

## CURRICULUM VITA

**ALEXIS. G. CLARE**, Professor of Glass Science, New York State College of Ceramics at Alfred University

### Professional Positions

- Sept 2001- **Professor of Glass Science**, New York State  
College of Ceramics at Alfred University, Alfred, New York  
**Evaluator** for ABET  
**Director**, NYS Advance Research Center in Photonics  
**Program Chair**, Glass Science  
**Interim Program Chair**: Biomaterials Engineering (from 2006)
- 2000-2005 **Commissioner ABET** Engineering Accreditation Commission
- 1995-2001 **Associate Professor of Glass Science**, New York State  
College of Ceramics at Alfred University, Alfred, New York  
**Site Director**, NSF Industry/University Center for Biosurfaces  
**Evaluator** for ABET
- 1989-1995 **Assistant Professor of Glass Science**, New York State College  
of Ceramics at Alfred University, Alfred, New York
- 1987-1989 **British Telecom Post Doctoral Research Fellow**, University of  
Sheffield, U.K. "Fluoride Glasses for Active Optics"
- 1985-1987 **Post Doctoral Research Fellow, University** of Sheffield, U.K.  
"Heavy Metal Fluoride Glasses for Long Range Telecommunications"

### Education

- 1978-1981 The University of Reading, U.K., B.Sc. Chemical Physics with  
Subsidiary Mathematics
- 1981-1984 The University of Reading, U.K., Ph.D. Physics  
Thesis, "Neutron Studies of Amorphous and Related Crystalline  
Materials"

### Selected Honors and Awards

- 1992 John F. McMahon Ceramic Teaching Excellence Award
- 1994 Elected Fellow of the Society of Glass Technology, UK
- 1995 John F. McMahon Ceramic Teaching Excellence Award
- 1996 Alfred University Award for Excellence in Teaching
- 1996 State University of New York Chancellors Award for Excellence in  
Teaching
- 1997 National Institute of Ceramic Engineers Karl Schwartzwalder PACE  
Award
- 1997 National Academy of Sciences Committee on the Utilization of  
Russian Technologies (7 member committee chaired by Alvin  
Trivelpiece, Director, ORNL)
- 1997 Seven Lakes Girl Scout "Women of Excellence" Award (Role Model  
Award)
- 1998 Patent with Galileo Corporation for amplifier component  
developed during sabbatical leave at Galileo
- 2000 Elected Fellow of the American Ceramic Society

2000	Recipient of 2000 Vittorio Gottardi Prize for Glass Science given by the International Commission on Glass
2001	Recipient of NYS Faculty Development Award for retaining talented researchers in New York State
2003	Alfred University Excellence in Teaching Award
2004	National Academy of Science Review Panel for DOE Industries of the Future Program
2006	Alfred University Excellence in Teaching Award

**Professional Societies** Society of Glass Technology, American Ceramic Society, National Institute of Ceramic Engineers, Tau Beta Pi (Honorary), Keramos (Honorary) Optical Society of America

### Offices Held in Professional Societies

1991-1992	Chair of the Amorphous Materials Special Interest Group, American Crystallographic Society
1991-1995	Secretary, Western New York Section of American Ceramic Society
1993	Convener of North American Section of the Society of Glass Technology
1993-	Secretary, North American Section of the Society of Glass Technology
1993-	Bioceramics Liaison Representative, Glass Division of American Ceramic Society
1996	Elected Vice Chair of the Glass Division of the American Ceramic Society
1997	Chair Elect, Glass and Optical Materials Division American Ceramic Society
1996-1998	American Ceramic Society Presidents' Governance Committee (established by Jim McCauley, Chaired by VP at large Warren Wolfe to examine and recommend changes in the Governance of ACerS)
1998	Chair, Glass and Optical Materials Division of the American Ceramic Society
1998	Speaker at Opening Ceremony of International Congress on Glass
2000-2001	Secretary/Treasurer of National Institute of Ceramic Engineers
1999-2000	The Nominating Committee for the American Ceramic Society
2000	Appointed Commissioner to The Engineering Accreditation Commission
2001	Appointed to the Panel of Fellows for both the Society of Glass Technology and the American Ceramic Society
2002	President Elect of the National Institute of Ceramic Engineers
2003	President of the National Institute of Ceramic Engineers
2003	Appointed to the Coordinating Technical Committee for the International Commission on Glass
2003	Appointed to Chair Technical Committee 4 of the International Commission on Glass
2003-2005	Membership Committee American Ceramic Society
2004	Global Task Force Committee American Ceramic Society
2003-2005	American Ceramic Society Education Committee

