urquidi, I. A. Gee, C. J. Benmore and C. E. Johnson.
J. Phys: Condensed Matter. **15** (27), 4679-4693 (2003).
31. Site symmetry in binary and ternary tin silicate glasses – ^{29}Si and ^{119}Sn NMR.
D Holland, R. Dupree, A. Howes, J. A. Johnson and C. E. Johnson.
J. Phys: Condensed Matter. **15**, S2457-S2472 (2003).
32. Insights into near-frictionless carbon films.
J. A. Johnson, J. B. Woodford, X. Chen, J. Anderson, A. Erdemir and G. R. Fenske.
Journal of Applied Physics **95** (12), 7765-7771 (2004).
33. Insights into near-frictionless carbon films.
J. A. Johnson, J. B. Woodford, X. Chen, J. Anderson, A. Erdemir, and G. R. Fenske.
Virtual Journal of Nanoscale Science and Technology **9**, 24 (2004).
34. Fluctuation microscopy studies of medium-range order structures of near frictionless carbon films.
Xidong Chen, Jacqueline Johnson, Jon Hiller, and Zhongyi Liu.
Microsc. Microanal. **10** (suppl. 2), 798 (2004).
35. Interpretation of the Raman spectra of ultrananocrystalline diamond.
James Birrell, J. E. Gerbi, O. Auciello, J. M. Gibson, J. Johnson, and J. A. Carlisle.
Diamond and Related Materials **14** 86 (2005).

36. Mössbauer spectroscopy as a probe of silicate glasses.
J. A. Johnson and C. E. Johnson.
J. Phys.: Condensed Matter **17**, R381-R412 (2005).
37. X-ray studies of near-frictionless carbon films.
Nikhil J Mehta, Sujoy Roy, Jacqueline Anne Johnson, John Woodford, Alexander Zinovev, Zahirul Islam, Ali Erdemir, Sunil Sinha, George Fenske and Barton Prorok.
Mater. Res. Soc. Symp. Proc. **843**, T2.7.1 (2005).
38. Thermal and mechanical properties of rare earth aluminate optical glasses.
J.A. Johnson, R. Weber, and M.H. Grimsditch.
Journal of Non-Crystalline Solids **351** (8-9), 650-655 (2005).
39. Temperature dependence of tribological characteristics of DLC film.
G.H. Xu, H. Liang, J. Woodford, J.A. Johnson and D. Yang.
J. Am. Ceram. Soc. **88** (11) 3110-3115 (2005).
40. ZBLAN-based X-ray storage phosphors and scintillators for digital X-ray imaging.
Gang Chen, Jacqueline A. Johnson, Richard Weber, Stefan Schweizer, Douglas MacFarlane, John Woodford, and Francesco De Carlo.
Proc. SPIE: Physics of Medical Imaging, **5745**, 1351-58 (2005).
41. A surface analytical study of the effects of water and oxygen on tribological behavior of DLC films.
Osman Eryilmaz, Ali Erdemir, Jacqueline Johnson, Nikhil J Mehta, and Barton Prorok.
Proceedings of the World Tribology Congress (2005).
42. Structures and visco-elastic properties of potassium tellurite: Glass vs. melt.
J. Kieffer, J. A. Johnson, and J. D. Bass
J. Phys.: Condens. Matter **18** 903-914 (2006).
43. Fluorozirconate-based nanophase glass ceramics for high-resolution medical x-ray imaging.
G. Chen, J. Johnson, R. Weber, R. Nishikawa, S. Schweizer, P. Newman, and D. MacFarlane.
J. Non. Cryst. Sol. **352** (6-7) 610-614 (2006).
44. Deposition, characterization, and tribological applications of near-frictionless carbon films on glass and ceramic substrates.
O. L. Eryilmaz, J. A. Johnson, O. O. Ajayi, and A. Erdemir.
J. Phys.:Condensed Matter **18** S1751-S1762 (2006).
45. Transparent BaCl₂:Eu²⁺ glass-ceramic scintillator.
Gang Chen, Jacqueline A. Johnson, Francesco De Carlo, Richard Weber, Stefan Schweizer, Peter Newman, and Douglas MacFarlane.
Proc. SPIE: Physics of Medical Imaging, **6142**, 2X (2006).

46. Energy-dependent scintillation efficiency of fluorozirconate-based glass-ceramic x-ray detectors.
Stefan Schweizer, Stephanie Köneke, Gang Chen, Jacqueline A. Johnson, Francesco De Carlo, and Richard Weber.
Proc. SPIE: Physics of Medical Imaging, **6142**, 2Y (2006).
47. Insights into phase formation in fluorochlorozirconate glass-ceramic storage phosphors.
Gang Chen, Jacqueline Johnson, Stefan Schweizer, and John Woodford.
Applied Physics Letters **88** 191915 (2006).
48. Eu-activated fluorochlorozirconate glass-ceramic scintillators.
J. A. Johnson, S. Schweizer, B. Henke, G. Chen, J. Woodford, P. J. Newman, and D. R. MacFarlane.
J. App. Phys. **100**, 034701 (2006).
49. Top-surface characterization of a near frictionless carbon film.
Jacqueline A. Johnson, Diane Holland, John B. Woodford, Alexander Zinovev, Ian A. Gee, Osman L. Eryilmaz, and Ali Erdemir.
Diamond and Related Materials **16** 209 (2007).
50. Fluorozirconate-based glass ceramics x-ray detectors for digital radiography.
S. Schweizer and J. A. Johnson.
Radiation Measurements **42**, 632 (2007).
51. A Glass-Ceramic Plate for Mammography.
J. A. Johnson, S. Schweizer, and A. R. Lubinsky.
J. Am. Ceram. Soc. **90**, 693 (2007).
52. Oxidation and Removal Mechanisms during Chemical-Mechanical Planarization
D. Ng, M. Kulkarni, J. Johnson, A. Zinovev, D. Yang, and H. Liang
Wear **263** 1477 (2007).
53. Complementary Neutron and X-ray Reflectivity Studies of Near-Frictionless Carbon Films.
Jacqueline. A. Johnson, Sungkyun Park, Sujoy Roy, Sunil K. Sinha, Ali Erdemir, Osman L. Eryilmaz, and John B. Woodford.
J. Appl. Phys. **101** 103538 (2007).
54. Zr and Ba edge phenomena in the scintillation intensity of fluorozirconate-based glass-ceramic x-ray detectors.
Bastian Henke, Stefan Schweizer, Jacqueline A. Johnson, and Denis T. Keane.
J. Sync. Rad. **14**, 252 (2007).
55. Structural order in near-frictionless diamond-like carbon films probed at three different length scales in the transmission electron microscope.
A. C. Y. Liu, R. Arenal, D. J. Miller, Xidong Chen, J. A. Johnson, O. L. Eryilmaz, A. Erdemir, and John B. Woodford
Phys. Rev. B **75**, 205402 (2007).
56. Deformation Behavior and Joining of an MgF₂ Optical Ceramic.
C. Lorenzo-Martin, D. Singh, J. Johnson, and J. L. Routbort.
J. of the Euro. Cer. Soc. **27** 3371 (2007).

57. Fluorozirconate-based glass-ceramic storage phosphors for digital mammography.
Stefan Schweizer, Anthony R. Lubinsky, and Jacqueline A. Johnson.
Proc. SPIE: Physics of Medical Imaging **6510** 46 (2007).
58. Strontium Environment Transition in Tin Silicate Glasses by Neutron and X-ray Diffraction.
Jacqueline A. Johnson, Jacob Urquidi, Diane Holland, Charles Johnson, and Paul Appleyard.
J. Non. Cryst. Sol. **353** 4084 (2007).
59. Structural and optical investigations of Nd-doped fluorozirconate-based glass ceramics for enhanced upconverted fluorescence.
Bernd Ahrens, Christian Eisenschmidt, Jacqueline A. Johnson, Paul T. Miclea and Stefan Schweizer.
App. Phys. Lett. **92** 061905 (2008).
60. Enhanced up-converted fluorescence in fluorozirconate based glass ceramics for high efficiency solar cells.
Bernd Ahrens, Bastian Henke, Paul T. Miclea, Jacqueline A. Johnson, and Stefan Schweizer.
Proc. SPIE: Photonics for Solar Energy Systems II **7002** 700206 (2008).
61. Paramagnetic hyperfine splitting in the ^{151}Eu Mössbauer spectra of $\text{CaF}_2:\text{Eu}^{2+}$.
J. Selling, B. Bielemeier, G. Wortmann, J.A. Johnson, E.E. Alp, Tsi-tsi Chen, D.E. Brown, C.E. Johnson, and S. Schweizer.
Phys. Rev. B. **77** 224442 (2008).
62. Carbon-hydrogen bonding in near-frictionless carbon.
J. A. Johnson, J. B. Woodford, D. Rajput, A. Kolesnikov, J. Schleuter, O. Eryilmaz, and A. Erdemir.
App. Phys. Lett. **93** 31911 (2008).
63. Glass Ceramics for High-Resolution Imaging.
Jacqueline A. Johnson, Stefan Schweizer, Alexander Kolesnikov, and Rick Weber.
Proceedings of ASME International Mechanical Engineering Congress and Exposition IMECE2008-66205 (2008).
64. Erbium- and chlorine-doped fluorozirconate-based glasses for up-converted fluorescence.
Bastian Henke, Bernd Ahrens, Paul T. Miclea, Jacqueline A. Johnson, and Stefan Schweizer.
J. Non. Cryst. Sol. **355** 1916 (2009).
65. A neutron diffraction study of nano-crystalline graphite oxide.
J. A. Johnson, C. J. Benmore, S. Stankovich, and R. S. Ruoff.
Carbon **47** 2239 (2009).
66. Crystallization in heat-treated ZBLAN glasses.
J. A. Johnson, J. K. R. Weber, A. I. Kolesnikov, and S. Schweizer.
J. Phys.: Condens. Matter **21** 375103 (2009).
67. Eu oxidation state in fluorozirconate-based glass ceramics.
B. Henke, C. Paßlick, P. Keil, J.A. Johnson, and S. Schweizer.
J. App. Phys. **106** 113501 (2009).
68. Upconverting glasses for high-efficiency solar cells.
Bastian Henke, Bernd Ahrens, Jacqueline A. Johnson, Paul-Tiberiu Miclea, and Stefan Schweizer.
SPIE Newsroom 10.1117/2.1200910.1811 <http://spie.org/x37778.xml?ArticleID=x37778> (2009).

