THE UNIVERSITY OF BRITISH COLUMBIA Curriculum Vitae for Faculty Members

Date: 27 April 2012

Please Initial: JHB

1. SURNAME: Brewer FIRST NAME: Jesse MIDDLE NAME(s): Herman

2. DEPARTMENT/SCHOOL: University of British Columbia

3. FACULTY: Science

4. PRESENT RANK: Professor **SINCE:** 1986

5. POST-SECONDARY EDUCATION

University or Institution	Degree	Subject Area	Dates
Trinity College (Hartford, CT, USA)	B.Sc.	Physics	June 1967
Univ. of California (Berkeley, CA, USA)	M.A.	Physics	March 1969
Univ. of California (Berkeley, CA, USA)	Ph.D.	Physics	June 1972

Special Professional Qualifications

6. EMPLOYMENT RECORD

(a) Prior to coming to UBC

University, Company or Organization	Rank or Title	Dates		
Lawrence Berkeley Laboratory	Postdoctoral Fellow	1972-73		
Dept. Of Physics, University of Arizona	Postdoctoral Fellow	1973		

(b) At UBC

Rank or Title	Dates
Postdoctoral Fellow (Chemistry)	1973-74
Research Associate (TRIUMF)	1974-77
Assistant Professor (Physics)	1977-81
Associate Professor (Physics)	1981-86
Professor (Physics)	1986-2011

(c) Date of granting of tenure at U.B.C.: 1982

7. LEAVES OF ABSENCE

University, Company or Organization at which Leave was taken	Type of Leave	paid / unpaid	Dates
E.T.H. Zurich and S.I.N., Switzerland	Sabbatical	60% salary	Jul - Dec 1982

Univ. of Tokyo Meson Science Lab., Japan	Sabbatical	60%	Jan - Jun 1983
		salary	
TRIUMF	Sabbatical	75%	Jul '89 - Jun '90
		salary	
Columbia University	Sabbatical	75%	Jul '97 - Jun '98
		salary	
	Medical Leave	Full salary	Jul - Dec 2003
TRIUMF & UBC	Sabbatical	80%	Jul - Dec 2004
		salary	
TRIUMF & UBC	Sabbatical	80%	Jul - Dec 2005
		salary	
	Part-Time	50%	Jan – Apr
	absence	salary	2009-2011

8. TEACHING

(a) Areas of special interest and accomplishments

Use of computers and information technology in education, e.g. WebCT courses, the Skeptic's Guide to Physics (see

http://musr.physics.ubc.ca/~jess/hr/skept/) and the Science 1
HyperTextBook (see http://musr.physics.ubc.ca/~htb/).

(b) Courses Taught at UBC [for last 5 years]

Session	Course	Lecture	Class				
	Number	Hrs/week	Size	Lectures	Tutorials	Labs	Other (Office Hours)
Fall 2006	Phys 210			2/week		2	
- 2008		2	7-21			hr/wk	
Fall 2006	Phys 409A					9	
& 2007			20,18			hr/wk	
Spr. 2007	Phys 438	4	30	2/week			
Spr. 2007	Phys 409B					9	
			9			hr/wk	
Fall 2008	Phys 259					3	
						hr/wk	
Fall 2009	Science 1			1/week	2/week	6	
		1	68			hr/wk	
Fall 2010	Phys 210			2/week		6	
		2	54			hr/wk	

(c) Graduate Students Supervised

Student Name	Program	Year		Principal	Co-Supervisor(s)
	Type	Start	Finish	Supervisor	
R.F. Kiefl	Ph.D.		1982	J.B. Warren	J.H. Brewer
A. Fry	Ph.D.		1985	C.J. Oram	J.H. Brewer
D.R. Harshman	Ph.D.		1987	J.H. Brewer	
G.M. Luke	Ph.D.		1988	J.H. Brewer	S.R. Kreitzman
G.D. Morris	M.Sc.	1985	1990	J.H. Brewer	
	Ph.D.	1990	1998	J.H. Brewer	
Q. Li	M.Sc.		1990	J.H. Brewer	
B.M. Forster	Ph.D.		deceased	J.H. Brewer	G.M. Marshall
T.L. Duty	M.Sc.		1992	J.H. Brewer	
T.M. Riseman	M.Sc.		1989	J.H. Brewer	
	Ph.D.	1989	1993		
J.R. Brownstein	Ph.D.	1996	withdrew	J.H. Brewer	