- 2005 Appointed Cluster Coordinator for the Surfaces of Glass Cluster for the International Commission on Glass
- 2005 Elected to the Board of Directors American Ceramic Society
- 2006 Chair of ACerS Task Force on Internet Strategy
- 2006 Organizing Committee for International Congress on Glass Strasbourg 2007

### Conferences and Meetings Chaired

- 1993 Co-Chair with Bill LaCourse for the 12th University Conference on Glass
- 1994 Bioceramics Symposium Organizer (with Larry Hench (Basic Science) and Gary Fischman (Engineering Ceramics)) Annual Meeting, Indianapolis IN 1994
- 1996 Co Chair 10th International Symposium on Non-Oxide Glasses, Corning NY
- 1997 Co-Chair of Bioceramics Symposium, Annual Meeting, American Ceramic Society Annual Meeting.
- 1997 Co-Chair 5th International Symposium on the Advances in Fusion and Processing of Glass, Toronto, Canada
- 2000 Co-Chair SPIE Symposium on Inorganic Optical Materials
- 2001 Chair of Biomaterials Symposium and Education Symposium at the American Ceramic Society Annual Meeting
- 2004 Non Crystalline Materials IX Corning NY

### PAPERS

WRIGHT A.C., SUMNER D.J., CLARE A.G.  
 in "The Structure of Non-Crystalline Materials 1982" p. 395-406, eds. P.H. Gaskell, J.M. Parker, E.A. Davis  
*Random Network Models of Vitreous B<sub>2</sub>O<sub>3</sub> Containing Boroxol Rings*

SINCLAIR R.N., TASKER C.G., CLARE A.G., WRIGHT A.C.  
 Nucl. Instrumen. Meth **A240** (1985) p 199-202  
*The Calibration of Neutron Time of Flight Diffractometers for Amorphous Materials*

WRIGHT A.C., HANNON A.C., CLARE A.G., SINCLAIR R.N., JOHNSON W.L., ATZMON M., MANGIN P.  
 J. de Physique Colloque **C8** (1985) p.299-303  
*A Neutron Diffraction Investigation of the Atomic and Magnetic Structure of Amorphous Dy<sub>7</sub>Ni<sub>3</sub>*

PARKER J.M., CLARE A.G., SEDDON A.B.  
 Mat. Sci. Forum **5** (1986) p.257-262  
*Crystallisation Studies of Fluorozirconate Glasses*

PARKER J.M., SEDDON A.B., AINSWORTH G.N., CLARE A.G.  
 Physics and Chemistry of Glasses **27** (1986) p.219-

*Crystallisation Studies in the ZrF<sub>4</sub>-BaF<sub>2</sub>-NaF System*

PARKER J.M., SEDDON A.B., CLARE A.G.  
Physics and Chemistry of Glasses **28** (1987) p.4-  
*Crystallisation Studies in the ZrF<sub>4</sub>-BaF<sub>2</sub>-AlF<sub>3</sub>-LaF<sub>3</sub>-NaF System*

SEDDON A.B., CLARE A.G., PARKER J.M., MORRIS J., PITT N.  
Mat. Sci. Forum **19-20** (1987) p.398-404  
*Chloride Doped ZBLAN Glasses*

SEDDON A.B., SHAH W.A., CLARE A.G., PARKER J.M.  
Mat. Sci. Forum **19-20** (1987) p.388-397  
*The Effect of NaF on the Crystallisation of ZBLAN Glasses*

WRIGHT A.C., CLARE A.G., ETHERINGTON G. SINCLAIR R.N., BRAWER S.A., WEBER M.J., .  
Mat. Sci. Forum **19-20** (1987) p.157-160  
*The Structure of Vitreous NaF-DyF<sub>3</sub>-BeF<sub>2</sub>: A Neutron Diffraction and Molecular Dynamics Study*

CARTER S.F., FRANCE P.W., MOORE M.W., PARKER J.M., CLARE A.G.  
Physics and Chemistry of Glasses **28** (1987) p.188-195  
*The Crystallisation of a ZrF<sub>4</sub>-BaF<sub>2</sub>-LaF<sub>3</sub>-AlF<sub>3</sub>-NaF-PbF<sub>2</sub> Core Glass for Infrared Fibres*