69. In-situ TEM studies of tribo-induced bonding modifications in near-frictionless carbon films.
A. P. Merkle, A. Erdemir, O. L. Eryilmaz, J. A. Johnson, and L. D. Marks.
Carbon **48** 587 (2010).
70. Multi-functionality of fluorescent nanocrystals in glass ceramics.
B. Henke, C. Paßlick, P. Keil, J.A. Johnson, and S. Schweizer.
Radiation Measurements **45** 485 (2010).
71. Differential scanning calorimetry investigations on Eu-doped fluorozirconate-based glass ceramics.
C. Paßlick, B. Ahrens, B. Henke, J.A. Johnson, and S. Schweizer.
J. Non. Cryst. Sol. **356** 3085 (2010).
72. Saturation effects in the upconversion efficiency of Er-doped fluorozirconate glasses.
B. Henke, F. Pientka, J. A. Johnson, B. Ahrens, P. T. Miclea, and S. Schweizer.
J. Phys.: Condens. Matter **22** 155107 (2010).
73. Scanning translucent glass-ceramic x-ray storage phosphors.
A. R. Lubinsky, J. A. Johnson, S. Schweizer, J. K. R. Weber, R. M. Nishikawa, P. Domenicali and S. D. Fantone.
Proc. SPIE: Physics of Medical Imaging **7622**, 76223W (2010).
74. XANES studies on Eu-doped fluorozirconate based glass-ceramic x-ray detectors.
B. Henke, C. Paßlick, M. C. Wiegand, P. Keil, J. A. Johnson, and S. Schweizer.
Mater. Res. Soc. Symp. Proc. Vol. **1262**-W08-03 (2010).
75. Up- und Down-Konversion in Gläsern und Glaskeramiken für hocheffiziente Solarzellen.
S. Schweizer, B. Henke, B. Ahrens, C. Paßlick, P. T. Miclea, J. A. Johnson, J. Wenzel, E. Reisacher, and W. Pfeiffer. *Submitted to Symposium mit Ausstellung Zukunft Glas - von der Tradition zum High-Tech-Produkt. Ostbayerisches Technologie-Transfer-Institut e.V. – Regensburg, Montag, 22. März 2010 - Vielen Dank für Ihr Interesse.*
76. Progress on up- and down-converted fluorescence in rare-earth doped fluorozirconate-based glasses and glass ceramics for high efficiency solar cells.
Stefan Schweizer, Bastian Henke, Bernd Ahrens, Paul T. Miclea and Jacqueline A. Johnson
Proc. SPIE Photonics Europe: Photonics for Solar Energy Systems (Invited Paper) **7725** 77250X-1 (2010).
77. Glass-ceramic covers for highly efficient solar cells.
Christian Paßlick, Bastian Henke, Bernd Ahrens, Paul-Tiberiu Miclea, Johannes Wenzel, Eduard Reisacher, Wulf Pfeiffer, Jacqueline Anne Johnson and Stefan Schweizer.
SPIE Newsroom 10.1117/2.1201005.002938 <http://spie.org/x40453.xml?highlight=x2358&ArticleID=x40453> (2010).
78. Advances in up- and down-converted fluorescence for high efficiency solar cells using rare-earth doped fluorozirconate-based glasses and glass ceramics.
Christian Paßlick, Bastian Henke, István Császár, Bernd Ahrens, Paul-T. Miclea, Jacqueline A. Johnson and Stefan Schweizer.
Next Generation (Nano) Photonic and Cell Technologies for Solar Energy Conversion 7772: Art. No. 77720A (2010). *Proceedings of SPIE-The International Society for Optical Engineering.*

79. Rare-earth doped fluorozirconate-based glass ceramics for high efficiency solar cells: Recent developments. Stefan Schweizer, Bastian Henke, István Császár, Christian Paßlick, Bernd Ahrens, Paul T. Miclea, and Jacqueline A. Johnson.
25th European Photovoltaic Solar Energy Conference and Exhibition (25th EU PVSEC) and 5th World Conference on Photovoltaic Energy Conversion (WCPEC-5) (Feria Valencia, Spain, September 2010).
80. Time-resolved Investigations of Erbium Ions in ZBLAN Glasses and Glass Ceramics. U. Skrzypczak, M. Miclea, A. Stalmashonak, B. Ahrens, B. Henke, G. Seifert, J.A. Johnson, and S. Schweizer.
Phys. Status Solidi C, 1–4 (2011) / DOI 10.1002/pssc.201084131
81. Crystallization behavior of rare-earth doped fluorochlorozirconate glasses. C. Paßlick, B. Ahrens, B. Henke, J.A. Johnson and S. Schweizer.
J. Non. Cryst. Sol. **357** 2450 (2011).
82. Influence of rare-earth ions on $\text{SiO}_2\text{-Na}_2\text{O-RE}_2\text{O}_3$ glass structure. J. A. Johnson, C. J. Benmore, D. Holland, J. Du, B. Beuneu, and A. Mekki.
J. Phys.: Condens. Matter **23** 065404 (2011).
83. In-situ TEM studies of nanoparticle growth in a fluorozirconate (ZBLAN) glass matrix. M.Vu, C. Alvarez, Y. Liu, A.K. Petford-Long and J.A. Johnson.
Microsc. Microanal. **17(Suppl. 2)**, 496 (2011).
84. Structural properties of fluorozirconate-based glass ceramics doped with multivalent europium. C. Paßlick, O. Müller, D. Lützenkirchen-Hecht, R. Frahm, J.A. Johnson and S. Schweizer.
J. App. Phys. **110** 113527 (2011).
85. The oxidation state of europium in halide glasses. J.K.R. Weber, M. Vu, C. Paßlick, S. Schweizer, D.E. Brown, C.E. Johnson and J.A. Johnson.
J. Phys.: Condens. Matter **23** 495402 (2011).
86. Fifty years of Mössbauer Spectroscopy: From alloys and oxides to glasses and nanoparticles. C.E. Johnson and J.A. Johnson.
Hyperfine Interactions **204** 47-55 (2012).
87. Anti-fog coating for a bronchoscope lens. Russell L Leonard, Alexander Y Terekhov, Carol Thompson, Robert A Erck and Jacqueline A Johnson
Surface Engineering **28** 6 468 (2012). DOI: 10.1179/1743294412Y.0000000018
88. Protective coatings for enhanced performance in biomedical applications. Russell L Leonard, Saad A Hasan, Alexander Y Terekhov, Carol Thompson, Robert A Erck, James H Dickerson, and Jacqueline A Johnson.
Surface Engineering **28** 7 473 (2012). DOI: 10.1179/1743294412Y.000000001
89. Mössbauer measurements on spinel-structure iron oxide nanoparticles. C.E. Johnson, L. Costa, S. Gray, J.A. Johnson, A. J. Krejci, S. A. Hasan, I. Gonzalo-Juan and J. H. Dickerson.
Proceedings of the 36th Annual Condensed Matter and Materials Meeting, 31st Jan – 3rd Feb 2012 Wagga Wagga, NSW, Australia, <http://www.aip.org.au>, ISBN: 978-0-646-57-71-6 (2012).
90. Superparamagnetic Iron Oxide Nanoparticles with variable size and Iron Oxidation State: Synthesis and Relaxivity Studies.