J.E. Sonier	Ph.D.	1994	1998	R.F. Kiefl	J.H. Brewer
J. Chakhalian	Ph.D.	1995	2003	R.F. Kiefl	J.H. Brewer
R.I. Miller	Ph.D.	1996	2003	R.F. Kiefl	J.H. Brewer
M.A. Bayer	M.Sc.	2001	withdrew	J.H. Brewer	
S. Stubbs	M.Sc.	2004	withdrew	J.H. Brewer	

... and numerous students from UBC and elsewhere who completed Ph.D. experiments in μSR at TRIUMF.

(d) Undergraduate Research Assistants Supervised

```
Average of 1 student employed each academic year and 1 (usually CO-OP) summer student each summer.

Summer 2003 - three students: Aaron M. Froese, Derek M.C. Liu and Ali Izadi-Najafabadi.

Summer 2004 - two students: Aaron M. Froese and Anthony Uy.

Fall 2004 - One CO-OP student: Angus Lau.

Summer 2006 - one student: Jacob Cosman.

Summer 2008 - one student: Simon Hastings.

Summer 2009 - one student: Jacob Cosman.

Summer 2010 - one student: Andrew Warren.

Summer 2012 - one student: Andrew Warren.

Average of 2-3 volunteer students/year supervised as unpaid helpers on µSR experiments at TRIUMF.
```

Average of 1-2 CO-OP student projects (someone else's) evaluated each year for UBC CO-OP office (1991-2000).

(e) Continuing Education Activities

```
Taught 3 Physics courses in the UBC Centre for Continuing Education in 1970's and 1980's.

Hosted 3 High School Physics teachers in TRIUMF Research Internship program (2003-4). Co-authored a paper with one of them.

Taught course "What Does It All Mean? - Physics as Poetry" in UBC Continuing Studies, 2005.
```

(f) Visiting Lecturer (indicate university/organization and dates)

```
Taught Physics 1493 (lab course) at Columbia Univ. while on sabbatical in Fall 1997.
```

(g) Other

Use of computers and the Internet in promoting wider and better access to information of all sorts, from public educational Web sites to remote data analysis in research.

Hosted TRIUMF High School Fellowship winners Reka Moldovan (Summer 2004, now graduated from UBC), Jacob Cosman (Summer 2005, now graduated from UBC), Jany Gao (Summer 2005, now at UC Berkeley) and Andrew Warren (Summer 2010, now at Reed College).

9. SCHOLARLY AND PROFESSIONAL ACTIVITIES

(a) Areas of special interest and accomplishments

(b) Research or equivalent grants [for last 10 years]

(indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC)

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co- Investigator(s)
NSERC	Individual Research		\$71,600	97-02	J.H. Brewer	invoctigator(c)
	Grant ogp0009055 "µSR in Solids"	С	,			
NSERC	Individual Research Grant "µSR in Solids"	С	\$82,698	99-02	J.H. Brewer	
NSERC	Major Facility Access Grant MFA0184836 "μSR User Facility"	С	\$256,800	99-02	J.H. Brewer	various
NATO	Linkage Grant #977687 "Electron Transport in Matter"	С	\$13,857	01-03	J.H. Brewer	V. Storchak et al.
NSERC	Individual Research Grant "µSR in Solids"	С	\$85,000	02-07	J.H. Brewer	
NSERC	Major Facility Access Grant MFA0184836 "µSR User Facility"	С	\$318,000	02-04	J.H. Brewer	various
NSERC	Major Facility Access Grant "CMMS"	С	\$350,000	04-05	P.W. Percival	various
NSERC	Research Tools & Instruments Grant	С	\$54,234	2005	W.N. Hardy	several
NSERC	Major Facility Access Grant "CMMS"	С	\$325,500	06-08	P.W. Percival	various
CFI	Muon Beamline for MMS at TRIUMF	С	\$2,405,525 total, 4 y	07-10	P.W. Percival	various
NSERC	Individual Research Grant "µSR in Solids"	С	\$69,480	07-12	J.H. Brewer	
NSERC	Major Resources Support Grant "CMMS"	С	\$442,800	09-14	P.W. Percival	various

