

*Curriculum Vitae*

**Silviu Birauas**

*Str . Petre Ramneantu, Nr.4,Ap.6*

*Timisoara -300596*

*Romania*

*Home: +40 745 031 041 ♦Office: +40 56 592 286*

*E-mail: birauas@math.uvt.ro*

**EDUCATION**

**Doctor of Philosophy**, Differential Equations, Faculty of Mathematics , The West University of Timisoara, Romania, 1996

**Master of Science**, Nonlinear Analysis, Faculty of Mathematics , The West University of Timisoara, Romania, 1981

**Bachelor of Science**, Faculty of Mathematics , The West University of Timisoara, Romania, 1980

**ACADEMIC/TEACHING EXPERIENCE**

- Teach undergraduate and graduate students.
- Supervise and guide master and doctoral students thesis work.

**Associate Professor**, Department of Applied Mathematics, Faculty of Mathematics, The West University of Timisoara, Romania, 2002-present

**Lecturer** Department of Applied Mathematics, Faculty of Mathematics, The West University of Timisoara, Romania, 1992-2002.

**Assistant Professor**, Chair of Differential Equations , Faculty of Mathematics, The West University of Timisoara, Romania, 1986-1992

**Teacher (Mathematics)** ,High School “C.Brediceanu”, Lugoj, Romania, 1981-1986

## COURSES TAUGHT

### Undergraduate & Graduate

- Ordinary differential Equations
- Partial Differential Equations
- Dynamical systems in dimension 2
- Special chapters of Differential Equations

### Master

- Qualitative Theory of Differential Equations
- Stability theory
- Differential Models
- Dynamical Models in Economy

## COURSES DEVELOPED

- Ordinary Differential and Integral Equations
- A Problem Book in Ordinary Differential Equations

## PUBLICATIONS

1. S. Birăuș - **A nonlinear Mathematical Model for the Single Crystal Sheet**

**Grown Process from the Melt in a Vacuum by the E.F.G. Method**, Bulletins for Applied Mathematics, BAM 959/94, [LXX], pp. 215-224.

2. St. Balint, A.M. Balint, S. Birăuaş - **On an infinite system of differential equations**, **Bulletins for Applied Mathematics**, BAM 960/94, [LXX], pp. 225-240.

3. S. Birăuaş - **The meniscus equation in the case of growing cylindrical monocrystalline bars from the melt by the method E.F.G. at a given pressure**, Bulletins for Applied Mathematics, BAM 1103/1995, [LXXV], pp. 355-368.

4. S. Birăuaş - **On an infinite system of differentiale equations related to the hydrodynamical shock problems in adiabatic case, I**, Bulletins for Applied Mathematics, BAM 1262/1996, [LXXX], pp. 247-262.

5. S. Birăuaş - **On an infinite system of differentiale equations related to the hydrodynamical shock problems in adiabatic case, II**, Bulletins for Applied Mathematics, BAM 1262/1996, [LXXX], pp. 263-270.

6. S. Birăuaş, St. Balint - **Qualitative Study of the Solutions of the Damped Nonlinear Wave Equation**, Proceedings of ICNPAA-1998, Second International Conference on Nonlinear Problems in Aviation and Aerospace, Editor: Seenith Sivasundaram, European Conference Publications, Cambridge, UK, 1999, pp. 111-118.

7. S. Birăuaş, St. Balint - **Some qualitative properties of the solutions of Boussinesq system**, Proceedings of ICNPAA-2000, Third International Conference on Nonlinear Problems in Aviation and Aerospace, Editor: Seenith Sivasundaram, European Conference Publications, Cambridge, UK, 2001, pp. 81-86.

8. S. Birăuaş, St. Balint - **Closed orbits of Boussinesq system in a time dependent cylindrical domain**, Proceedings of ICNPAA-2002, Fourth International Conference on Nonlinear Problems in Aviation and Aerospace, Editor: Seenith Sivasundaram, European Conference Publications, Cambridge, UK, 2003, pp. 51-56.

9. E. Kaslik, A.M. Balint, S. Birăuaş, St. Balint - **Approximation of the domain of attraction of an asymptotically stable fixed point of a first order analytical system of difference equations**, Nonlinear Studies, Vol. 10, No 2, 2003, pp. 103-112.

10. E.Kaslik, A.M.Balint, S.Birauas, St.Balint - **On the controllability of the roll rate of the ALFLEX reentry vehicle**. Nonlinear Studies, Vol.11, No.4, pg. 543-564 (2004).

#### **BOOKS:**

1. Nonlinear waves equation , Mathematical Monographs , Ed. Mirton, 2004, 240 pp.

2. Ordinary Differential and Integral Equations , Ed. West University Timisoara,1999,204pp
3. Ordinary Differential Equations Problem Book , on print, Ed. Mirtin, Timisoara

## RESEARCH INTERESTS

- Nonlinear waves equation
- Shocks capturing.
- Domains of attraction.
- Boussinesq convection system.

## SERVICE -- PROFESSIONAL

### **Reviewer for Professional Journals:**

[Zentralblatt MATH](#)

### **Professional Affiliations**

- Member, Romanian Mathematical Society