- Pavel Kucheryavy, Galina Goloverda, Cheryl Stevens, Leonard Spinu, D. Lenormand, Jibao He, Vijay John, Alex Burin, Charles Johnson, Jackie Johnson and Vladimir Kolesnichenko.
Proceedings of Louisiana EPSCoR RII LA-SiGMA Symposium 1-4 (2012).
91. On Optical Imaging of Tissue: Aspects of Photo-Acoustic Femtosecond Spectroscopy.
Christian G. Parigger, Jacqueline A. Johnson, and Robert Splinter
34th Annual International Conference on the IEEE Engineering in Medicine and Biology (2012).
 92. Physiological Sensing through Tissue with Femto-second Laser Radiation (2012).
Christian G. Parigger, Jacqueline A. Johnson and Robert Splinter.
High Capacity Optical Networks and Emerging/Enabling Technologies (HONET) Istanbul, Turkey.
 93. Crystallization studies on rare-earth co-doped fluorozirconate-based glasses.
Christian Paßlick; Jacqueline A Johnson; Stefan Schweizer
J. Non. Cryst. Sol. **371-372** 33-36 (2013).
 94. Rare earth doped downshifting glass ceramics for photovoltaic applications.
Russell L Leonard; Sharon Gray; Shauna Albritton; Lydia Brothers; Raven Cross;
Andrea Eastes; Hien-Yoong Hah, ; Hodari James; Julie King; Sanjay Mishra; Jacqueline A Johnson.
J. Non. Cryst. Sol. **366** 1-5 (2013).
 95. Mössbauer spectroscopy of europium-doped fluorochloro-zirconate glasses and glass ceramics: optimization of storage phosphors in computed radiography.
C Pfau, C Paßlick, S. Gray, J A Johnson, C E Johnson and S Schweizer.
J. Phys.: Condens. Matter **25** 205402 (2013).
 96. Optical Diagnostic and Therapy Applications of Femtosecond Laser Radiation using Lens-Axicon Focusing.
Christian G. Parigger, Jacqueline A. Johnson, and Robert Splinter.
Conference proceedings: Annual International Conference of the IEEE Engineering in Medicine and Biology Society. *IEEE Engineering in Medicine and Biology Society. Conference*, **ISSN:** 1557-170X **Pages:** 374-377
 97. Insight into Nanocrystallization in Fluorochlorozirconate Glass Ceramics.
Carlos Alvarez, Yuzi Liu, Russell Leonard, Jacqueline Johnson, and Amanda Petford-Long.
J. American Ceramic Soc. **1** 5 (2013). DOI: 10.1111/jace.12540
 98. Magnetic Resonance Guided Laser Induced Thermal Therapy for Glioblastoma Multiforme: A Review
Sarah E. Norred and Jacqueline Anne Johnson
BioMed Research International vol. 2014, Article ID 761312, 9 pages, 2014. doi:10.1155/2014/761312.
 99. Mössbauer spectra and superparamagnetism of europium sulfide nanoparticles.
C.E. Johnson, L. Costa, J.A. Johnson, D.E. Brown, S. Somarajan, W. He, and J. H. Dickerson.
J. Phys. D. **47** (2014) 075001 (4pp).
 100. Probing the mechanism of sodium ion insertion into copper antimony Cu₂Sb anodes.
Loïc Baggetto, Kyler J. Carroll, Hien-Yoong Hah, Charles E. Johnson, David R. Mullins, Raymond R. Unocic, Jacqueline A. Johnson, Ying Shirley Meng, Gabriel M. Veith.
J. Phys. Chem. C **118** pp. 7856-7864 (2014)

101. The reaction mechanism of FeSb₂ as anode for sodium-ion batteries.
Loïc Baggetto, Hien-Yoong Hah, Charles E. Johnson, Jacqueline A. Johnson, Craig A. Bridges and Gabriel M. Veith. *J. Phys. Chem. Chem. Phys.* **16**, 9538–9545 (2014).
102. Mössbauer spectroscopy of europium-containing glasses: Optical activator study for x-ray image plates
C.E. Johnson, M. Vu, J.A. Johnson, D.E. Brown, J.K.R. Weber, C. Paßlick and S. Schweizer.
Hyperfine Interact. **226**:797–801 (2014). DOI 10.1007/s10751-014-1065-0.
103. The reaction mechanism of SnSb and Sb anodes for Na-ion batteries studied by x-ray diffraction, ¹¹⁹Sn and ¹²¹Sb Mössbauer spectroscopies.
L. Baggetto, H-Y Hah, J-C Jumas, C.E. Johnson, J.A. Johnson, J.K. Keum and G.M. Veith.
J. Power Sources, **267** 329 (2014).

Book Chapters/Manuals

1. The structure of industrial glasses probed by Mössbauer Spectroscopy.
C.E. Johnson, K.F.E. Williams, and J.A. Johnson.
Chapter 7 in *Mössbauer Spectroscopy Applied to Magnetism and Materials Science*,
Volume 2. Edited by Gary J. Long and Fernande Grandjean (Plenum Press, New York
1996) pp 153-166.
2. The GLAD manual: A guide to performing experiments on the Glass, Liquids, and Amorphous Materials diffractometer at IPNS.
J. A. Johnson, A. J. G. Ellison, and D. L. Price.
IPNS manual, Argonne National Laboratory, US (1999).
3. Down-conversion in rare-earth doped glasses and glass ceramics.
S. Schweizer, C. Paßlick, F. Steudel, M. Dyrba, B. Ahrens, P.-T. Miclea, **J. A. Johnson**, K. Baumgartner, R. Carius.
Accepted by VCH Wiley Books (2013).
4. Up-conversion for enhanced efficiency of solar cells.
J. C. Goldschmidt, S. Fischer, H. Steinkemper, B. Herter, S. Wolf, F. Hallermann, G. von Plessen, **J. A. Johnson**,
B. Ahrens, Paul-T. Miclea, S. Schweizer.
Accepted by VCH Wiley Books (2013).
5. Glass Ceramic Scintillators.
Jacqueline A. Johnson, Russell L. Leonard, Carlos Alvarez, Brooke Barta and Stefan Schweizer.
Accepted by Pan Stanford Publishing (2013).

Invited Lectures at Conferences and Universities

1. Tin Mössbauer in glass (1994).
Jacqueline A. Johnson
University of Liverpool, UK.
2. Mössbauer spectra of tin in float glass (1994).
Jacqueline A. Johnson
4th Seeheim Workshop, Germany.
3. A Mössbauer study of tin at the surface of float glass (1995).
Jacqueline A. Johnson.
Argonne National Laboratory, Chicago, Illinois, USA.
4. A material science approach to nanomaterials: The case of selenium (1997).
Jacqueline A. Johnson
Argonne National Laboratory, Chicago, Illinois, USA.
5. Transition metals in glass. A structural study (1997).
Jacqueline A. Johnson.
University of Rolla, Rolla, Missouri, USA.
6. Ternary alkali stannosilicate glasses: A Mössbauer and neutron study (1999).
Jacqueline A. Johnson.
University of Wales, Aberystwyth, U.K.
7. Through a glass, darkly (1999).
Jacqueline A. Johnson.
University of Virginia, Charlottesville, USA.
8. Seeing our way through glass (2000).
Jacqueline A. Johnson.
Intense Pulsed Neutron Source, Argonne, USA.
9. Materials research at Argonne National Laboratory (2001).
Jacqueline A. Johnson.
University of Alaska, Fairbanks, USA.
10. Cation coordination in oxychloride glasses (2001).
Jacqueline A. Johnson
Intense Pulsed Neutron Source, Argonne, USA.
11. Past, present and future: Materials in Argonne National Laboratory (2001).
Jacqueline A. Johnson.
Coe College, Cedar Rapids, Iowa, USA.
12. NanoScience at Argonne National Laboratory: The small and the big picture (2001).
Jacqueline A. Johnson.
DOE EPSCoR Workshop, Brookhaven National Laboratory, New York, USA.

13. Structure and properties of complex glasses (2001).
Jacqueline A. Johnson, Charles E. Johnson, and Diane Holland.
VII International Conference on Advanced Materials, Cancun, Mexico.
14. Glass science at a National Laboratory (2002).
Jacqueline A. Johnson
Glass and Optical Materials Division Fall Meeting, AcerS, Pittsburgh, USA.
15. Structure-property relationships in optically active glasses (2003).
Jacqueline A. Johnson, Marcos H. Grimsditch, and J. K. Richard Weber.
Glass and Optical Materials Division Fall Meeting, AcerS, Corning, USA.
16. Structure and properties of novel rare earth-doped glasses (2004).
Jacqueline A. Johnson, J. K. Richard Weber, Marcos H. Grimsditch, Stefan Schweizer, Douglas R. MacFarlane, Martin Spaeth, and Francesco de Carlo.
American Association for the Advancement of Science, Seattle, USA.
17. Effects of surface adsorbates on friction and wear of diamondlike carbon films (2004).
Ali Erdemir and Jacqueline A. Johnson.
Frontiers in Tribology at the Atomic Scale, Oak Ridge, USA.
18. Secure fingerprint module (2004).
Jacqueline A. Johnson.
Office of Technology Transfer and Commercialization Technology Panel Presentations, California State University, San Bernadino, USA.
19. Can we move on from X-ray film? (2004).
Jacqueline A. Johnson, Francesco de Carlo, John B. Woodford, Gang Chen, J. K. Richard Weber, Scott Hampton, Douglas R. MacFarlane, Stefan Schweizer, and Martin Spaeth.
Biomedical Engineering Series of Lectures, IIT, Chicago, USA.
20. Characterization of carbon materials for hydrogen storage (2005).
Jacqueline A. Johnson.
Northwestern University, Evanston, USA.
21. Manipulation effects in chemical-mechanical planarization (2005).
Milind Kulkarni, Dedy Ng, Hong Liang, Jacqueline A. Johnson, and Alex Zinovev.
IMIC - Tenth International Conference on Chemical-Mechanical Polishing, Fremont, USA.
22. A 2D x-ray detector made from glass (2005).
Jacqueline A. Johnson, Gang Chen, Francesco de Carlo, John B. Woodford, J. K. Richard Weber, Scott Hampton, Douglas R. MacFarlane, Stefan Schweizer, and Martin Spaeth,
User Science Seminar, Advanced Photon Source, Argonne, USA.
23. Deposition and Characterization of Super-low Friction Carbon Films on Glass and Ceramic Substrates (2005).
Ali Erdemir, Osman L. Eryilmaz, Jacqueline A. Johnson, Oyelayo O. Ajayi.
107th Annual Meeting and Exposition of the American Ceramic Society, Baltimore, USA.