(c) Research or equivalent contracts [for last 10 years]

(indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC)

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co- Investigator(s)

(d) Invited Presentations

Invited Symposium Lectures

- 1. " μ^+ SR Spectroscopy: the positive muon as a magnetic probe in solids", Hyperfine Interactions Conf., Uppsala, Sweden, 1974.
- 2. " μ^{+} SR Studies at TRIUMF", 173rd National Meeting of American Chemical Society, New Orleans, March 1977, Division of Nuclear Chemistry and Technology. (Invited paper, Symposium on Chemical and Physical Applications of Positron and Muon Spectroscopy.)
- 3. "Muon Spin Rotation: Recent Developments of Applications in Chemistry and Material Science", Int. Symp. on Meson Chemistry and Mesomolecular Processes in Matter, Dubna, USSR, June 1977 (1977).
- 4. "Paramagnetic μ^+e^- States in Insulators and Semiconductors", Chicago Meeting of the American Physical Society, 19-23 March, 1979.
- 5. "Muonium States in Nonmetals", Symposium on Muon Spin Rotation and Associated Problems, Dogashima, Japan, April 1979.

- 6. Several invited talks at $2^{\rm nd}$ Int. Topical Meeting on Muon Spin Rotation, Vancouver 1980.
- 7. Brewer, J.H., "µSR at TRIUMF: Muonium on Surfaces", Int'l Symp. on Basic Research in Science using Mesons, Tsukuba/Tokyo (1981).
- 8. " μ SR Experiments with Surface Muons", UTMSL-BOOM Users' Meeting, Tokyo (1981).
- 9. "Introduction to μ SR : Development and Applications of μ SR", Workshop on Muon Science and Facilities at Los Alamos (March, 1982).
- 10. "Applications of Low-Energy Muon Beams", Symposium on Applications of Low-Energy Positron Beams, Japan (1983).
- 11. "Surface Muon Beams", Workshop on the Advanced Muon Physics Facility, KEK, Japan (March, 1983).
- 12. "Recent Progress in Muonium Physics", Spring 1983 meeting of Japanese Physical Society, Tokyo (1983).
- 13. "Summary of Papers on Muonium in Solids" (summary talk), Yamada Conference on Muon Spin Rotation and Associated Problems, Shimoda, Japan, (April 1983).
- 14. "Recent Progress in μ SR Techniques", CAP Conference (June 1984).
- 15. "TRIUMF as an Atomic Physics Facility", 9th International Conference on Atomic Physics, Seattle, (July 1984).
- 16. "Muonium Spin Relaxation Mechanisms", European Workshop on Spectroscopy of Subatomic Species in Non-metallic Solids, Paris (Sept. 1985).
- 17. "High Temperature Superconductivity", Western Regional Nuclear Physics Conference (Jan. 1988).
- 18. " μ SR in High Temperature Superconductors", First Canadian Conference on High Temperature Superconductivity, Hamilton, Ont. (1988).
- 19. " μ SR in High Temperature Superconductors", CAP Conference (June 1988).
- 20. "Probing High Temperature Superconductors with μ SR", Western Regional Nuclear Physics Conference (Jan. 1989).
- 21. "How Elementary Particle Physics (and Chemistry) Brought High Temperature Superconducters to UBC", Nobel Symposium for opening of UBC Chemistry-Physics bldg. (Sept. 1989).
- 22. "Advanced Muon Beams and the Future of SR", 18th INS Int. Symp. on Physics with High-Intensity Hadron Accelerators, Tokyo (March 1990).
