

## **Curriculum Vitae**

Department of Applied Mathematics,  
Israel Institute for Biological Research (**IIBR**),  
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### **Personal Details**

Date of Birth 14 March 1979, Israel  
Marital Status Married, 3 children  
Citizenship Israeli citizen

### **Education**

B.Sc., 2006, Mechanical Engineering, Tel-Aviv University,  
(MAGNA CUM LAUDE, The direct path to M.Sc.)  
M.Sc., 2007, Fluid Mechanics and Heat Transfer, Tel Aviv University, Israel  
Supervisor: Prof. Lev Shemer and Prof. Dvora Barnea.  
Flow field behind a fixed bluff body simulating a moving Taylor  
bubble.  
Ph.D., 2015- Fluid Mechanics and Heat Transfer, Tel-Aviv University, Israel  
Supervisor: Prof. Lev Shemer and Prof. Dvora Barnea  
.Experimental Investigation of the Local Heat Transfer in Gas- Liquid  
Slug Flow.

### **Professional experience**

2015 -Present Israeli Institute for Biological Research, Israel  
Research Scientist  
Head of Environmental Wind Tunnel Laboratory,  
Department of Applied Mathematics, Environmental Sciences Division, IIBR  
2014 -2015 Ort Hermelin Engineering Academic College, Israel  
Lecturer  
Mechanics laboratory for mechanical engineering  
2010-2013 Tel-Aviv University, Tel Aviv, Israel  
Lecturer  
Mechanics laboratory for biomedical engineering  
2005-2013 Tel-Aviv University, Tel Aviv, Israel  
Teaching assistant  
Thermodynamics, Fluid Mechanics laboratory, Measurements laboratory.

## **Awards and Honors**

2022- The IIBR Excellence Award

2011- Prof. Itzhak Goldhirsh research and studies excellence award, Department of Mechanical Engineering, TAU

2006- B.Sc MAGNA CUM LAUDE, The direct path to M.Sc., Department of Mechanical Engineering, TAU

## **List of Publications**

### **Pear Reviewed Papers**

V. Babin, L. Shemer and D. Barnea : *Flow field behind a fixed bluff body simulating a moving Taylor bubble.*, *Physics of Fluids* 25, 105103 (2013).

V. Babin, L. Shemer and D. Barnea, *Local instantaneous heat transfer around a rising single Taylor bubble*, *International Journal of Heat and Mass Transfer*, vol. 89, pp. 884-893 (2015).

A. Fershtman, V. Babin, D. Barnea and L. Shemer: *On shapes and motion of an elongated bubble in downward liquid pipe flow*, *Physics of Fluids* 29, 112103 (2017).