WRIGHT A.C., PRICE D.L., CLARE A.G., ETHERINGTON G., SINCLAIR R.N.  
Diffusion and Defect Data **53-54** (1987) p.255-263  
*Diffraction by Glasses with a Layer Structure*  
(Also selected for publication in special edition published in Chinese)

CLARE A.G. PARKER J.M.  
SPIE Vol **1048** p.49-56 (1989)  
*Thermal and Mechanical Stresses in Fluoride Glass Optical Fibres*

WRIGHT A.C., CLARE A.G., GRIMLEY D.I., SINCLAIR R.N.  
J. Non-Cryst. Solids **112** p. 33-47 (1989)  
*Neutron Scattering Studies of Network Glasses*

WRIGHT A.C., CLARE A.G., ETHERINGTON G., SINCLAIR R.N., BRAWER S.J., WEBER M.J.  
J. Non-Cryst. Solids **111** p.139-152 (1989)  
*A Neutron Diffraction and Molecular Dynamics Investigation of the Structure of Vitreous Beryllium Fluoride*

CLARE A.G., ETHERINGTON G. WRIGHT A.C., WEBER M.J., BRAWER S.J., KINGMAN D., SINCLAIR R.N.  
J. Chem. Phys. **91** p.6380-6392 (1989)  
*A Neutron Diffraction and Molecular Dynamics Investigation of the Environment of Dy<sup>3+</sup> in Fluoroberyllate Glass*

CLARE A.G., WRIGHT A.C., SINCLAIR R.N., GALEENER F.L. GEISSBERGER A.E.

J. Non-Cryst. Solids **111** p.123-138 (1989)  
*A Neutron Diffraction Investigation of the Structure of Vitreous As<sub>2</sub>O<sub>3</sub>*

CLARE A.G., PARKER J.M.  
Physics and Chemistry of Glasses **30** p.205-210 (1989)  
*The effect of Refractive Index Modifiers on the Thermal Expansion Coefficient of Fluoride Glasses*

WILLIAMS D.L., CLARE A.G., SEDDON A.B.  
Physics and Chemistry of Glasses **31** p.64-70 (1990)  
*Crystallisation of Zr-Ba-La-Al-Li Fluoride Glasses*

CLARE A.G., PARKER J.M., FURNISS D., HARRIS E.A., SEARLE T.M.  
J. Phys.: Condensed Matter **1** p.8753 (1989)  
*Spectroscopy of U<sup>3+</sup> in Fluoride Glasses*

WHITTAKER D., CLARE A.G.  
"Glasses for Electronic Applications" pp.111-121 Ed. K.M. Nair Ceramic Transactions Volume 20 (1990)  
American Ceramic Society  
*Preparation of Fluoroaluminate Glasses Containing Reduced Oxidation State Dopants*

CLARE A.G., BACHRA B., WRIGHT A.C., SINCLAIR R.N.,  
in The Physics of Non-Crystalline Solids 1992 eds. L David Pye, W.C. LaCourse, H.J. Stevens, Taylor and Francis, London p.48  
*The Structure of Sodium Silicate Glasses by Neutron Diffraction*

FURNISS D., PARKER J.M., SEDDON A.B., CLARE A.G., HARRIS E.A., SEARLE T.M., STANLEY A.T.  
in The Physics of Non-Crystalline Solids 1992 eds. L David Pye, W.C. LaCourse, H.J. Stevens, Taylor and Francis, London p.632  
*Uranium 3+ in fluoride glasses*

WRIGHT A.C., CLARE A.G., BACHRA B., SINCLAIR R.N., HANNON A.C., VESSAL B.,  
Trans Amer. Crystallographic Assoc. **27** 1991 p. 239-254  
*Neutron Diffraction Studies of Silicate Glasses*

WRIGHT A.C., BACHRA B., VESSAL B., CLARE A.G., SINCLAIR R.N., HANNON A.C.,  
Proc. 2nd E.S.G. Int. Conf. on "Fundamentals of Glass Science and Technology", Venice June 21-24 1993  
Supplement to "Rivista della Stazione Sperimentale del Vetro" Vol. **XXIII** 211-216  
*A Neutron Diffraction and Molecular Dynamics Study of the Mixed Alkali Effect*