- 23. "μSR at New Accelerators", 5th Int. Conf on SR, Oxford, UK (April 1990).
- 24. "Premonitions from Maui", Workshop on Low Energy Muon Science (LEMS-93), Santa Fe (April 1993).
- 25. Conference Summary Talk, Sixth International Conference on Muon Spin Rotation/Relaxation/Resonance, Wailea, Maui, Hawaii (June 1993).
- 26. "Muon Spin Rotation/Relaxation/Resonance", CAP Symposium on Materials Science Requiring Large Facilities, SFU (June 1993).
- 27. "Muons and Muonium in Fullerenes", Gordon Conference on Hydrogen in Metals, Tilton NH (July 1993).
- 28. "Prospects for the Future of μ SR", Royal Society meeting on Muon Implantation and Hydrogen in Solids, London, UK (June 1994).
- 29. "High-Field μSR Lineshapes in HTSC Vortex Lattices", NEDO Workshop on Highly Correlated Electron Systems, Los Angeles (14 March 1998).
- 30. Series of lectures on μSR at SUSSP Summer School, St. Andrews, Scotland (Aug. 1998).
- 31. Summary talk at Workshop on Applications of Low Energy Muons to Solid State Phenomena, PSI, Villigen, Switzerland (19 Feb. 1999).
- 32. "Muon Stopping & Muonium States", Pre-conference Tutorial Course, 8th International Conference on Muon Spin Rotation/Relaxation/Resonance, Williamsburg, VA, June 2002.
- 33. "Delayed Muonium Formation in Liquids & Solids", Symposium on Muonium Formation in Liquids, 8th International Conference on Muon Spin Rotation/Relaxation/Resonance, Williamsburg, VA, June 2002.
- 34. "µSR: Fantasy, Fiction, Physics", Brockhouse Medal lecture at CAP Congress, Laval, June 2008.
- 35. "Half a Century of Muon Spin Rotation & Relaxation", IAEA workshop: Exotic Beam Research for Advanced Engineering Materials, held at TRIUMF, June 2008.

Invited Lectures

- 1. December 1979: "A Muon's-Eye View of Solids" (Physics Colloquium at Arizona State University).
- 2. January 1985: "Solid State Physics with μ SR" (Physics Colloquium at Univ. of Alberta).
- 3. November 1985: "Muonium" (Physics Colloquium at Univ. of Victoria).
- 4. October 1987: "High Temperature Superconductors" (Vancouver Institute lecture).
- 5. January 1990: "Muons as Probes of Superconductivity" (Physics Colloquium at Oregon State Univ.).
- 6. February 1990: "Not Getting Anyons" (Condensed Matter Physics Seminar at McMaster Univ.).
- 7. February 1990: " μ SR in High Temperature Superconductors" (Physics Colloquium at Univ. of Manitoba).
- 8. " μ SR Data Analysis", Lecture at μ SR Summer School, Wailea, Maui, Hawaii (May 1993).
- 9. "Muon Spin Rotation/Relaxation/Resonance", TRIUMF Summer Nuclear Institute, Vancouver (July 1993).
- 10. October 1994: " μ SR in Cryocrystals" (Physics Colloquium at UBC).
- 11. 21 Nov. 1997: "Muonium in Cryocrystals" (Physics Colloquium at Virginia St. Univ.).
- 12. 5 Dec. 1997: "µSR in Cryocrystals" (Physics Colloquium at Columbia Univ.).
- 13. 26 Feb 2004: " μ SR" (Colloquium at Univ. of Northern British Columbia).
- 14. 5 May 2006: "Applied Particle Physics" (Colloquium at Ohio Univ., Athens, OH).
- 15. 2 Oct 2008: "µSR: Fantasy, Fiction, Physics" (UBC Adventures in Science lecture).
- 16. 5 May 2009: " μ SR: Keeping the Promise of Particle Physics" (Physics Colloquium at U. Arkansas).

