A. J. TIMOTHY JULL
Department of Geosciences, University of Arizona, Tucson, Arizona 85721, USA
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A. Professional Preparation

University of British Columbia, B. Sc. Chemistry	1972
University of Bristol, Ph. D. Chemistry (geochemistry)	1976

Postdoctoral Training.

University of Bristol	mass spectrometry, lunar studies	1975-1976
University of Cambridge	mass spectrometry, isotope geochemistry	1976-1979
Max-Planck-Institut für Chemie	ion microprobe studies and isotope effects	1979-1981

B. Appointments and Experience

2017-	Visiting Professor, Institute for Nuclear Research, Debrecen, Hungary
2006-	Professor, Geosciences and Physics, University of Arizona
2012-2013	Fulbright Scholar, Institute for Nuclear Research, Debrecen, Hungary
2000-2006	Senior Research Scientist, University of Arizona
2004-2005	Leverhulme Visiting Professor, University of Glasgow, UK
2000-2014	Director, NSF Arizona AMS Laboratory, University of Arizona
1992-2001	Research Scientist, Department of Geosciences and Co-Principal Investigator, NSF-Arizona AMS Facility.
1984-1992	Research Scientist, Dept. of Geosciences, University of Arizona
1981-1984	Research Associate, Dept. of Geosciences, University of Arizona
1979-1981	Visiting Scientist, Max-Planck-Institut für Chemie, Mainz, Germany.
1976-1979	Postdoctoral Fellow, Department of Mineralogy and Petrology, University of Cambridge, UK.
1975-1976	Postdoctoral Research Assistant, University of Bristol, UK

C. Five Relevant Publications.

Jull A. J. T., Burr G.S., McHargue L. R., Lange T. E., Lifton N. A., Beck J. W. and Donahue D. J. (2004) New frontiers in dating of geological, paleoclimatic and anthropological applications using accelerator mass spectrometric measurements of ^{14}C and ^{10}Be in diverse samples. *Global and Planetary Change* 41: 309-323.

Jull A. J. T. and Burr G. S. (2006) Accelerator Mass Spectrometry: is the future big or small? *Earth and Planetary Science Letters* 243: 305-325.

Buentgen, U. and 68 other authors, 2018. Tree rings reveal globally coherent signature of cosmogenic radiocarbon events in 774 and 993 CE. Nature Communication, Doi: 0.1038/s41467-018-06036-0.

Jull A.J.T., Panyushkina I.P., Miyake F., Masuda K., T. Nakamura, Lange T.E., Cruz R.J., Baisan C., Janovics R., Varga T., Molnár M. 2018. More rapid carbon-14 excursions in the tree-ring record: A record of different kind of solar activity at about 800 BC? *Radiocarbon,* 60(4):1237-1248. doi:10.1017/RDC.2018.53.

Miyake F., Jull A.J.T., Panyushkina I.P., Wacker L., Salzer M., Baisan C., Lange T., Cruz R., Masuda K., Nakamura T. 2017. Large ^{14}C excursion in 5480 BC indicates an abnormal sun in the mid-Holocene. *PNAS Physical Sciences - Earth, Atmospheric, Planetary Sciences* 114 (3), doi:10.1073/pnas.161314411.

Jull A.J.T., Panyushkina I.P., Lange T.E., Kukarskih V.V., Clark K.J., Myglan V.S., Salzer M., Burr G.S., Leavitt S.L. 2014. Excursions in the ^{14}C record at AD 774-775 from tree rings from Russia and America. *Geophysical Research Letters* 41: 3004-3010.

5 other publications

A.J. T. Jull, G. S. Burr, J. W. Beck, D. J. Donahue, D. Biddulph, A. L. Hatheway, T. E. Lange and L. R. McHargue (2003) Using accelerator mass spectrometry for geochronology of the climatic record and connections with the ocean. *Journal of Environmental Radioactivity* 69: 3-19.
A. J. T. Jull (2006) Terrestrial Ages of Meteorites. In "Meteorites and the Early Solar System II" (eds. D. Lauretta, et al.), pp. 889-905. Tucson: University of Arizona Press.
A. J. T. Jull, G. S. Burr, J. W. Beck, G. W. L. Hodgins, D. L. Biddulph, J. Gann, A. L. Hatheway, T. E. Lange and N. A. Lifton (2006) Application of accelerator mass spectrometry to environmental and paleoclimate studies at the University of Arizona. In *Radionuclides in the Environment* (P. Povinec and J. A. Sanchez-Cabrera, eds.), Amsterdam:Elsevier, pp. 3-23
A. J. T. Jull and G. S. Burr (2013). Mass Spectrometry Instruments VI: Accelerator Mass Spectrometry. In *Treatise of Geochemistry* (K. K. Turekian and H. Holland, eds.) Amsterdam: Elsevier.
A. J. T. Jull (2007) Overview of Dating Techniques. In *Encyclopedia of Quaternary Science* (ed. S. Elias), Elsevier: Amsterdam. pp.452-459