24. The joy of working at a National Laboratory (2005).
Jacqueline A. Johnson.
107th Annual Meeting and Exposition of the American Ceramic Society, Baltimore, USA.
25. Characterization of thin films at facilities large and small (2005).
Jacqueline A. Johnson, Robert E. Erck, Osman L. Eryilmaz, Ali Erdemir, and John B. Woodford
XIV International Materials Research Congress, Cancun, Mexico.
26. Medical x-ray imaging plates (2005).
Jacqueline A. Johnson, Stefan Schweizer, Gang Chen, and J. K. Richard Weber.
The Medical Imaging Research Center, IIT, Chicago, USA.
27. Around the Ring (2006).
Jacqueline A. Johnson.
BioCARS, Advanced Photon Source, Argonne, USA.
28. Multifunctionality of optically-active nanoparticles in fluorozirconate glasses (2006).
Stefan Schweizer and Jacqueline A. Johnson.
Department of Engineering, Northern Illinois University, DeKalb, USA.
29. 2D glass-ceramic plate for mammography (2006).
Jacqueline A Johnson and Stefan Schweizer.
Cancer Research Center, University of Chicago, USA.
30. Nano-crystallized glasses for x-ray scintillation applications (2006).
Douglas R. MacFarlane, Peter Newman, Gang Chen, Jacqueline A. Johnson, and Stefan Schweizer.
International Symposium on Non Oxide and Optical Glasses, Department of Physics, Indian Institute of Science, Bangalore, India.
31. Grain rotation and deformation in ceramics (2006).
Gang Chen, Ulrich Lienert, Cinta Lorenzo–Martin, Jacqueline A. Johnson, Dileep Singh, and Jules Routbort.
International Workshop. Mechanical Properties in Advanced Materials: Recent Insights, June 7-11, 2006, Fuenteheridos, Spain.
32. Deformation Behavior and Joining of an MgF₂ Optical Ceramic (2006)
C. Lorenzo–Martin, D. Singh, J. Johnson, and J. L. Routbort
International Workshop. Mechanical Properties in Advanced Materials: Recent Insights, Fuenteheridos, Spain.
33. Fluorozirconate-based glass ceramic x-ray detectors for digital radiography (2006).
Stefan Schweizer and Jacqueline A. Johnson.
6th European Conference on Luminescent Detectors and Transformers of Ionizing Radiation (LUMDETR 2006), Lviv, Ukraine.
34. A Glass-Ceramic Plate for Medical, Energy, and Homeland Security Applications (2006).
Jacqueline A. Johnson and Stefan Schweizer.
EPIR Technologies, Inc., Bolingbrook, USA.

35. Sensors and Contraband Detection - Homeland Security Applications (2006).
Jacqueline A. Johnson, Stefan Schweizer, J. P. Allain, Ali Erdemir, Millie Firestone, Brian Reiss, Paul Raptis, Shuh-Haw Sheen, and George Fenske.
National Security matrix meeting, Argonne, USA.
36. Super solar cell efficiencies using glass ceramics (2006).
Jacqueline A. Johnson, Stefan Schweizer, Amanda Petford-Long, and Peter Zapol.
Solar and Biomass matrix meeting, Argonne, USA.
37. Nanocrystalline scintillators in a glass matrix for both active and passive radiological and explosives detection (2006).
Jacqueline A. Johnson, Stefan Schweizer, and Chris Deemer.
Presentation to the National Security Associate Laboratory Directorate (ALD), Argonne, USA.
38. Nanocrystalline scintillators for Homeland Security (2006).
Jacqueline A. Johnson, Stefan Schweizer, and Chris Deemer.
Presentation to the National Nuclear Security Administration, Argonne, USA.
39. Glass Ceramics and Medical Imaging (2007).
Jacqueline A. Johnson.
Colloquium, San Diego State University, USA.
40. Glass Ceramics – Science and Applications (2007).
Jacqueline A. Johnson.
Colloquium, Ohio University, USA.
41. Scintillating Nanoparticles for Medical Imaging (2007).
Jacqueline A. Johnson.
Colloquium, St. Johns University, USA.
42. Optically Active Barium Halide Nanocrystals in Glasses for Radiation Detection (2007)
S. Schweizer, J. Selling, B. Henke, B. Ahrens, J. A. Johnson.
Advanced Wide Band Gap Materials for Radiation Detectors MATRAD 2007, Sinaia, Romania.
43. The Character and Application of Glass Ceramics and Diamond-Like Carbon. (2007).
Jacqueline A. Johnson.
Colloquium, University of Tennessee Space Institute, USA.
44. Optical Applications of Glass Ceramics. (2007).
Jacqueline A. Johnson.
Colloquium, Clemson University, USA.
45. Up-conversion in glasses and glass ceramics for photovoltaic applications (2007).
Stefan Schweizer, Bernd Ahrens, Bastian Henke, Paul T. Miclea, and J.A. Johnson.
Photon Management in Solar Cells, Bad Honnef, Germany.
46. A new mammography plate and other health-related applications of materials (2008).
Jacqueline A. Johnson.
University of Tennessee Knoxville, USA.

47. Mammography and Prosthesis Coatings (2008).
Jacqueline A. Johnson.
Colloquium, Vanderbilt University, USA.
48. Working at a National Laboratory –When to transition to a university and why (2008).
Jacqueline A. Johnson.
Glass and Optical Materials Division of the American Ceramic Society, Tucson, USA
49. Mammography and Prosthesis Coatings alias Glass Ceramics and Diamond-like Carbon (2008).
Jacqueline A. Johnson.
Colloquium, Coe College, USA.
50. Europe vs. USA and National Laboratory vs. University (2008).
Jacqueline A. Johnson.
2nd International Congress on Ceramics, Verona, Italy
51. Nanoscience in Mammography (2008).
Jacqueline A. Johnson.
Colloquium, Temple University, USA.
52. Materials for Mammography (2008).
Jacqueline A. Johnson.
Presentation to President Peterson of the University of Tennessee Knoxville at the
University of Tennessee Space Institute, USA.
53. Nanomaterials in Medical Imaging (2008).
Jacqueline A. Johnson.
Colloquium, University of Missouri, Rolla, USA.
54. Biomedical materials - A new mammography image plate and implant coatings (2008).
Jacqueline A. Johnson.
Colloquium, Texas A&M University, College Station, USA.
55. Mammography and Implant Coatings (2008).
Jacqueline A. Johnson.
VINSE Colloquium, Vanderbilt University, USA.
56. Materials design for medical applications (2009).
Jacqueline A. Johnson
Colloquium, University of Memphis, Memphis, USA.
57. Applications and Future Challenges in X-ray Imaging (2009).
Jacqueline A. Johnson and Stefan Schweizer.
ASME Summer Heat Transfer Conference, San Francisco, USA.
58. Multi-functionality of fluorescent nanocrystals in glass ceramics (2009).
S. Schweizer, B. Henke, M. Dyrba, P. T. Miclea, B. Ahrens, M. Secu, and J. A. Johnson.
7th International Conference on Luminescent Detectors and Transformers of Ionizing Radiation (LUMDETR),
Kraków, Poland.

59. ZBLAN glasses for imaging plates and solar up-conversion (2009)
Jacqueline A. Johnson
Seminar, Oak Ridge National Laboratory, Oak Ridge, USA.
60. What goes on in the lab? (2009)
Jacqueline A. Johnson
Seminar, University of Tennessee Space Institute, Tullahoma, USA.
61. Progress on up-converted fluorescence in Er-doped fluorozirconate-based glass ceramics for high efficiency solar cells. (2010)
Stefan Schweizer, Bastian Henke, Bernd Ahrens, Paul T. Miclea, and Jacqueline A. Johnson.
Photonics for Solar Energy Systems: SPIE Photonics Europe, Brussels, Belgium.
62. Science and Engineering of Materials for Medical Applications. (2010)
Jacqueline A. Johnson
Seminar, Old Dominion University, Norfolk, USA.
63. Materials and Medicine. (2010)
Jacqueline A. Johnson
Colloquium, San Diego State University, San Diego, USA.
64. Materials for Medical Applications. (2010)
Jacqueline A. Johnson
Seminar, University of Tennessee, Knoxville, USA.
65. The Physics of Materials for Medical Applications (2010).
Jacqueline A. Johnson
Seminar, SUNY, Binghamton, USA.
66. Materials Design for Medical Imaging (2010).
Jacqueline A. Johnson
Seminar, Wright State University, Dayton, USA.
67. Mammography Image Plates and Coatings for Implants (2010).
Jacqueline A. Johnson
Seminar, Rhodes College, Memphis, USA.
68. Mössbauer spectroscopy of europium-containing glasses (2011).
C.E. Johnson, M. Vu, J.A. Johnson, D.E. Brown and R.J.K. Weber.
The Sixth Nassau-Argonne Mössbauer International Symposium, New York, USA.
69. A mother in science. (2011)
Jacqueline A. Johnson
Sustainability Women Engineering Conference (Knoxville, USA).
70. Medical Imaging and other fun projects (2011).
Jacqueline A. Johnson.
Seminar, MABE Department, University of Tennessee, Knoxville, USA.
71. Charge Collection and Photon Conversion for Radiation Sensing (2011).
Jacqueline A. Johnson.
UTK & Y-12 Partnership in Technology Forum (Oak Ridge, USA).