(e) Other Presentations

1. March 1998: "High-Field μ SR Lineshapes in HTSC Vortex Lattices" (NEDO Workshop, Los Angeles).

(f) Other (list PDFs, RAs, Visitors - including dates)

Postdoctoral Fellows

- 1. E. Koster (PDF with D.Ll. Williams) 1979-1984
- 2. D.R. Noakes (NSERC PDF) 1983-1985
- 3. Th. Pfiz (PDF with D.Ll. Williams) 1988-1990
- 4. J. Schneider (PDF with R.F. Kiefl) 1989-1992
- 5. Ch. Niedermeyer, visiting PDF, 1990-1991
- 6. P. Mendels, visiting PDF, 1991-1992
- 7. G.D. Morris (PDF with R.F. Kiefl) 1998-2001
- 8. Z.M. Salman (PDF with R.F. Kiefl) 2002-2005
- 9. J.A. Chakhalian (PDF) 2003
- 10. P.L. Russo (PDF) 2006-2008
- 11. Rinat Ofer (PDF) 2009
- 12. Oren Ofer (PDF) 2009-2011
 - ...and numerous PDFs from other institutions, e.g. Univ. of Tokyo.

Research Associates

- 1. B.D. Patterson (shared support with A.S. Arrott of SFU) 1978-1980
- 2. H. Schilling (shared support with D. Ll. Williams) 1979-1981
- 3. M. Senba (supported under IEP-97) 1981-
- 4. E. Turner (supported by TRIUMF Theory group and IEP-20) 1982-1985
- 5. R. Keitel (supported under IEP-97) 1983-87
- 6. S.R. Kreitzman (supported under IEP-20 and IEP-97) 1983-93

- 7. I. Reid (supported under IEP-97) 1984-87
- 8. R.F. Kiefl (supported under TRIUMF) 1984-87
- 9. M. Celio (supported by TRIUMF Theory group) 1985-88
- 10. R. Kadono (R.A. with R.F. Kiefl) 1985-88
- 11. C. Zhang (supported by TRIUMF Theory group) 1990-92
- 12. M. Gingras (supported by TRIUMF Theory group) 1992-96

Visitors

- 1. A. Schenck (LHE/ETH Zurich) 1979-80
- 2. E.J. Ansaldo (U. of Sask.) 1982-1983
- 3. J. Bailey (IKO Amsterdam) 1983-1984
- 4. K.M. Crowe (U.Calif., Berkeley) 1983-1984
- 5. R. Mota (UFSM Brazil) 1984-1985
- 6. P. Mendels (U. Paris Sud Orsay) 1991-93 (NSERC International Fellowship)
- 7. V.G. Storchak (Kurchatov Inst., Moscow) 1992-93 (NSERC International Exchange Fellowship) plus approx. 2 months/year since then.
- 8. D.G. Eshchenko (Paul Scherrer Inst., Switzerland) 1998-present, approx. 2 months/year.
- ...and numerous shorter visits of many Canadian and foreign scientists to carry out collaborative μSR experiments at TRIUMF.

(g) Conference Participation (Organizer, Keynote Speaker, etc.)

