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EDUCATIONAL HISTORY

University of Alberta, Edmonton, Alberta, Canada
Doctor of Philosophy, Electrical Engineering
August, 1978

University of Alberta, Edmonton, Alberta, Canada
Master of Science, Electrical Engineering
March, 1976

Thesis: Beat Frequency Plasma Heating
University of Alberta, Edmonton, Alberta, Canada
Bachelors of Science, Physics (with First Class Honors)
April, 1974

EMPLOYMENT HISTORY

University of Washington
Seattle, Washington
Research Professor, Department of Aeronautics & Astronautics 11/2009 – Present

University of Washington
Seattle, Washington, USA
Research Scientist, Aerospace Research Program 1/1998 – 10/2009

MCM Enterprise Ltd.
Bellevue, Washington, USA
Director, Software Engineering 1/1993 – 12/1997

Mathematical Sciences Northwest / Spectra Technologies / STI Optronics
Bellevue, Washington, USA
Principal Research Scientist 8/1978 – 12/1992

PUBLICATIONS OF PAST 5 YEARS

Refereed archival journal publications

1. **R.D. Milroy**, C.C. Kim, and C.R. Sovinec, "Magnetohydrodynamic Simulations of FRC Formation and Sustainment with RMF Current Drive", to be submitted to Phys. Plasmas
2. J.A. Grossnickle, G.C. Vlases, A.L. Hoffman, P.A. Melnik, **R.D. Milroy**, A. Tankut, K.M. Velas "Particle and Recycling Control in TCS-Upgrade", Phys. Plasmas "under revision".

3. **R.D. Milroy**, and L.C. Steinhauer, "Toroidal field stabilization of the rotational instability in field-reversed configurations", Phys. Plasmas **15**, 022508 (2008)

4. H. Y. Guo, A. L. Hoffman, **R. D. Milroy**, L. C. Steinhauer, R. D. Brooks, C. L. Deards, J. A. Grossnickle, P. Melnik, K. E. Miller, and G. C. Vlases, "Improved confinement and current drive of high temperature field reversed configurations in the new translation, confinement, and sustainment upgrade device", Phys. Plasmas **15**, 056101 (2008)

5. K. E. Miller, J. A. Grossnickle, R. D. Brooks, C. L. Deards, T. E. DeHart, M. Dellinger, M. B. Fishburn, H. Y. Guo, B. Hansen, J. W. Hayward, A. L. Hoffman, W. S. Kimball, K. Y. Lee, D. E. Lotz, P. A. Melnik, **R. D. Milroy**, Z. A. Pietrzyk, and G. C. Vlases, "The TCS Upgrade: Design, Construction, Conditioning, and Enhanced RMF FRC Performance", Fusion Science and Technology, **54**, 948 (2008)

6. A. I. D. Macnab, **R. D. Milroy**, C. C. Kim, and C. R. Sovinec, "Hall magnetohydrodynamic simulations of end-shorting induced rotation in field-reversed configurations", Phys. Plasmas **14**, 092503 (2007)

7. H. Y. Guo, A. L. Hoffman, and **R. D. Milroy**, "Rotating magnetic field current drive of high-temperature field reversed configurations with high zeta scaling", Phys. Plasmas **14**, 112502 (2007)

8. A.L. Hoffman, H.Y. Guo, K.E. Miller, **R.D. Milroy**, "Principal Physics of Rotating Magnetic Field Current Drive of FRCs", Phys. Plasmas **13**, 012507 (2006)

9. H.Y. Guo, A. L. Hoffman, L. C. Steinhauer, K. E. Miller, and **R. D. Mil**roy, "Evidence of Relaxation and Spontaneous Transition to a High-Confinement State in High-Beta Steady-State Plasmas Sustained by Rotating Magnetic Fields", Phys. Rev. Lett. **97** 235002 (2006)

10. H.Y. Guo, A.L. Hoffman, R.D. **Milroy**, K.E. Miller, and G.R. Votroubek, "Stabilization of interchange modes by rotating magnetic fields", Phys. Rev. Lett. **94**, 185001 (2005)

11. A.L. Hoffman, H.Y. Guo, K.E. Miller, R.D. **Milroy**, "Long Pulse FRC Sustainment with Enhanced Edge Driven Rotating Magnetic Field Current Drive", Nucl. Fusion **45**, 176 (2005)

12. Richard D. **Milroy** and H.Y. Guo, "Rotating magnetic quadrupole current drive for field-reversed configurations", Phys. Plasmas **12**, 072503 (2005)