72. ZBLAN glass ceramics for X-ray imaging (2011).
Jacqueline A. Johnson, Christian Paßlick and Stefan Schweizer.
PacRim 9 - The 9th International Meeting of Pacific Rim Ceramic Societies Cairns, Australia.
73. Developing an x-ray image plate – engineering the material (2011).
Jacqueline A. Johnson
Seminar, Tennessee State University, Nashville, USA.
74. Fifty years of Mössbauer Spectroscopy: From alloys and oxides to glasses and nanoparticles. (2011)
C.E. Johnson and J.A. Johnson.
International Conference on the Applications of the Mössbauer Effect Kobe, Japan.
75. Luminescent Materials for Medical, Defense and Solar Applications (2011).
Jacqueline A. Johnson
Seminar, University of the South, Sewanee, USA.
76. ZBLAN glass ceramics for X-ray imaging (2012).
Jacqueline A. Johnson, Christian Paßlick and Stefan Schweizer.
36th International Conference and Exposition on Advanced Ceramics and Composites Daytona Beach, USA.
77. Luminescent Materials for Devices (2012).
Jacqueline A. Johnson
Austin Peay, Clarksville, USA.
78. Study of Europium Valence in ZBLAN Imaging Plates (2012).
Jacqueline A. Johnson, S. Gray, C.E. Johnson, R. Weber, C. Paßlick and S. Schweizer.
Glass and Optical Materials Division Annual Meeting, American Ceramic Society St. Louis, USA.
79. Applications of Luminescent Materials (2012).
Jacqueline A. Johnson
Seminar, Xavier University, New Orleans, USA.
80. Graduate and Intern Opportunities at the UT Space Institute (2012).
Jacqueline A. Johnson
Kentucky Nanotechnology Symposium Bowling Green, USA.
81. Evolution of Nanocrystals in Fluorochlorozirconate Glasses.
Carlos Alvarez, Yuzi Liu, Jacqueline Johnson and Amanda K. Petford-Long.
EMC Workshop 8: *In situ* and Environmental Science: How Can Electron Microscopy and Spectroscopy Help?
Argonne National Laboratory Users Meeting (Argonne, USA, May 2012).
82. Glass ceramics for storage phosphor applications (2012).
C. Paßlick, J. A. Johnson, A. R. Lubinsky and S. Schweizer.
8th International Conference on Luminescent Detectors and Transformers of Ionizing Radiation - LUMDETR
Halle (Saale) Germany.
83. X-ray imaging enhancement with glass ceramic plates (2012).
Jacqueline Johnson, Lee Leonard, Sharon Gray, Christian Paßlick, Carlos Alvarez, Stefan Schweizer and
Amanda Petford-Long.
Innovations in Biomedical Materials 2012 Raleigh, USA.

84. On Optical Imaging of Tissue: Aspects of Photo-Acoustic Femtosecond Spectroscopy (2012).
Christian G. Parigger, Jacqueline A. Johnson, and Robert Splinter
34th Annual International Conference on the IEEE Engineering in Medicine and Biology San Diego, USA.
85. Glass Ceramics for Radiation Detection (2012).
Jacqueline Anne Johnson, Rick Lubinsky and Stefan Schweizer.
Materials Science & Technology 2012 Conference & Exhibition Pittsburgh, USA.
86. Physiological Sensing through Tissue with Femto-second Laser Radiation (2012).
Christian G. Parigger, Jacqueline A. Johnson and Robert Splinter.
International Conference on High Capacity Optical Networks and Emerging/Enabling Technologies (HONET)
Istanbul, Turkey.
87. Mössbauer Spectra and Superparamagnetism of Europium Sulfide Nanoparticles (2013).
C.E. Johnson, L. Costa, J.A. Johnson, D.E. Brown, S. Somarajan, W. He and J.H. Dickerson.
7th North American Mössbauer Symposium, Austin, USA.
88. X-ray imaging enhancement using nanoscience (2013).
Jacqueline Johnson, Lee Leonard, Carlos Alvarez, Sharon Gray, Rick Lubinsky, Amanda Petford-Long, Stefan Schweizer and Charles Johnson.
37th International Conference and Expo on Advanced Ceramics and Composites Daytona Beach, USA.
89. Nanoparticles in Medicine (2013)
Jacqueline Johnson
Seminar, Middle Tennessee State University, Murfreesboro, USA.
90. Nanostructured bio-ceramic x-ray imaging plate (2013).
Jacqueline Johnson, Lee Leonard, Hien-Yoong Hah, Carlos Alvarez, Rick Lubinsky, Amanda Petford-Long and Charles Johnson.
10th Pacific Rim Conference on Ceramic and Glass Technology San Diego, USA.
91. Nanoparticles in Medicine (2013).
J. A. Johnson, L. Leonard, C. Alvarez, C. E. Johnson, S. Schweizer, R. Lubinsky, A. Petford-Long, S. Clare and T. Gorgio.
8th Pacific Rim International Conference on Advanced Materials and Processing, Hilton Waikoloa Village, Big Island of Hawaii, USA.
92. Nanoparticles in Medicine/Graduate Opportunities and Internships (2013).
Jacqueline A. Johnson
Seminar, University of North Georgia, Dahlonega, USA.
93. γ -ray imaging enhancement using nanoscience (2014).
Russell Lee Leonard, Julie King, Jacqueline Johnson and Schweizer, Stefan.
38th International Conference and Expo on Advanced Ceramics and Composites Daytona Beach, USA.
94. Radiation Detection: The case for glass ceramics (2014).
Jacqueline Anne Johnson
Seminar, Oak Ridge National Laboratory, Oak Ridge, USA.

95. Nanoscience in Imaging (2014).

Jacqueline Anne Johnson

Lightning talk, Symposium, Institute of Biomedical Engineering (iBME), Knoxville, USA.

Contributed Lectures at Conferences

1. Tin silicate glasses.
D. Holland, M.M. Karim, C.E. Johnson, K. Williams, and J.A. Johnson.
The 2nd International Conference of the European Society of Glass (Venice, Italy, 1993).
2. The variation in f-factor of Sn²⁺ and Sn⁴⁺ in tin doped glasses.
K. Williams, C.E. Johnson, J.A. Johnson, D. Holland, and M.M. Karim.
The Royal Society of Chemistry 34th Mössbauer Spectroscopy Discussion Group Meeting (Nottingham, UK, 1993).
3. The Mössbauer effect of tin doped float glass and the temperature dependence of the f- factor.
K. Williams, C.E. Johnson, J.A. Johnson, D. Holland, and M.M. Karim.
The Society of Glass Technology New Researchers Forum on Glass (Warwick, UK, 1993).
4. Novel contactor for the treatment of aqueous waste.
C. Dyson, D. Phipps, and J.A. Johnson.
TheACHEMA Trade Fair (Frankfurt, Germany, 1994).
5. Mössbauer spectra of tin silicate binary glasses, float glass and tin doped float glass.
K. Williams, C.E. Johnson, J.A. Johnson, D. Holland, and M.M. Karim.
The Royal Society of Chemistry 35th Mössbauer Spectroscopy Discussion Group Meeting (Nottingham, UK, 1994).
6. Mössbauer spectra of tin in float glass.
K. Williams, C.E. Johnson, J. Greengrass, B. Tilley, and J.A. Johnson.
Condensed Matter and Materials Physics Conference (Warwick, UK, 1994).
7. The enhancement of oxygen transfer by the use of mixing devices.
R.M. Al-Khaddar and J.A. Johnson.
Putting a Price on Water (Bahrain, 1995).
8. A novel high efficiency plant for oxygen transfer.
J.A. Johnson, C. Dyson, and D.A. Phipps.
Third International Conference on Water Pollution (Porto Carras, Greece, 1995).
9. Home energy performance fails to meet objectives.
J.A. Johnson.
First Interdisciplinary Conference on the Environment (Boston, USA, 1995).
10. A comparison of the surface and bulk of iron-containing (tinted) float glass by Mössbauer spectroscopy.
K. Williams, M.F. Thomas, C.E. Johnson, J. Greengrass, B. Tilley, and J.A. Johnson.
The Royal Society of Chemistry 36th Mössbauer Spectroscopy Discussion Group Meeting (Nottingham, UK, 1995).
11. Oxidation states of tin and iron in clear and tinted float glass by Mössbauer spectroscopy.
K. Williams, M.F. Thomas, C.E. Johnson, J. Greengrass, B. Tilley, and J.A. Johnson.
Conference on Fundamentals of Glass Science and Technology (Växjö, Sweden, 1997).