- 1. Member of International Advisory Committee for First International Topical Meeting on Muon Spin Rotation (Rorschach, Switzerland, Sept. 1978), or "µSR1."
- 2. Member of Scientific Program Committee for 8th International Conference on High Energy Physics and Nuclear Structure (Vancouver, June 1979).
- 3. Chairman of Muon Spin Rotation Workshop (UBC 1979).
- 4. Chairman of Second International Topical Meeting on Muon Spin Rotation (Vancouver, Aug. 1980), or " μ SR2".
- 5. Member of Organizing Committee, TRIUMF Muon Science Facilities Workshop (August 1980).
- 6. Member of International Advisory Committee for Yamada Conference on Muon Spin Rotation and Associated Problems (Shimoda, Japan, April 1983), or "µSR83".
- 7. Chairman of μ SR Workshop (UBC, August 1985).
- 8. Member of Int. Adv. Comm. for "µSR86" conference (Uppsala, Sweden, June, 1986).
- 9. Single-handedly organized and chaired International Workshop on Low-Energy Muon Science at Large Accelerators (TRIUMF, June 1989).
- 10. Member of Int. Adv. Comm. for " μ SR90" conference (Oxford, UK, April 1990).
- 11. Convener of Muon section of International Workshop on Physics at the KAON Factory (Vancouver, July 1990).
- 12. Chairman of Sixth International Conference on Muon Spin
 - Rotation/Relaxation/Resonance (Wailea, Maui, Hawaii, June 1993), or " μ SR93".
- 13. Member of Int. Adv. Comm. for "Hyperfine Interactions" conference (1994).
- 14. Member of Organizing Committee for "VogtFest" Symposium in honour of E.W. Vogt's retirement (UBC/TRIUMF, 4 Dec. 1994).
- 15. Member of Int. Adv. Comm. for " μ SR96" conference (Nikko, Japan, April 1996).
- 16. Member of Int. Adv. Comm. for " μ SR99" conference (Les Diablerets, Switzerland, Aug. 1999).
- 17. Member of Int. Adv. Comm. for " μ SR02" conference (Virginia, USA, 2002).
- 18. Member of Int. Adv. Comm. for " μSR05 " conference (Oxford, UK, 2005).
- 19. Member of Int. Adv. Comm. for "µSR08" conference (Tsukuba, Japan, 2008).

10. SERVICE TO THE UNIVERSITY

(a) Memberships on committees, including offices held and dates

Departmental

- 1. Undergraduate Physics Labs Committee (1981-1982)
- 2. Physics Dept. Computerization Committee (1981-1984)
- 3. Committee on Promotion, Reappointment and Tenure (1984-1992)
- 4. Committee on Promotion, Reappointment and Tenure (1994-1997)
- 5. Committee on Promotion, Reappointment and Tenure (2001-2003)
- 6. Chair of Departmental Graduate Admissions Committee (2001-2003)
- 7. Acting Graduate Chair (Spring term 2004)
- 8. Chair of Departmental Website Committee (2001-2010)
- 9. Computing Committee (2006-2011)

University

- 1. Chair of committee to develop new Science course requirements for the Faculty of Arts (1985-1986)
- 2. Member of committee to develop Science 1 program (1988)
- 2. Member of Committee to select Faculty of Science Teaching Awards (1991)
- 3. Member of Faculty Awards Committee (1998-2002)
- 4. Member of Advisory Committee for Individual Interdisciplinary Studies Graduate Program (2003-)
- 5. Member of UBC Major Entrance Scholarship Selection Committee (2006,2008)

(b) Other service, including dates

- 1. UBC Open House, 1979: Chairman/Organizer of Physics Dept. activities
- 2. UBC Open House, 1979: Coordinator for Faculty of Science
- 3. Faculty of Science Rep. to Faculty of Arts (1984-87)
- 4. UBC CO-OP Program Faculty Advisor (1991-2000)
- 5. Faculty of Science Mentor (1991-1993)
- 6. Faculty of Science Liaison with University Hill Secondary School "Transition School" program (1993-1997)
- 7. UBC New Faculty Mentor (1994-2001)
- 8. Imagine! UBC Professor of the Year (2005).

11. SERVICE TO THE COMMUNITY

(a) Memberships on scholarly societies, including offices held and dates

- 1. Member of the Chemical Institute of Canada since 1977.
- 2. Member of the Canadian Association of Physicists since 1977.
- 3. Member of the American Physical Society since 2001.