WRIGHT A.C., CLARE A.G., BACHRA B., HANNON A.C., SINCLAIR R.N., VESSAL B.,  
Proc. XVI Int. Cong. on Glass, Madrid, Oct 4-9 1992, Bol. Soc. Esp. Vid. **31C,3** 77-82  
*A Neutron Diffraction Study of the Structure of Alkali Silicate Glasses*

WRIGHT A.C., GRIMLEY D.I., BACHRA B., VESSAL B., CLARE A.G., SINCLAIR R.N.,  
Proc. 11th Conf. on Glass and Ceramics, Varna Oct 25-27 1993  
*Neutron Scattering Studies of Oxide Glasses*

MATTOS L., CLARE A.G.

Physics and Chemistry of Glasses **34** 1993 244-250

*The Crystallization and Optical Properties of Gallium Cerium Lanthanum Sulfide Glasses*

KING W.A., CLARE A.G., LACOURSE W.C.,

J. Non-Cryst. Solids **181** 231 (1995)

*Laboratory Preparation of Highly Pure As<sub>2</sub>Se<sub>3</sub> Glass*

LOBIONDO N.E., CLARE A.G., JONES L.E.

21st Biennial Conference on Carbon, June 13-18 1993 Extended Abstract p.34-35

*Halogenated Glass Protection Systems for Carbon-Carbon Composites*

CLARE A.G.

“Bioceramics: Materials and Applications” Ceramics Transactions Volume **48** Eds. Gary Fischman, Alexis Clare and Larry Hench 313-326

*“Optical Fibers for Laser Surgery”*

LOBIONDO N.E., CLARE A.G., JONES L.E.

Carbon **33** (4) 499-508 (1995)

*Halogenated Glass Protection Systems for Structural Carbon-Carbon Composites*

CLARE A.G.

Glass Researcher Volume **3** Number 1 (1993) Bulletin of Glass Science and Engineering, New York State College of Ceramics at Alfred University

*Fluorescence: An Alternative Method for Examining Redox Behavior*

JONES L.E., CLARE A.G., GERLING D.

Glass Researcher Volume **3** Number 1 2 (1994) Bulletin of Glass Science and Engineering, New York State College of Ceramics at Alfred University

*Evolution of NO<sub>x</sub> and SO<sub>x</sub> from Silicate Glasses*

JONES L.E., CLARE A.G., GERLING D.

Glass Researcher Volume **4** Number 1 (1994) Bulletin of Glass Science and Engineering, New York State College of Ceramics at Alfred University

*Emissions Concerns for Glass Manufacturing*

WRIGHT A.C., VESSEL B., BACHRA B., HUME R.A., CLARE A.G., GRIMLEY D.I., SINCLAIR R.N.,  
Materials Research Society Symposium Proceedings **367** 635-659 (1995)

*Neutron Scattering Studies of Network Glasses*

CLARE A.G.

Glasstech. Ber. Glass Sci. Technol. **70C** 1997 418-426

*Glass Optical Fibers in Medicine*

VEDISHCHEVA N.M., SHAKHMATKIN B.A., SCHULTZ M.M., VESSAL B., WRIGHT A.C., BACHRA B., CLARE A.G., HANNON A.C. and SINCLAIR R.N.,

J. Non-Cryst. Solids 192-193 292-7 (1995)

*A Thermodynamic, Molecular Dynamics and Neutron Scattering Investigation of the Distribution of Tetrahedral Si Species and the Network Modifying Cation Environment in Alkali Silicate Glass*

WRIGHT A.C., HANNON A.C., VESSAL B., SINCLAIR R.N., GRIMLEY D.I., BACHRA B., CLARE A.G.  
Proc. Otto Schott Symposium, Jena July 11-14 1994  
*Neutron Scattering Studies of Glasses*

CAO Y., CORMACK A.N., CLARE A.G., BACHRA B., WRIGHT A.C., SINCLAIR R.N., HANNON A.C.,  
Proc. Pacific Rim Meeting of the American Ceramic Society November 1993  
*Points of Contact Between Theory and Experiment: A Comparison of Molecular Dynamics and Neutron Diffraction Results*