12. Polyselenides and their radical ions.
A.J. Goldbach, J.A. Johnson, M.L. Saboungi, L.A. Curtiss, A.R. Cook, and D. Meisel.
American Chemical Society (San Francisco, USA, 1997).
13. Semiconductors in confined geometries: A material sciences approach.
J. A. Johnson, M.L. Saboungi, P. Thiyagararjan, and R. Csencsits.
American Crystallographic Association (St. Louis, USA, 1997).
14. Structure of lithium conducting polymers.
J. A. Johnson, M.L. Saboungi, D.L. Price, S. Ansell, and T. Russell.
American Crystallographic Association (St. Louis, USA, 1997).
15. The role of iron in commercial float glass, a neutron scattering study.
J. A. Johnson, D. Holland, C.E. Johnson, and A. Mekki.
International Conference on Neutron Scattering (Toronto, Canada, 1997).
16. Structure of solid and liquid polyethylene oxide.
J. A. Johnson, M.L. Saboungi, D.L. Price, S. Ansell, and T. Russell.
Materials Research Using Cold Neutrons at Pulsed Neutron Sources Conference (Chicago, USA, 1997).
17. Interactions of iron and tin in the float glass surface.
K. Williams, M.F. Thomas, C.E. Johnson, J.A. Johnson, and J. Greengrass.
Society of Glass Technology Meeting (Lathom, UK, 1997).
18. Atomic structure of PEO and LiClO₄-PEO.
M.L. Saboungi, S. Ansell, H.P. Hauck, J.A. Johnson, D.L. Price, and T. Russell.
American Physical Society Meeting (Los Angeles, USA, 1998).
19. Ternary alkali stannosilicate glasses: A Mössbauer and neutron study.
J.A. Johnson, D. Holland, C.E. Johnson, A. Sears, J.F. Bent, P. Appleyard, M.F. Thomas, and A.C. Hannon.
American Crystallographic Association (Buffalo, USA, 1999).
20. Shape effects on the magnetization of cobalt and permalloy nano-scale arrays.
J.A. Johnson, V. Metlushko, P. Vavassori, M. Grimsditch, B. Ilic, P. Neuzil, and R. Kumar.
American Physical Society Meeting (Minneapolis, USA, March 2000).
21. MOKE investigation of cobalt and permalloy nano-scale dot arrays: Shape effects on magnetization reversal.
J.A. Johnson, V. Metlushko, P. Vavassori, M. Grimsditch, B. Ilic, P. Neuzil, and R. Kumar.
Materials Research Society Meeting (San Francisco, USA, April 2000).
22. Cation coordination in oxychloride glasses.
J.A. Johnson, D. Holland, P. Appleyard, and C.E. Johnson.
American Crystallographic Association (St. Paul, USA, July 2000).
23. Tin germanate glasses.
D. Holland, Mark E. Smith, I.J.F. Poplett, J.A. Johnson, M.F. Thomas, and J. Bland.
The Eighth International Conference on the Structure of Non-Crystalline Materials (Aberystwyth, UK, July 2000).
24. The structure of glasses by pulsed neutron diffraction and Mössbauer Spectroscopy.
J.A. Johnson, D. Holland, C.E. Johnson, A. Sears, J.F. Bent, P. Appleyard, and M.F. Thomas, A.C. Hannon.
The American Ceramic Society, Glass and Optical Materials Division Meeting (Corning, USA, October 2000).

25. Shape tuning of magnetic stability in nano-particles: The role of dipolar instability pockets.
M. Grimsditch, A. Berger, J.A. Johnson, V. Metlushko, B. Ilic, P. Neuzil, and R. Kumar.
Materials Research Society Meeting (San Francisco, USA, April 2001).
26. The structure of rare earth glasses by pulsed neutron diffraction and X-ray photoelectron spectroscopy.
J. A. Johnson, D. Holland, A. Mekki, K. A. Ziq, and C.F. McConville.
Pac Rim IV: An International Conference on Advanced Ceramics and Glasses (Maui, USA, November 2001).
27. Structural characterization of near frictionless carbon (NFC) films for tribological applications.
J.A. Johnson and J.B. Woodford.
American Conference on Neutron Scattering (Knoxville, USA, June 2002).
28. Low friction coatings.
G. Fenske, A. Erdemir, J. Woodford, J. Johnson, and L. Ajayi.
International Conference on Materials for Extreme Environments (Denali, AK, USA, August 2002).
29. Near frictionless carbon (NFC) films for tribological applications – a neutron reflectivity and UV Raman study.
J.A. Johnson, J.B. Woodford, and A. Erdemir.
Materials Research Society Meeting (Boston, USA, November 2002).
30. Structural characterization of diamond-like-carbon films.
J.A. Johnson, J.B. Woodford, and A. Erdemir.
American Physical Society meeting (Austin, USA, March 2003).
31. Structural characterization of diamond-like-carbon films.
J.A. Johnson, J.B. Woodford and A. Erdemir.
105th Annual Meeting and Exposition of the American Ceramic Society (Nashville, USA, April 2003).
32. What difference does it make?
J.A. Johnson.
105th Annual Meeting and Exposition of the American Ceramic Society (Nashville, USA, April 2003).
33. Medium-range order in diamond-like carbon films by fluctuation microscopy.
X. Chen and J. A. Johnson.
Materials Research Society Meeting (Boston, USA, November 2003).
34. Raman spectroscopy of nanostructured diamond.
J. Birrell, O. Auciello, J.E. Gerbi, J. Johnson, X. Xiao, and J.A. Carlisle.
Materials Research Society Meeting (Boston, USA, November 2003).
35. High-temperature deformation of SrTiO₃.
D. Singh, J. Johnson, U. Lienert, and J. Routbort.
106th Annual Meeting and Exposition of the American Ceramic Society (Indianapolis, USA, April 2004).
36. Fluctuation microscopy studies of medium-range order structures of near frictionless carbon films.
X. Chen, J. A. Johnson, J. Hiller, and Z. Liu.
Microscopy and Microanalysis Conference, Microscopy Society of America (Savannah, USA, August 2004).

37. X-ray studies of near-frictionless carbon films.
Nikhil J Mehta, Sujoy Roy, Jacqueline Anne Johnson, John Woodford, Alexander Zinovev, Zahirul Islam, Ali Erdemir, Sunil Sinha, George Fenske, and Barton Prorok.
Materials Research Society Meeting (Boston, USA, November 2004).
38. ZBLAN-based x-ray storage phosphors and scintillators for digital x-ray imaging.
Gang Chen, Jacqueline Johnson, Richard Weber, Stefan Schweizer, Doug MacFarlane, John Woodford, and Francesco de Carlo.
SPIE - International Society for Optical Engineering (San Diego, USA, February, 2005).
39. Inelastic neutron scattering of diamond-like carbon films.
Alok Chatterjee, Jacqueline A. Johnson, and John B. Woodford.
107th Annual Meeting and Exposition of the American Ceramic Society (Baltimore, USA, April 2005).
40. Effect of reinforcing carbon fiber morphology on tribological behavior of PEEK polymers.
A. Greco, O. O. Ajayi, R. A. Erck, J. A. Johnson, and G. R. Fenske.
STLE Annual Meeting (Las Vegas, USA, May 2005).
41. Structural changes during the wear of diamondlike carbon films at low temperature.
J. B. Woodford, G. Helen Xu, H. Liang, and J. A. Johnson
Applied Diamond Conference (Chicago, USA, May 2005).
42. Structure-property relationships in near frictionless carbon.
Jacqueline Johnson, Ali Erdemir, Osman Eryilmaz, Ian, Gee, Diane Holland, Amelia Liu, Nikhil Mehta, Sujoy Roy, Sunhil Sinha John Woodford, and Alex Zinovev.
Applied Diamond Conference (Chicago, USA, May 2005).
43. A mechanistic study of the effects of environmental species on the friction and wear behavior of highly hydrogenated DLC films.
O. L. Eryilmaz, J. A. Johnson, A. Erdemir, N. Mehta, and B. Prorok.
International Tribology Conference (Kobe, Japan, June 2005).
44. Synchrotron x-ray study of ZBLAN-based glass ceramics for medical x-ray imaging.
Gang Chen, Jacqueline Johnson, Richard Weber, Stefan Schweizer, Doug MacFarlane, and John Woodford.
17th University Conference on Glass Science, and 1st International Materials Institute Workshop on New Functionality in Glasses (Penn State, USA, June 2005).
45. A surface analytical study of the effects of water and oxygen on tribological behavior of DLC films.
Osman Eryilmaz, Ali Erdemir, Jacqueline Johnson, Nikhil J Mehta, and Barton Prorok.
World Tribology Congress (Washington D.C., USA, September 2005).
46. Manipulating reactive metals during chemical-mechanical polishing.
H. Liang, J. Johnson, A. Zinovev, M. Kulkarni, G.H. Xu, and D. Yang.
World Tribology Congress (Washington D.C., USA, September 2005).
47. Effect of reinforcing carbon fiber morphology on tribological behavior of PEEK polymers.
Aaron C. Greco, Oyelayo O. Ajayi, Robert A. Erck, Jacqueline A. Johnson, and George R. Fenske.
World Tribology Congress (Washington D.C., USA, September 2005).

