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**RESEARCH INTERESTS:**

Convection, Solidification and Modeling and analysis of natural and industrial processes.

**EDUCATION:**

Ph.D Theoretical and Applied Mechanics,  
The University of Illinois, Urbana, **1989**.

Dissertation: Analytical Investigations of Convection Effects on the Solid-Liquid Interface

M.S. Applied Mathematics,  
The University of Toledo, Ohio, **1983**.

B.S. Petroleum Engineering,  
The University of Tulsa, Oklahoma, **1980**.

B.S. Applied Mathematics,  
The University of Tulsa, Oklahoma, **1980**.

**REFEREED JOURNAL PAPERS:**

1. **L. Hadji** and M. Schell, Transition to Soret-driven convection in a system with nearly impermeable boundaries, *Phys. Fluids A* **1**, 1467 (1989).
2. **L. Hadji**, M. Schell and D. N. Riahi, Interfacial pattern Formation in the Presence of Solidification and Thermal Convection, *phys. Rev. A* **41**, 863 (1990).
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8. X. Jin and **L. Hadji**, Interfacial finger cells in a system coupling steady Soret-driven convection and solidification, *phys. Rev. E* **50**, 2361 (1994).
9. **L. Hadji** and X. Jin, Penetrative convection induced by the freezing of seawater, *Int. J. Heat Mass Transfer* **39**, 3823-3834 (1996).
10. **L. Hadji**, Nonlinear analysis of the coupling between interface deflection and hexagonal patterns in Rayleigh-Bénard-Marangoni convection, *Phys. Rev. E* **53**, 5982-5992 (1996). Errata *Phys. Rev. E* **55** p. 3793 (1997).
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17. **L. Hadji**, Thermal force induced by the presence of a particle near a solidifying interface, *Phys. Rev. E* **64**, 051502-1 (2001).
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19. **L. Hadji**, Axisymmetric shapes and forces resulting from the interaction of a particle with with a solidifying interface, *Phys. Rev. E*, **66**, 041404 (2003).
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