CLARE A.G.  
Science World 53 [6] 13 91996)  
*High Tech Glasses*

CLARE A.G., WRIGHT A.C., SINCLAIR R.N.  
J. Non-Cryst Solids **213 & 214** (1997) 321-324  
*A Comparison of the Structural Role of Na<sup>+</sup> Network Modifying Cations in Sodium Silicate and Sodium Fluoroberyllate Glasses*

KING W.A., CLARE A.G., LACOURSE W.C., VOLIN K., WRIGHT A.C., WANLESS A.J.  
Physics and Chemistry of Glasses **38** (1997) 269-76  
*A Neutron Scattering Study of As<sub>2</sub>Se<sub>3</sub> Glass Fibers*

VEDISCHEVA N.M., SHAKHMATKIN B.A., SHULTZ M.M., VESSAL B., WRIGHT A.C., BACHRA B.,  
CLARE A.G., HANNON A.C., SINCLAIR R.N.  
J. Non Cryst. Solids **192 & 193** 1995 292-297  
*A Thermodynamic, Molecular Dynamics and Neutron Diffraction Investigation of the Distribution of Tetrahedral {Si(n)} Species and the Network Modifying Cation Environment in Alkali Silicate Glasses*

CLARE A.G.  
*Perspective from a University with and Industry Funded Research Program*  
pp1-8 National Research Council Russian Academy of Sciences Technology Commercialization: Russian Challenges, American Lessons National Academy Press Washington DC (1998)

AMY B. JEDLIKA, CLARE A.G.  
Advances in the Fusion and Processing of Glass II Vol **82**, Transactions of the American Ceramic Society (1998)  
*Biological Interactions with Glass Surfaces*

KUCUK A., CLARE A.G., JONES L.E.  
Advances in the Fusion and Processing of Glass II Vol **82**, Transactions of the American Ceramic Society (1998)  
*Density and Surface Tension of Glass Melts as a Function of Composition at 1400C*

JONES L.E., LARSON E.D. SAMEDIHI T.W. CLARE A.G

Advances in the Fusion and Processing of Glass II Vol **82**, Transactions of the American Ceramic Society (1998) pp 81-84

*Emissions Produced Upon Processing Silicate Glasses*

WRIGHT A.C., CLARE A.G., CHO J., FELLER S. HANNON A.C., JOHNSON B.C. MARTIN S.W., POLYAKOVA I.G., ROYLE M. L., SENAPATI U., SHAKHMATKIN B.A., SINCLAIR R.N, VEDISCHEVA N.M., VENHUIZEN P., WILLIAMS R.B.

Proc. XVIII International Congress on Glass Eds. Manoj K. Choudhary, Norman T. Huff and Chrales H. Drummond Published on CD ROM by the American Ceramic Society

*Neutron Scattering Studies of Oxide and Chalcogenide Glasses*

KUCUK A., CLARE A.G., JONES L.E.

Proc. XVIII International Congress on Glass Eds. Manoj K. Choudhary, Norman T. Huff and Chrales H. Drummond Published on CD ROM by the American Ceramic Society

*Density and Surface Tension of Glass Melts*

CLARE A., BURDICK V., WENZEL J.,

Proc. Unified International Technical Conference **2** 1137-1144(1998)

*Refractories Education in the United States of America*

CLARE A.G.

"Technology Commercialization; Russian Challenges, American Lessons" National Research Council, Russian Academy of Sciences, National Academy Press, Washington DC 1998 pp. 1-8

*Perspective from a University with an Industry-Funded Research Program*

KUCUK A., CLARE A.G.

Journal of Optical Materials **13** (1999) 279-287

*Optical Properties of Cerium and Europium Doped Fluoroaluminate Glasses*

KUCUK A., CLARE A.G., JONES L.E.

Glass Technology **40** (5) (1999) 149-153

*Estimation of Surface Tension for Silicate Glass Melts at 1400°C Using Statistical Analysis*

LEE S.H. and CLARE A.G

*"In Vitro Bioresorbable Fiber Dissolution,"*

pp. 113-27 in Ceramic Transactions, Vol. 110, *Bioceramics: Materials and Applications III*. Edited by L. George, R. P. Rusin, G. S. Fischman, and V. Janas. American Ceramic Society, Westerville, 1999.

KUCUK A., CLARE A.G., JONES L.E.