48. A transparent BaCl₂:Eu²⁺ glass-ceramic scintillator with high efficiency.
Gang Chen, Jacqueline A. Johnson, Francesco De Carlo, Richard Weber, Stefan Schweizer, Peter Newman and Douglas MacFarlane.
SPIE - International Society for Optical Engineering (San Diego, USA, February, 2006).
49. Energy-dependent scintillation efficiency of fluorozirconate-based glass-ceramic x-ray detectors.
Stefan Schweizer, Stephanie Köneke, Gang Chen, Jacqueline A. Johnson, Francesco De Carlo, and Richard Weber.
SPIE - International Society for Optical Engineering (San Diego, USA, February, 2006).
50. Short and medium range orders in nearly frictionless diamond-like carbon.
Amelia Liu, Raul Arenal de la Concha, Dean Miller, Xidong Chen, Jacqueline Johnson, Osman Eryilmaz, and Ali Erdemir.
University of Chicago Review, Materials Science Division (Argonne, IL, USA, February 2006).
51. Glass-ceramic scintillator for biomedical x-ray imaging.
G. Chen, J. A. Johnson, S. Schweizer, and D. MacFarlane.
BIO 2006, Annual International Convention (Chicago, USA, April 2006).
52. Glass-ceramic x-ray storage phosphors for high-resolution medical imaging.
S. Schweizer, G. Chen, and J. A. Johnson
BIO 2006, Annual International Convention (Chicago, USA, April 2006).
53. Short and medium range orders in nearly frictionless diamond-like carbon.
Amelia Liu, Raul Arenal de la Concha, Dean Miller, Xidong Chen, Jacqueline Johnson, Osman Eryilmaz, and Ali Erdemir.
Department of Energy Operations Review of the Electron Microscopy Center, Materials Science Division (Argonne, IL, USA, April 2006).
54. Mechanical, tribological, and heamo-compatibility properties of ZrN-Ag, ZrN-Au, and ZrN-Pd nanocomposite films.
P. Basnyat, A. Aul, S.M. Aouadi, P. Kohli, S.R. Mishra, O. Eryilmaz, J. A. Johnson, and A. Erdemir.
The International Conference on Metallurgical Coatings and Thin Films (ICMCTF) (San Diego, USA, May 2006).
55. A glass-ceramic plate for medical, non-destructive testing and homeland security applications.
Jacqueline A. Johnson, Gang Chen, Stefan Schweizer, Peter Newman, and Douglas MacFarlane, John Woodford, Richard Weber.
The American Ceramic Society, Glass and Optical Materials Division Meeting (Greenville, USA, May 2006).
56. Conductivity measurements on near-frictionless carbon films.
C. Zuniga, A. Kosarev, A. Torres, J. A. Johnson, A. Erdemir, and O. L. Eryilmaz.
Amorphous and Microcrystalline Semiconductors, 5th International Conference (St. Petersburg, Russia, June, 2006).
57. A glass-ceramic plate for mammography.
J. A. Johnson, S. Schweizer, B. Henke, G. Chen, J. Woodford, P. J. Newman, and D. R. MacFarlane.
ACerS 8th International Symposium on Crystallization in Glasses and Liquids (Jackson Hole, USA, September, 2006).
58. Complementary techniques for the determination of glass structure – ternary tin silicates.
Diane Holland, J.F. Bent, A.C. Hannon, P. Appleyard, M.F. Thomas, J.A. Johnson, C.E. Johnson, and J. Urquidi.
International Workshop on Current Challenges in Liquid and Glass Science (Abingdon, UK, January, 2007).

59. A glass ceramic plate to increase solar cell efficiency.
J. A. Johnson and S. Schweizer.
The American Ceramic Society, Glass and Optical Materials Division Meeting (Rochester, USA, May 2007).
60. Fluorozirconate-based glass-ceramic storage phosphors for digital mammography.
Anthony R. Lubinsky, Stefan Schweizer, and Jacqueline A. Johnson.
SPIE - International Society for Optical Engineering (San Diego, USA, February, 2007).
61. Short and Medium Range Order in Hydrogenated Diamond-Like Carbon Films.
A. C. Y. Liu, R. Arenal, X. Chen, D. J. Miller, A. Erdemir, J. A. Johnson, O. L. Eryilmaz, and J. B. Woodford.
Microscopy and Microanalysis (Ft. Lauderdale, USA, August, 2007).
62. Enhanced up-converted fluorescence in fluorozirconate based glass ceramics for high efficiency solar cells.
Bernd Ahrens, Bastian Henke, J.A. Johnson, Paul T. Miclea, and Stefan Schweizer.
SPIE Europe Photonics Europe (Strasbourg, France, April, 2008).
63. Erbium-doped barium chloride nano-crystals in fluorozirconate based glasses for enhanced up-converted fluorescence.
Bastian Henke, Bernd Ahrens, Paul T. Miclea, Jacqueline A. Johnson, and Stefan Schweizer.
16th International Symposium on Non oxide and New Optical Glasses, ISNOG (Montpellier, France, April, 2008).
64. Strontium Environment Transition in Tin Silicate Glasses by Neutron and X-ray Diffraction.
Jacqueline. A. Johnson, Jacob Urquidi, Diane Holland, Charles Johnson, and Paul Appleyard.
The American Ceramic Society, Glass and Optical Materials Division Meeting (Tucson, USA, May 2008).
65. Glass Ceramics for High-Resolution Imaging.
Jacqueline A. Johnson, Stefan Schweizer, Alexander Kolesnikov, and Rick Weber.
ASME International Mechanical Engineering Congress and Exposition (Boston, USA, November 2008).
66. Upconverted fluorescence in Er-doped fluorozirconate based glass ceramics for high efficiency solar cells
Bastian Henke, Bernd Ahrens, Jacqueline A. Johnson, Paul T. Miclea, and Stefan Schweizer.
SPIE Solar Energy and Technology Conference (San Diego, USA, August 2009).
67. Progress on erbium-doped fluorozirconate glass ceramics for upconversion-based solar cell systems
Stefan Schweizer, Bastian Henke, Jacqueline A. Johnson, Bernd Ahrens, and Paul T. Miclea
24th European Photovoltaic Solar Energy Conference (Hamburg, Germany, September 2009).
68. Nanocrystal formation in Modified ZBLAN Glass Ceramics studied by Differential Scanning Calorimetry.
Jacqueline A. Johnson, Rick Weber, and Stefan Schweizer
Crystallization 2009: 9th International Symposium on Crystallization in Glasses and Liquids (Foz do Iguaçu, Brazil, September 2009).
69. Scanning translucent glass-ceramic x-ray storage phosphors.
A.R. Lubinsky, J. A. Johnson, S. Schweizer, J. K. R. Weber, R. M. Nishikawa, P. Domenicali, S. Fantone.
SPIE Medical Imaging Conference (San Diego, USA, February 2010).
70. Eu oxidation state in fluorozirconate-based glass ceramics.
B. Henke, C. Paßlick, P. Keil, J. A. Johnson, and S. Schweizer.
German Conference for Research with Synchrotron Radiation, Neutrons and Ion Beams at Large Facilities (SNI2010) (Berlin, Germany, February 2010).

71. Crystallization and structural investigation of Eu-doped fluorozirconate-based glass ceramics.
C. Paßlick, B. Ahrens, B. Henke, J. A. Johnson, and S. Schweizer.
Condensed Matter Division of the German Physical Society (DPG), (Regensburg March 2010).
72. Time-resolved optical spectroscopy on Er-doped fluorozirconate based glasses for efficient up-conversion.
Ulrich Skrzypczak, Manuela Miclea, Jacqueline A. Johnson, and Stefan Schweizer.
Condensed Matter Division of the German Physical Society (DPG), (Regensburg March 2010).
73. XANES on Eu-doped fluorozirconate based glass-ceramic x-ray detectors.
B. Henke, C. Paßlick, M. C. Wiegand, P. Keil, J. A. Johnson, and S. Schweizer.
MRS Spring Meeting (San Francisco, USA, April 2010).
74. A secondary ion mass spectroscopy (SIMS) and Mössbauer study of modified ZBLAN glasses.
Manh Vu, Alexander Terekhov, George Murray, Stefan Schweizer, Rick Weber, Charles Johnson and Jacqueline Johnson.
The American Ceramic Society, Glass and Optical Materials Division Meeting (Corning, USA, May 2010).
75. Crystallization behavior of rare-earth doped fluorochlorozirconate glasses.
Christian Paßlick, Bernd Ahrens, Bastian Henke, Jacqueline A. Johnson, and Stefan Schweizer.
17th International Symposium on Non-Oxide and New Optical Glasses XVII ISNOG (Ningbo, China, June 2010).
76. Optimizing the performance of ZBLAN glasses as image plates.
Manh Vu, Jacqueline A. Johnson and Stefan Schweizer.
Comparative & Experimental Medicine and Public Health Research Symposium (Knoxville, USA, June 2010).
77. Synthesis and Characterization of Diamond-like Carbon Films for Biomedical Applications.
Lee Leonard and Jacqueline A. Johnson
Comparative & Experimental Medicine and Public Health Research Symposium (Knoxville, USA, June 2010).
78. Advances in up- and down-converted fluorescence for high efficiency solar cells using rare-earth doped fluorozirconate-based glasses and glass ceramics.
Christian Paßlick, Bastian Henke, István Császár, Bernd Ahrens, Paul-T. Micleab, Jacqueline A. Johnson and Stefan Schweizer.
SPIE Optics and Photonics Conference (San Diego, USA, August 2010).
79. Time-resolved investigations of erbium ions in ZBLAN glasses and glass ceramics.
U. Skrzypczak, M. Miclea, A. Stalmashonak, B. Ahrens, B. Henke, G. Seifert, J. A. Johnson and S. Schweizer.
Fourth International Conference on Optical, Optoelectronic and Photonic Materials and Applications (Budapest, Hungary, August 2010).
80. Rare-earth doped fluorozirconate-based glass ceramics for high efficiency solar cells: Recent developments.
Stefan Schweizer, Bastian Henke, István Császár, Christian Paßlick, Bernd Ahrens, Paul T. Miclea, and Jacqueline A. Johnson.
25th European Photovoltaic Solar Energy Conference and Exhibition (25th EU PVSEC) and 5th World Conference on Photovoltaic Energy Conversion (WCPEC-5) (Feria Valencia, Spain, September 2010).
81. Synthesis and Characterization of Diamond-like Carbon Films for Medical Applications.
R. L. Leonard, S. A. Hassan, A. Terekhov, R. A. Erck, J. A. Dickerson, and J. A. Johnson.
Materials Science & Technology 2010 Conference & Exhibition (Houston, USA, October 2010).

