

Curriculum vitae

Personal Informations

Name **BIROU Iulian Mircea Tudor**
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Date of Birth 04.11.1964

CURRENT OCCUPATION/ POSITION/ EMPLOYER

Department of Electrical Machines and Drives, Faculty of Electrical Engineering, / Univ. Professor /
Technical University of Cluj-Napoca, Memorandumului 28 Str., Cluj-Napoca, Romania

Professional experience

Field of Education and Research

Period (since) 2003 – 2000 – 1996 – 1993 – 1991

Professional position Full Professor – Associate Professor – Lecturer – Assistant – Associate Assistant

Professional activities

Teaching activities (courses, seminars, projects, labs) at disciplines: **Bases of electrical drives** and **Scalar electrical drives** for the Study Programm *Electrical Drives* (until 2002); **Electrical Drives I and II** and **Control of Electrical Drives** for the Study Programs *Electrical Drives* and *Electromechanics* (2002-2012); **Electrical Drives** for all Study Programms of the *Electrical Engineering Faculty* (since 2012), **Real time computing systems for process control** (optional course) **Control Systems** for the Study Programs *Electrical Drives*, *Electromechanics* and *Industrial Power systems* (2002-2004); **Modern Control Theory for Motion Control** and **High Efficient Electromechanical Conversion Systems** the Master Study programms (*TMPACIE* and *MSEM*)

Research activities (competences) in the fields of:

- Electrical drives, Control of variable speed electrical drives.
- Modern control strategies (fuzzy systems, optimal robust control, adaptive control, intelligent control) used in motion control.
- Electrical drives for renewable energy generating systems
- Real time computing systems for process control.
- Parameter identification in electrical drives.

Management activities:

Head of Institute of Electrical Drives 2008-2011;
Head of Department of Electrical Machines and Drives 2011-2017

Period 1989 - 1991

Professional position Dipl.Engineer

Professional activities Electrical engineer in the field of Control, Protection, Automation and Monitoring in Low and Medium Voltage Electrical Power Systems.

Employer Electrical Power Supply Company, IRE Cluj, Cluj-Napoca, Romania

Education background

Period 1990 - 1999

Calification/title	Doctoral work: <i>Reglarea vectorială a acțiunărilor de curent alternativ optimizate cu logică fuzzy si regulatoare robuste H_2 și H_{00}</i> . (Vector control of AC drive systems with fuzzy-logic controllers and optimal robust H_2 and H_{00} controllers)/ Ph.D. in the field of <i>Electrical Machines, Devices and Drives</i> . Technical University of Cluj-Napoca, Scientific supervisor: Prof.-Univ. Dr.-Eng. Arpad Kelemen									
Period	1984-1989									
Calification/title	University studies (bachelor and master), Faculty of Electrical Engineering / Dipl.Eng. in Electrical Engineering, specialization Electrical drives Technical University of Cluj-Napoca									
Period	1979 - 1983									
Calification/title	Highschool / Diploma in informatics (computer programming) Mathematics-physics highschool with informatics profile, Cluj-Napoca									
Period	1971 - 1979 German school, Cluj-Napoca									
Foreign languages	German, english, french									
German language English language French language	Understanding				Speaking				Writing	
	Listening		Reading		Conversation		Oral speach		Composing	
	C2		C2		C2		C2		C2	
	C1		C1		C1		C1		C1	
	B2		B2		B2		B2		B1	
	(*) European evaluation criterias									
Social abbilities	Communication ability									
Organazing abbilities	Human resource management; Research project management Head of Institute, Head of Department, Member in the Faculty Council, Senator of the Technical University of Cluj.									
Technical competencies	Research, designing and control of technical and technological processes									
Computer competences	Working in operating systems, programming languages (Fortran, Pascal, C), application programming (Office, CAD, Simulation programmes)									

Additional Informations

Specializations:

June-Aug. 1991 – research stage at Universitee de Provence, Marseille, France;
March 1994 - graduating Workshop Texas Instruments, TMS320C3x, C4x - European Customer Training Centre;
Oct. 1994–Aug. 1995 – **DAAD (German Academic Exchange Service)**, University of Siegen, Germany;
Febr. 2000–Jan. 2001 - **Humboldt postdoc Fellowship of Alexander von Humboldt Foundation** at University of Erlangen-Nuernberg, Germany;
June.– Aug. 2005 – **Humboldt** guest Professor at University of Siegen, Germany
May – Aug. 2017 - **Humboldt** guest Professor at University of Siegen, Germany
June. – Aug. 2022 - **Humboldt** guest Professor at University of Siegen, Germany

Awards:

- Prizes at the National Mathematics and Computer Science Olympics (clasele VIII-XII);
- Prizes at the national student competitions of Electrical Engineering –Traian Lalescu (Bucuresti, 1985) and Computer Programming respectively (2 editii, Cluj-Napoca, 1985 si Craiova, 1986).

Scientific results:

- 130 published scientific papers:
 - 1 book abroad;
 - 4 books as single author in Romania;
 - 30 papers published at Conferences abroad;
 - 64 papers at International Conferences;
 - 30 papers in scientific magazines;
- participant at 23 research contracts between 1991-2015:
 - 9 as research director/manager;
 - 5 international research projects
- visiting professor at Universities Darmstadt, Bochum, Karlsruhe, Siegen in Germania, Chisinau in Rep. Moldova between 2001-2023;
- permanent scientific reviewer of IEEE of Industrial Electronics Society
- permanent scientific reviewer of IEEE Transactions on Industrial Electronics
- scientific reviewer of Advances in Electrical and Computer Engineering
- scientific reviewer of over 10 ISI magazines
- member of the Scientific Board of many International Conferences

Affiliations:

IEEE Member in Industry Application Society, Industrial Electronics Society, Power and Energy Society, Energy Conversion Society;
IEEE-IAS Romania
Humboldt Clubul Transilvania si Clubul Humboldt România;
Alumni DAAD România;
AGIR (Asociația Generala a Inginerilor din România);

Recognitions:

In volum **Elite Clujene Contemporane**, vol. II, pp. 89-100, 2014

Prof. dr. ing. Iulian BIROU