D. Synergistic Activities.

AGU Devendra Lal Medal Committee, American Geophysical Union, 2017-2023.
Decadal Review Committee, Physical Research Laboratory, Jan 2019
Student Affairs Policy Committee, University of Arizona, 2010-2017
University of Arizona Faculty Senate, 2008-2012, 2015-2017
Chair, 20th International Radiocarbon Conference, Hawaii, June 2009
International Scientific Advisory Committee, A E Lalonde Accelerator Mass Spectrometry Laboratory, Ottawa, Canada
Advisory Board, Rez Accelerator Mass Spectrometry and Environmental Sciences (RAMSES), Prague, Czech Republic.
Associate Editor, Encyclopedia of Quaternary Sciences, Elsevier.
Associate Editor, Encyclopedia of Scientific Dating Methods, Springer
Editor, Meteoritics and Planetary Science, 2003-date
Editor, Radiocarbon, 1999- date

E. Collaborations.

i. Collaborators: G. F. Herzog, B. Hofmann, E. Gnos, A. W. R. Bevan, P. A. Bland, R. C. Reedy, K. J. Kim, J. Sisterson, W. J. Zhou, D. Lal, Z. S. An, F. Phillips, M. Zreda, M. Caffee, R. Finkel, M. Kurz, J. O. Stone, Y. Kuzmin., M. Geertsema, P. Sanborn, P. A. Bland, J. Pigati, D. Dettman, S. Colman, J. Quade, E. M. Scott, S. Freeman, C. Schnabel, S. Xu, L. Cheng, D. Steadman, P. S. Martin, G. Meyer, I. Sharon, E. Boaretto, R. Freer-Waters, T. Omori, M. Thiemens, A. Priyadarshi, P. Povinec, S. Leavitt, I. P. Panyushkina, Vladimir V. Kukarskih, Vladimir S. Myglan , Kelley J. Clark, Matthew W. Salzer, M. Molnar, I. Major, X. L. Hou, P. Steier, M. D. Giscard, J. McIntosh, C. Koeberl., L. Ferrière, C. Hatté, J. Pelletier, P. Kapp, G. Davis, A. F. Zhou, R. Bhushan, P. Kumar, M. Meszaros, S. Das.

ii. Graduate & postdoctoral advisors: G. Eglinton (University of Bristol) and C. T. Pillinger (Open University; University of Bristol); F. Begemann and L. Schultz (Max-Planck-Institut für Chemie, Mainz).
iii. **Graduate students/advisees:** N. A. Lifton (Purdue), W. M. Phillips (Idaho State), J. Pigati (USGS), L. McHargue (Arizona), D. Desilets (Arizona), K. Al-Basheirer (Yarmouk University), B. Dugan-Thierrault (Arizona), N. Sproch (Arizona), M. A. Sakiraya (Arizona), M. D. Leclerc-Giscard (Arizona), C. C. Chang (Arizona), L. Y. White (Arizona). iv. **External Examiner**: J. Eliades (Toronto), A. Zazzo (Univ. Pierre et Marie Curie, Paris), M. Aboulahris (Morocco).

Awards:
NATO Postdoctoral Fellow, National Research Council of Canada, 1977-1979.
Kirk Bryan Award, Geological Society of America, 1997.
Fellow, Geological Society of America, 1998.
Fellow, Meteoritical Society, 1998.
Member, Royal Society of Chemistry, 1999.
Fellow, Royal Society of Chemistry, 2017.

Leverhulme Visiting Professor, University of Glasgow, 9/2004-1/2005.
Fulbright Scholar, Hungary, ATOMKI and University of Debrecen, 2012-2013.
Hungarian Academy of Sciences, Distinguished Guest Scientist, 2013.

F. Teaching.

(University of Arizona)
Fall 2006: GEOS 489/589 Quaternary Geochronology (with J. Quade, 12 students)
Fall 2007-2012: GEOS 595A Geosciences seminar (26 students in Fall 2010)
Fall 2007: NATS 101 A Geological Perspective (~158 students)
Fall 2008: GEOS 489/589 Quaternary Geochronology (with J. Quade, 14 students)
Spring 2009: NATS 101 A Geological Perspective (155 students)
Fall 2010: NATS 101 A Geological Perspective (with J. Kapp and N. Fay, 955 students)
Fall 2011: GEOS 489/589 Quaternary Geochronology (with J. Quade, 9 students)
Spring 2012: GEOS 218, Natural Hazards, (40 students)
Fall 2013: GEOS 489/589 Quaternary Geochronology (with J. Quade, 9 students)
Spring 2014: GEOS474/574 Geochronology and Thermochronology (with P. Reiners, 10 students)
Fall 2015: GEOS 489/589 Quaternary Geochronology (7 students)
Spring 2021: GEOS 489/589 Quaternary Geochronology

Other classes:
Quaternary Geochronology, Institute for Nuclear Research, Debrecen 2013.
Accelerator Mass Spectrometry & Applications, Inter-Universities Accelerator Centre, New Delhi, India. 2016.
Radiocarbon dating and cosmogenic nuclides, University of Lanzhou, November 2017
Radiocarbon dating, Weizmann Institute of Science, March 2018
Radiocarbon dating and meteorite studies: Carpathian Summer School of Physics, Sinaia, Romania. June 2016 and 2018.
Quaternary Geochronology, Debrecen, student tutoring, Spring 2019
Radiocarbon dating, University of Lanzhou, July 2019.

Publications: Author or co-author of 406 refereed scientific publications, plus additionally many abstracts and conference presentations.