J. Non-Cryst. Solids **261**(1) 2000 28-38

*Differences Between Surface and Bulk of Glass Melts I: Compositional Differences and Influence of Volatilization on Composition and the Physical Properties*

CLARE A.G. and AMES D

*Probing Glass Oxidation States Using Fluorescence Spectroscopy*

Glass Researcher 10[1] 15 (2000)

KUCUK A., CLARE A.G., JONES L.E.

Physics and Chemistry of Glasses **41** (2000) 75-80

*Differences Between Surface and Bulk of Glass Melts II: Influence of Redox Ratio on Surface Properties of Silicate Melts*

KUCUK A., CLARE A.G., JONES L.E.

Glastech. Berichte Glass Sci. Technol. **73** (5) 2000 1-7

*The Influence of various Atmospheres on the Surface Properties of Silicate Melts*

AMY B. JEDLIKA, CLARE A.G.

Ceramic Transactions **101** (1999) 219-229 Surface Active Processes in Materials

*The Differential Response of Cultured Mammalian Cells to Commercial Silicate Glasses*

KUCUK A., CLARE A.G., JONES L.E., CORMACK A. CAO Y.

Glastech. Berichte Glass Sci. Technol. **73 C2** 430-440 2000

*The Bulk and Surface Structure of Potassium and Lithium Silicate Melts at 1700K: A Comparison of Data from Sessile and Pendant Drop Measurements and Molecular Dynamics Simulations*

SAMADHI T.W., ELLIOTT J. JONES L.E. CLARE A.G.

Glastech. Berichte Glass Sci. Technol. **74** 2001

*Sodium Sulfate decomposition in dry atmospheres*

SAMADHI T.W., JONES L.E. CLARE A.G.

Glastech. Berichte Glass Sci. Technol. **73 C2** 361-369 (2000)

*Decomposition of Sodium Sulfate as Influenced by Carbon*

CLARE A.G., DRESCHER H., RHEINBERGER V. HOELAND W.,

Glastech. Berichte Glass Sci. Technol. **73 C1** 278-286 2000

*The Role of the Chemistry of the Oxide Surface Layer of <sup>IPS</sup>d.SIGN Alloys on the Quality of <sup>IPS</sup>dSIGN Glass Ceramic Coatings*

SAMADHI T.W., JONES L.E. CLARE A.G.

Ceramic Transactions vol. **119** Environmental Issues and Waste Management Technologies in the Ceramic and Nuclear Industries 517-524 (2001)

*Decomposition of Sodium Sulfate in the presence of Carbon: Measurements of SO<sub>x</sub> using Mass Spectrometry*

JEDLICKA A.B., CLARE A.G.

Journal of Non Crystalline Solids **281** 6-24 (2001)

*Chemical Durability of Commercial Silicate Glasses, Part 1 of 2: Materials Characterization*

CLARE A.G. SCHRADER A.B.

Proc. SPIE vol **4102** 2000

Water Content effect on Neodymium-Doped Fluorozirconate and Fluoroaluminate Glasses

JONES L.E., SAMADHI T.W., CLARE A.G.

SO<sub>x</sub> Emissions from Silicate Glass Batches

Ceram Eng. Sci Proc. 22[1] 165-74 (2001)

HALL M.M., CLARE A.G.

*Protein Binding Affinity at Glass Surfaces*

Proc. International Congress on Glass 2 911 (2001)

CLARE A.G.

*Using the Sessile Drop and Pendant Drop Methods to Measure Density and Surface Tension*

The Glass Researcher **10-11** [2-1] (2001) 30-2

CLARE A.G.

*NY State Technology Grant Focuses on Photonics Education and Training*

The Glass Researcher **10-11** [2-1] (2001) 54

CLARE A.G.

Physics and Chemistry of Glasses special edition (International Congress on Glass Invited Papers) 2001

*Glass Science Education at Alfred University*

CLARE A.G.

*Fabrication of Novel Optical Fiber Configurations: A Glass Science Viewpoint*

Glass Sci. Technol. **75** C1 pp.181-191 2002

CLARE A.G. WING D KUCUK A. JONES L.E.

*Density and Surface Tension of Borate Containing Glass Melts*

Glass Technol. **44** (2) (2003) 59-62

CLARE A.G.

Photonics a Light Introduction

Am. Ceram. Soc. Bull.82[6] 17-22 (2003)

CLARE A.G. HALL M.M. KORWIN-EDSON M.L., GOLDSTEIN A.H.