(b) Memberships on other societies, including offices held and dates

(c) Memberships on scholarly committees, including offices held and dates

(d) Memberships on other committees, including offices held and dates

- 1. Member of TRIUMF Instrumentation Advisory Committee (1980-82).
- 2. Chairman-elect of TRIUMF Users' Executive Committee (1980).
- 3. Chairman of TRIUMF Users' Executive Committee (1981).
- 4. Member of TRIUMF Experiments Evaluation Committee (1981-82).
- 5. Member of TRIUMF Operating Committee (1980-82; 1983-85; 1993-95).

- 6. Member of TRIUMF Long-Range Planning Committee (1990-93).
- 7. Member of TRIUMF Users` Executive Committee (1992-93).
- 8. Chairman of TRIUMF Long-Range Planning Committee (1996-97).
- 9. Chairman-elect of TRIUMF Users' Executive Committee (1999).
- 10. Chairman of TRIUMF Users' Executive Committee (2000).
- 11. Past Chair of TRIUMF Users' Executive Committee (2001).
- 12. Member of TRIUMF Experiments Evaluation Committee (2000-2001).

(e) Editorships (list journal and dates)

- 1. Assoc. Editor of Hyperfine Interactions (published by North-Holland) since 1981.
- 2. Divisional Associate Editor of *Physical Review Letters* (Condensed Matter) 2001-2005.

(f) Reviewer (journal, agency, etc. including dates)

- 1. Referee for Phys. Rev. B since 1977.
- 2. Referee for Phys. Rev. Lett. since 1977.
- 3. Occasional referee for U.S. National Science Foundation.
- 4. Referee for the Manning Prize competition (ca. 1990).
- 5. Occasional referee for Australian federal funding agencies.
- 6. Referee for International Science Foundation (1994).
- 7. Referee for NEDO Foundation [Japanese granting agency] (2001).
- 8. Occasional referee for IOP journals, e.g. Rep. Prog. Phys. and J. Phys.: Condensed Matter.
- 9. Occasional referee for Nature Materials.

(g) External examiner (indicate universities and dates)

Univ. of Witwatersrand - Morgan Madhuku's PhD thesis (2008)

(h) Consultant (indicate organization and dates)

(i) Other service to the community

- 1. Occasional lectures in B.C. community outside the University (approx. 1/year). -- e.g.:
 - a) "A Closer Look at Matter" (lecture to local science group in Maple Ridge, B.C.), 1984.
 - b) "Physics: the Womb of Reality" (course in UBC Centre for Continuing Education), Spring 1984.
 - c) "Confessions of an Amateur Teaching Natural Philosophy" (talk at B.C. Physics Teachers' Meeting), Spring 1985.
 - d) UBC Connect talk on $\mu \text{SR}\text{,}$ Summer 1986.
 - e) Shad Valley program talk on μSR in High Temperature Superconductors, Summer 1987.
 - f) "High Temperature Superconductivity", (talk to Vancouver Branch of Assoc. of Professional Engineers), June 1988.
 - g) "Broken Mirrors, Muons and Superconductors", UBC Connect talk, Summer 1990.
 - h) Shad Valley program talk on μ SR in High Temperature Superconductors, Summer 1999.
 - i) Lecture on μ SR for TRIUMF Summer Students, Summer 2004.
- 2. UBC/Science World "Scientists in the Schools" program, 1992-1997.
- 3. Occasional independent Physics presentations to primary school classes, 1992-.
- 4. Science Fair judge, 1992-1997.
- 5. Liaison with University Hill Secondary School "Transition School" program [see

```
above] 1993-1997.
```

6. Research host to High School Physics teachers in TRIUMF's Internship program (2003-).

12. AWARDS AND DISTINCTIONS

- (a) Awards for Teaching (indicate name of award, awarding organizations, date)
- (b) Awards for Scholarship (indicate name of award, awarding organizations, date)
- 1. Killam Postdoctoral Fellowship (Chemistry UBC), 1975-77.
- 2. Japanese Society for the Promotion of Science (JSPS) Fellowship, 1983.
- 3. Associate of Canadian Inst. for Advanced Research (CIAR), 1988-.
- 4. UBC Killam Research Prize (1996).

