

## CURRICULUM VITAE

**Name:** Ali Reza Naji Meidani

### EDUCATION

- 1980 B.Sc. (Mechanical Engineering), University of Ferdowsi, Mashhad, Iran.  
**Honored as Outstanding Graduate**
- 1988 M.Sc. (Mechanical Engineering, Heat & Fluids), University of Amirkabir, Tehran, Iran.
- 2001 Ph.D. (Mechanical Engineering, Heat & Fluids), McGill University, Montreal, Canada.
- 2001-2004 Post-Doctoral Fellow, McGill Metals Processing Centre, McGill University, Montreal, Canada.

### PUBLICATIONS

#### **Journal Papers:**

1. A.R. Naji Meidani, M. Isac, A. Richardson, A. Cameron and R.I.L. Guthrie, Modelling Shrouded Supersonic Jets in Metallurgical Reactor Vessels, *Journal of ISIJ International*, Vol. 44, No. 10, pp. 1639-1645, 2004.
2. A.R. Naji Meidani and M. Hasan, Mathematical and Physical Modelling of Bubble Growth Due to Ultrasound, *Journal of Applied Mathematical Modelling*, Vol. 28, pp. 333-351, 2004. (**Science Direct TOP25 Hottest Articles**)
3. A.R. Naji Meidani and M. Hasan, A Study of Hydrogen Bubble Growth during Ultrasonic Degassing of Al-Cu Alloy Melts, *Journal of Materials Processing Technology*, Vol. 147, pp. 311-320, 2004.
4. A.R. Naji Meidani and M. Hasan, A Numerical Study of the Complex Dynamic Behavior of a Reactive Gas Bubble in Water, *Journal of Applied Mathematical Modelling*, Vol. 21, pp. 127-138, 1997.
5. M. Hasan and A.R. Naji-Meidani, Ultrasonic Treatment of a Solidifying Al-Cu Melt in the Presence of Micron-sized Hydrogen Bubbles, *Journal of Light Metals*, pp. 831-836, 2009.

## Conference Papers:

1. A.R. Naji Meidani and M. Hasan, Effect of a Hydrogen Bubble in a Solidifying Al-Cu Alloy Melt Under Various Ultrasonic Pressure Fields, *Computer Applications in Metallurgy and Materials Processing, the Proceedings of the 37<sup>th</sup> Annual Conference of Metallurgists of CIM*, Calgary, Canada, pp. 94-113, 1998.
2. A.R. Naji Meidani and M. Hasan, An Aqueous Physical and Mathematical Modelling of Ultrasonic Degassing of Molten Metals, *Control and Optimization in Minerals, Metals and Materials Processing, the Proceedings of the 38<sup>th</sup> Annual Conference of Metallurgists of CIM*, Quebec, Canada, pp. 201-219, 1999.
3. A.R. Naji Meidani and M. Hasan, Dynamic Behavior of a Hydrogen Gas Bubble during Ultrasonic Treatment of Molten and Solidifying Al-Cu Alloys, *Computer Applications in Metals Processing, the Proceedings of the 40<sup>th</sup> Annual Conference of Metallurgists of CIM*, Toronto, Canada, pp. 139-156, 2001.
4. A.R. Naji Meidani and M. Hasan, Dynamic Behavior of a Hydrogen Gas Bubble in the Solidifying Al-Cu Alloy Melt Under an Ultrasonic Pressure Field, *the Proceedings of the Ninth Canadian Materials Science Conference*, McGill University, Montreal, Canada, page 67, June, 1997.
5. A.R. Naji Meidani, M. Hasan and R.I.L. Guthrie, In-situ Hydrogen Bubble Growth During Ultrasonic Degassing of Aluminium Alloy Melts, *the Proceedings of the fifth World Congress on Computational Mechanics, WCCM V*, Vienna, Austria, page 66, July, 2002.
6. A.R. Naji Meidani, M. Isac, A. Richardson, A. Cameron and R.I.L. Guthrie, Characteristics of Shrouded Supersonic Jets in Metallurgical Reactor Vessels, *Oxygen in Steelmaking, the Proceedings of the 43<sup>th</sup> Annual Conference of Metallurgists of CIM*, Hamilton, Canada, pp. 65-81, 2004.
7. R.I.L. Guthrie, A.R. Naji Meidani, M. Isac, A. Richardson and A. Cameron, Modelling Shrouded Supersonic Jets in BOF Steelmaking, *the proceedings of the Symposium in Honor of professor L.E. Holappa*, Copper Mountain, Colorado, USA, pp. 211-218, 2004.
8. A.R. Naji Meidani, M. Isac, M. kamal, A. Richardson, A. Cameron and R.I.L. Guthrie, Modelling Shrouded Supersonic Jets in steelmaking Reactor Vessels, *Proceedings of the 3<sup>rd</sup> International Congress on the Science and Technology of Steelmaking, ICS Proceedings*, USA, pp. 601-609, 2005.