*Biomolecular Characterization of Glass Surfaces*

Journal of Physics Condensed Matter **15** (31) S2365-S2375 (2003)

KORWIN-EDSON M.L., CLARE A.G., HALL M.M. GOLDSTEIN A.H. *Biospecificity of glass surfaces: streptavidin attachment to silica* Journal of Non-Crystalline Solids, Volume **349**, 1 December 2004, Pages 260-266

LOHBAUER U., FRANKENBERGER R., CLARE A.G., PETSCHILT A. GREIL P.

*Toughening of dental glass ionomer cements with reactive glass fibres*

Biomaterials, Volume 25, Issue 22, October 2004, Pages 5217-5225

LOHBAUER U., WALKER J., NICKOLAENKO S., WERNER J, CLARE A., PETSCHILT A. GREIL P.

*Reactive fibre reinforced glass ionomer cements* • *ARTICLE*

Biomaterials, Volume 24, Issue 17, August 2003, Pages 2901-2907

CLUPPER D.C., GOUGH J.E., HALL M.M., CLARE A.G., LACOURSE W.C., HENCH L.L.

*In-Vitro Activity of S520 Glass Fibers and Initial Assessment of Osteoblast Attachment*

J. Biomed. Mater Res. Part A 67[1] 285-94

SAMADHI T.W., JONES L.E. and CLARE A.G.  
*Influence of Carbon on SO<sub>x</sub> Emissions from Glass Processing*,  
J. Am. Ceram. Soc., **86** [12] 2044-9 (2003).

CLARE A.G. and DeWAAL, H  
*New Technical Committee for ICG*,  
GlassResearcher, 13 [2] 37-8 (2004).

SAMAHDI T.W. JONES L.E. KROPACEV A. CLARE A.G.  
*Fourier Transform Infrared Spectra of Emissions From Glass Batch*  
J Amer. Ceram. Soc. **87** 1210-1215 (2004)

WING D.R., CLARE A.G., JONES L.E.  
*The Effects of Vanadium Additions on the Surface Tension of Soda Lime Silicate Melts*  
Ceramic Transactions **141** Eds. J.R. Varner, T Seward, Helmut A. Schaeffer  
135-153 (2004)

CLARE A.G. WING D KUCUK A. JONES L.E.  
*Density and Surface Tension of Borate Containing Glass Melts*  
Glass Technol **44**(2) 59-62 (2003)

CLARE A.G. KING W.A. LaCOURSE W.C.  
*Forming Behavior and the Structure of Glasses*  
Glasstechnische Ber. Glass Sci. Technol **77C** (2004) 61-73

WING D. CLARE A.G. JONES L.E.  
*Effects of Redox State and Atmosphere on the Surface Tension of Iron-Containing Soda Lime Silicates*  
Glass Science and Technology **78** 117-124. (2005)

HALL M.M. CLARE A.G.  
*Influence of Glass Dissolution Products on the Detection of Proteins by Silver Staining*  
Journal of Biomedical Materials Research Part B **75B** 435-441 (2005)

ZHENG Y. CLARE A.G.  
*Rare Earth Doped Glasses for Conversion of Near Ultraviolet Light to White Light*  
Physics and Chemistry of Glasses. Vol. 46, no. 4, pp. 467-471. 2005

RASZEWSKI F., CLARE A.G.  
*Thermal Analysis of Glass Covered Amorphous Metal Wire and Ribbon*  
Physics and Chemistry of Glasses. Vol. 46, no. 4, pp.451-456. 2005

. HALL M.M. CLARE A.G.,  
*Effect of Excess Methanol on the Morphology of Sonogel-Derived Silica*  
Journal of Sol-Gel Science and Technology (2007) **41** 107-112