(c) Awards for Service (indicate name of award, awarding organizations, date)

1. Imagine! UBC "Prof of the Year" (2003).

(d) Other Awards

- 1. International Society for μ SR Spectroscopy (ISMS) award for lifetime contributions to μ SR (2005).
- 2. CAP Brockhouse Medal (2008).
- 3. ISMS Yamazaki Prize (2011).

13. OTHER RELEVANT INFORMATION (such as current personnel, major equipment, etc.) [Max. 1 Page]

Current Personnel

*funded entirely through NSERC Discovery Grant " μ SR in Solids".

1. Graduate students:

a. Scott L. Stubbs* (M.Sc. Student)

2. PDFs and Research Associates:

- a. Oren Ofer
- b. Rinat Ofer*

3. Technicians:

4. Faculty:

- a. J.H. Brewer* (UBC)
- b. V.G. Storchak (Kurchatov Inst.)
- c. D.G. Eshchenko (PSI)
- d. ...and *numerous* visitors, short- and long-term.

Major Equipment (value greater than \$10K), date of purchase

- 1. Varian magnet and power supply, \$50K, 1974
- 2. Computer and peripherals owned by μ SR group, \$70K, 1975
- 3. "Owned" μ SR Nuclear Instrumentation electronics, \$30K, 1978
- 4. "Eagle" μ SR spectrometer, \$60K, 1980
- 5. Assorted micro computers and interfaces, \$40K, 1981-85
- 6. Assorted cryostats, \$40K, 1983-85

- 7. Muon Spin Echo apparatus, \$ 90K 1984-85
- 8. "OMNI" μ SR spectrometer, \$100K, 1984-85
- 9. Superconducting magnet, \$50K, 1985
- $10.\mu$ SR Dilution Refrigerator, \$240K, 1985-86
- 11. "OMNI-prime" μ SR spectrometer, \$100K ,1986-87
- 12. " μ SR User Facility" Data Acquisition system and on-line computers \$78,581 (1990-91)
- 13. Superconducting magnet tail for μ SR Dilution Refrigerator, \$85K (1993)
- 14. "µSR User Facility" Cryostat \$35,000 (1994-95)
- 15. "Belle" Superconducting μ SR spectrometer magnet: gift from Bell Labs (1996-97).
- 16. High-field spectrometer (counters & cryostat) for "Belle" magnet = \$55K (1996-97).
- 17. TRIUMF Facilities (not including cyclotron itself) provided "mainly for $\mu\text{SR}"$ include three muon channels worth roughly \$2.5M each and assorted on-line computers with a cumulative net worth of roughly \$250K.

THE UNIVERSITY OF BRITISH COLUMBIA Publications Record

SURNAME: Brewer FIRST NAME: Jesse Initials: JHB

MIDDLE NAME(s): Herman

Date: 27 April 2012

Publication Summary:

	1.1	1.2	1.3	2	3	4	5	6	7	8	9
Career Total	77	99	157	34	2	9				0	0
Last 5 Years Total	20	4	8	11	0	0		2	5	0	0

1 = Refereed Scientific Journals A

1.1= Full Journal Articles

1.2= Letters, Notes & Communications

1.3= Refereed Conference Proceedings

2 = Non-Refereed Symposium Proceedings

3 = Books

4 = Chapters in Books

5 = Preprints

6 = Work Submitted for Publication

7 = Work in Progress

8 = Patents

9 = Special Copyrights

♠ Include pagination and indicate about 5 papers of primary importance. ("about" :-)

SEE APPENDED LIST