82. Time-dependent spectroscopy on Nd³⁺- and Er³⁺-doped fluorochlorozirconate glasses.
U. Skrzypczak, M. Miclea, J. A. Johnson, B. Ahrens, G. Seifert and S. Schweizer.
European Optical Society Annual Meeting (EOSAM) (Paris, France, October 2010).
83. Optical and structural properties of fluorozirconate-based glass ceramics doped with divalent and trivalent europium.
Christian Paßlick, Bernd Ahrens, Bastian Henke, Jacqueline A. Johnson and Stefan Schweizer.
75th Annual Meeting of the DPG and DPG Spring Meeting (Dresden, Germany, March 2011).
84. In-situ TEM Investigation of Nanocrystallization in a Fluorozirconate (ZBLAN) Glass Matrix
Carlos Alvarez, Yuzi Liu, Jacqueline Johnson and Amanda K. Petford-Long.
Argonne National Laboratory Users Meeting (Argonne, USA, May 2011).
85. Mössbauer spectroscopy of europium-containing glasses: Optical activator study for x-ray image plates.
C.E. Johnson, M. Vu, J.A. Johnson, D.E. Brown and R.J.K. Weber.
7th Seeheim Workshop on Mössbauer Spectroscopy (Frankfurt, Germany, June 2011).
86. Crystallization behaviour of rare-earth co-doped fluorochlorozirconate based glasses.
C. Paßlick, J. A. Johnson and S. Schweizer.
PacRim 9 - The 9th International Meeting of Pacific Rim Ceramic Societies (Cairns, Australia, July 2011).
87. In Situ TEM Studies of Nanoparticle Growth in a Fluorozirconate (ZBLAN) Glass Matrix.
M. Vu, C. Alvarez, Y. Liu, A. K. Petford-Long and J. A. Johnson.
Microscopy & Microanalysis 2011 Meeting (Nashville, USA, August 2011).
88. Scintillation in multi-valent Eu-doped image plates
Christian Paßlick, Jacqueline A. Johnson and Stefan Schweizer.
11th International Conference on Inorganic Scintillators and their Applications SCINT 2011 (Science Campus Justus-Liebig-University Giessen, Germany, September 2011).
89. Optical Properties of Samarium-doped Oxyfluoride Glasses Containing CaF₂ Nanocrystallites.
Marcel Dyrba, Paul-Tiberiu Miclea, Mihail Secu, Jacqueline Johnson and Stefan Schweizer.
Materials Science & Technology 2011 Conference & Exhibition (Columbus, USA, October 2011).
90. In Situ TEM Studies of Nanoparticle Growth in a Fluorozirconate (ZBLAN) Glass Matrix.
C. Alvarez, S. Gray, Y. Liu, A. K. Petford-Long and J. A. Johnson.
AVS 58th International Symposium & Exhibition (Nashville, USA, November 2011).
91. ZBLAN Glass: Improving Medical Imaging with Europium Doped HoF₃ and SrCl₂ Based Storage Phosphors.
A. Eastes, L. Brothers and J. A. Johnson
National Conference on Undergraduate Research (Ogden, USA, March 2012).
92. Evolution of Nanocrystals in Fluorochlorozirconate Glasses.
Carlos Alvarez, Yuzi Liu, Jacqueline Johnson and Amanda K. Petford-Long.
Argonne National Laboratory Users Meeting (Argonne, USA, May 2012).
93. Two-step annealing process for controlled barium halide crystallization in Eu-doped fluorozirconate-based glasses.
C. Paßlick, J. A. Johnson and S. Schweizer.
ISNOG 2012 -International Symposium on Non-Oxide and New Optical Glasses (Saint -Malo, France, July 2012).

94. Crystallization studies of ZBLAN glasses by DSC and *in situ* TEM
L. Leonard, C. Foerster, C. Alvarez, A. Petford-Long, R. Weber, C. Paßlick and S. Schweizer.
Glass and Optical Materials Division Annual Meeting, American Ceramic Society (St. Louis, USA, May 2012).
95. Investigations of Nanocrystal Phase Transformation in Glass Ceramics.
Carlos Alvarez, Yuzi Liu, Jacqueline Johnson and Amanda Petford-Long.
2012 SACNAS National Conference (Seattle, USA, October 2012).
96. Phase Transformations in ZBLAN Glass Ceramics
Jacqueline Johnson, Carlos Alvarez, Yuzi Liu, Charles Johnson and Amanda Petford-Long.
AVS International Symposium and Exhibition (Tampa, USA, October 2012).
97. Stoichiometry of Fe₃O₄ nanoparticles determined by Mössbauer spectroscopy.
H-Y Hah, M. Cole, S. Gray, C.E. Johnson, J.A. Johnson, V. Kolesnichenko, P. Kucheryavy and G. Goloverda.
79th Annual Meeting of the APS Southeastern Section (Tallahassee, USA, November 2012).
98. Iron nanoparticle Mössbauer Spectroscopy with rare-earth permanent magnets.
L. Swafford, C.G. Parigger, H-Y Hah, S. Gray, M. Cole, D. Warnberg, C.E. Johnson, J.A. Johnson and E. Shafranovsky.
79th Annual Meeting of the APS Southeastern Section (Tallahassee, USA, November 2012).
99. Rare-earth doped downshifting glass ceramics for photovoltaic applications.
Hien-Yoong Hah, Lee Leonard, Sharon Gray, Charles Johnson and Jacqueline Johnson.
10th Pacific Rim Conference on Ceramic and Glass Technology (San Diego, USA, June 2013).
100. Optical Diagnostic and Therapy Applications of Femtosecond Laser Radiation using Lens-Axicon Focusing.
Christian G. Parigger, Jacqueline A. Johnson, and Robert Splinter.
35th Annual International IEEE EMBS Conference of the IEEE Engineering in Medicine and Biology Society (Osaka, Japan July 2013).
101. Image Guided Surgery for Resource-limited Countries
Dr. Susan E. Clare, Dr. Catherine Jones Murphy, Dr. Jacqueline A. Johnson
NCI-NIBIB Point of Care Technologies for Cancer Conference (Bethesda, USA October 2013).
102. Development of Iron Nanoparticles for Brain Cancer (2014).
J. E. King, H-Y. Hah, C. E. Johnson, J. A. Johnson, M. D. Pawet, A. J. Rondinone, K. C. Kirkbride and T. D. Giorgio.
Institute for Biomedical Engineering (iBME) symposium (Knoxville, USA April 2014).
103. Motional narrowing in Mössbauer spectra of superparamagnetic Fe₃O₄ nanoparticles.
H.Y. Hah, M. Cole, S. Gray, C.E. Johnson, J.A. Johnson, V. Kolesnichenko, P. Kucheryavy and G. Goloverda.
22nd International Conference on Spectral Line Shapes (Tulahoma, USA June 2014).
104. Observation of the super in a superparamagnet though hyperfine interactions.
C.E. Johnson, H-Y Hah, J.A. Johnson, V. Kolesnichenko, G. Goloverda and P. Kucheryavy.
Joint International Conference on Hyperfine Interactions and Symposium on Nuclear Quadrupole Interactions, (Canberra, Australia September 2014).

-
105. Development of Iron Nanoparticles for Medical Applications.
J. E. King, H-Y. Hah, C. E. Johnson, J. A. Johnson, S. Park, M. D. Pawet, A. J. Rondinone, K. C. Kirkbride and T. D. Giorgio.
Annual Biomedical Engineering Society Conference (BMES) (San Antonio, USA October 2014).
106. Novel Dental Imaging System.
Jacqueline A. Johnson, Sharon K. Gray, Russell L. Leonard and J.K. Richard Weber.
Annual Biomedical Engineering Society Conference (BMES) (San Antonio, USA October 2014).
107. Mossbauer studies of rechargeable Na-ion batteries for medical applications.
H-Y. Hah, L. Baggetto, C.E. Johnson, J.A. Johnson and G.M. Veith.
Annual Biomedical Engineering Society Conference (BMES) (San Antonio, USA October 2014).

References

Sir John Enderby CBE, FRS,
Chief Scientist
Institute of Physics Publishing Ltd
Dirac House
Temple Back
Bristol BS1 6BE
United Kingdom

Tel no.: +44 1179 733411
Email: john.enderby@iop.org

Dr. A.K. Petford-Long,
Director, Center for Nanoscale Materials
Argonne National Laboratory,
Argonne, IL 60439

Tel no.: (630) 252 5480
Email: petford.long@anl.gov

Professor Sunil Sinha,
Department of Physics,
University of California San Diego,
9500 Gilman Drive
La Jolla CA 93093-0354

Tel no.: (858) 822-5537
Email: ssinha@physics.ucsd.edu

PD Dr. S. Schweizer,
Team Leader Optical Characterization and Photon Management
Fraunhofer Center for Silicon Photovoltaics (CSP)
Walter-Hülse-Straße 1
06120 Halle
Germany

Tel no.: + 49 345 5589-128
Email: stefan.schweizer@csp.fraunhofer.de

Dr. Lynette D. Madsen
Division of Materials Research,
Mathematical and Physical Sciences,
The National Science Foundation,
4201, Wilson Boulevard,
Arlington, VA 22230

Tel no.:(703) 292-4936
Email: lmadsen@nsf.gov

Dr. Richard Weber
President, Materials Development Inc.,
3090 Daniels Court,
Arlington Heights, IL 60004

Tel no.: 847 612 8597
Email: rweber@matsdev.com