## INVITED TALKS

- 1993 The Electrochemical Society, Toronto Canada  
Non Linear Optical Glasses
- 1994 Invited Speaker; Bioceramics Workshop, Alfred, June 8-10 1994  
"Fiber Optics for Laser Surgery"
- 1994 Invited Speaker 90th Birthday Symposium for Norbert Kreidl,  
Liechtenstein, July 3-8 "What's New for Lasers and Fiber Optics in  
Medicine"
- 1996 Invited Speaker Basic Science Division of American Ceramic Society;  
"Bioresorbable Glasses and Glass Ceramics"
- 1997 Invited Speaker American Ceramic Society Annual Meeting Student Forum  
Glasses for Photonic Applications
- 1999 Invited Speaker Glass and Optical Materials Division of American Ceramic Society;  
"Biological Reactions of Silicate Glasses"
- 2000 Student Congress Keynote Address, Cocoa Beach FL 23-25 Jan 2000
- 2000 International Commission on Glass Annual Meeting Gottardi Prize Lecture "Some  
Curious  
Characterizations of Glass"
- 1992-Present Seminars at University of Cincinnati, University of Toronto, RPI, University of Iowa,  
University of Missouri-Rolla, Pilkingtons, Johns Manville, PPG, British Telecom  
SUNY Stony Brook, Cornell University (3), University of Rochester, RIT
- 2000 NICE Student Congress *Keynote Address*, Cocoa Beach FL 23-25 Jan 2000
- 2000 Vittorio Gottardi Prize Lecture, International Commission on Glass Annual Meeting,  
Amsterdam, Holland, May 2000
- 2001 International Congress on Glass July 2001 "Education of Glass Scientists in the United  
States"
- 2001 The Annual Meeting of the European Ceramic Society "Distance Learning in Ceramic  
Engineering"
- 2001 Invited Discussion Leader for Functionally Graded Biomaterials at the Gordon  
Conference  
for Ceramics
- 2002 First International Workshop on Glass and the Photonics Revolution Bad Soden Germany
- 2002 Glass and Optical Materials Division Meeting Pittsburgh PA (2 invited talks)
- 2003 Seminars at University of Albany, Coe College, NRL, Virginia Tech., University of  
Washington, University of Illinois, Ohio State University
- 2003 University Conference on Glass RPI, "Biomolecular Specificity of Glass Surfaces"
- 2004 Invited Seminars at Guardian Industries, Johns Manville, Syracuse University, GMIC  
Glass Art and Science Seminar, The IT Collaboratory Meeting at RIT
- 2004 Invited Participant International Congress on Glass Kyoto, Japan
- 2004 Advisory Board for NSF International Materials Institute on New Functionality of Glass
- 2005 Invited Speaker University Conference on Glass, The Pennsylvania State University
- 2005 Invited Speaker at the Vth International Conference on Borate Glasses and Melts

## BOOK CHAPTERS

1. SHELBY J.E., LACOURSE W.C. , CLARE A.G.  
ASM International Engineered Materials Handbook Vol. 4 "Ceramics and Glasses"  
*Engineering Properties of Oxide Glasses and Other Inorganic Glasses*
2. CLARE A.G.  
Rare Elements in Glasses, Ed. J.E. Shelby Trans Tech Pub. 1994  
*Structure and Properties of Rare Earth Gallium Sulfide Glasses*
3. CLARE A.G.  
Rare Elements in Glasses, Ed. J.E. Shelby Trans Tech Pub. 1994  
*Rare Elements in Glasses for Laser Applications*
4. CLARE A.G., WRIGHT A.C.  
Rare Elements in Glasses, Ed. J.E. Shelby Trans Tech Pub. 1994  
*Neutron Diffraction Studies of Rare Earths in Glasses*
5. LACEFIELD W., CLARE A.G.  
Handbook of Biomaterials Evaluation 1998 second edition  
*Surface Analysis of Ceramics and Glasses pp. 143-155*
6. CLARE A.G.  
Advances in Biotechnology and Biomaterials  
Eds. Donglu Shi (2004) Published by Springer  
*Biotechnological Applications of Inorganic Glasses*
7. CLARE A.G., KUCUK A., WING D.R., JONES L.E.  
*The Measurement of the Density and Surface Tension of Glass Melts Using the Sessile Drop Method in High Temperature Glass Melt Property Database for Process Modelling* Edited by T.P Seward III and T. Vascott American Ceramic Society OH (2005)

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- 1) Ceramic Transactions Volume **48**  
FISCHMAN G.S., CLARE A.G., HENCH L. (1994) *Bioceramics: Materials and Applications*
- 2) TICK P., BARTHOLOMEW R., CLARE A.G., BRUCE A.  
*Journal of Non Crystalline Solids Proc. 10th International Conference on Non-Oxide Glasses (1996)*
- 3) Ceramic Transactions Volume **82**  
CLARE A.G., JONES L.E.. (1998) *Advances in Fusion and Processing of Glass II*

