

## PERSONAL INFORMATION

## Ioan Ardelean



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Sex Male | Date of birth 20/07/1966 | Nationality Romanian

## POSITION

## Professor

## WORK EXPERIENCE

01/10/2006–Present

## Professor

Technical University of Cluj-Napoca  
Memorandumului 28, 400114 Cluj-Napoca (Romania)  
<https://www.utcluj.ro/>

**Teaching**

Teaching activities of lectures, seminars, and laboratory works addressed to the students of the following faculties:

- Faculty of Civil Engineering (Physics);
- Faculty of Machine Building (English and German) (Lectures and seminars of physics);
- Faculty of Electronics Telecommunications and Information Technology (Physics I and Physics II);
- Electrical engineering course (Physics I and Physics II);
- Faculty of Materials and Environment Engineering (Master course: Nanoscience and Nanotechnology Investigation Methods)

Guidance activities in Doctoral School (Doctoral supervisor, Materials Engineering) (2 Ph.D. students; 7 theses successfully completed)

**Management activities**

- Coordinator of the doctorate domains** for Materials Engineering and Environmental Engineering;
- The organizer of an international workshop ([Alpine NMR Workshop](#), [Transylvanian NMR Workshop](#): 2004, 2009, 2011, 2013, 2016, 2019);
- Coordinator and founder** of the [NMR Relaxometry and Diffusometry Laboratory](#)

**Research and dissemination activities**

- Coordinator of 2 international projects;
- Member in the management comity of the COST action [CA15209](#) (EURELAX)
- Coordinator/Director of 7 national projects (UEFISCDI);
- Publication of 73 scientific works (52 ISI publications, 39 as the main author);
- Publication of 3 books (Romanian, single author);
- Publication of 2 book chapters (Royal Soc. of Chemistry, main author)
- Multiple presentations in international conferences (invited, oral, poster).

Business or sector University

01/10/2006–Present

## Professor and PhD supervisor

Universitatea Tehnica din Cluj-Napoca, Cluj-Napoca (Romania)

- 01/10/2002–01/10/2006 **Associated professor**  
Universitatea Tehnica din Cluj-Napoca, Cluj-Napoca (Romania)
- 01/10/1998–01/10/2002 **Assistant professor**  
Universitatea Tehnica din Cluj-Napoca, Cluj-Napoca (Romania)
- 01/10/1990–01/10/1998 **Assistent**  
Universitatea Tehnica din Cluj-Napoca, Cluj-Napoca (Romania)

**EDUCATION AND TRAINING**

- 15/09/1985–30/06/1989 **Licence in Physics** License in Physics  
Universitatea "Babes Bolyai" din Cluj-Napoca, Cluj-Napoca (Romania)  
-Mechanical Physics;  
-Electricity and magnetism;  
-Thermodynamics;  
-Statistics;  
-Electrodynamics and relativity theory;  
-Electronics;  
-Programming elements;  
-Optics;  
- Plasma and Radiation Physics;  
-Molecular and nuclear physics;  
-Quantum physics;  
-Solid body and semiconductor physics;  
-Special mathematics for physics;  
- Social disciplines.
- 01/10/1990–31/05/2007 **Doctor degree**  
Universitatea "Babes-Bolyai" din Cluj-Napoca, Cluj-Napoca (Romania)  
Doctorate in the field Physics/Molecular physics  
Ph.D. thesis title: *Modern methods of nuclear magnetic resonance with applications in obtaining information about the structure and dynamics of some molecular compounds.*
- 01/10/1996–31/03/1997 **DAAD research fellowship**  
Ulm University, Ulm (Germany)  
Research in the field of nuclear magnetic resonance (NMR) techniques.
- 01/10/1998–31/01/1999 **German language certificate**  
Goethe Institut, Schwaebisch Hall (Germany)
- 01/02/1999–31/03/2001 **Alexander von Humboldt research fellowship**  
Ulm University, Ulm (Germany)  
Postdoctoral research in the field of NMR applications in materials science.

01/10/2001–30/06/2007 **Multiple research stays at Ulm University (2-3 months each)**  
 Ulm University, Ulm (Germany)

PERSONAL SKILLS

Mother tongue(s) Romanian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
Language certificate					
German	B2	B2	B2	B2	B1
Language certificate					

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
 Common European Framework of Reference for Languages - Self-assessment grid

**Communication skills** -communication skills in English and German acquired as the result of my research stays in foreign laboratories;  
 - communication skills with students, due to long teaching and guidance activities;  
 - collaboration skills with various research groups in the country and abroad.

Organisational / managerial skills

-**Coordinator** of the doctorate domains for Materials Engineering and Environmental Engineering;  
 -**Coordinator and founder** of the NMR Relaxometry and Diffusometry Laboratory  
 -**Organizator** of **5 international workshops**:  
 ■ 1st Transylvanian NMR Workshop, Paltinis, February 25 – March 1, 2004;  
 ■ 2nd Transylvanian NMR Workshop, Cluj-Napoca, September 18 – 21, 2009;  
 ■ 3rd Transylvanian NMR Workshop, Cluj-Napoca, September 23 – 25, 2011;  
 ■ 4th Transylvanian NMR Workshop, Cluj-Napoca, September 27 – 29, 2013;  
 ■ Alpine NMR Workshop, Cluj-Napoca, September 23 – 25, 2016;  
**Member in the scientific committee of 14th International Bologna Conference on Magnetic Resonance in Porous Media (MRPM14)**, February 18-22, 2018, Gainesville, Florida, USA.  
 Member in the Senate of the Technical University of Cluj-Napoca (2012-2019);  
**Chairman** of the Research Commission of the Senate of the Technical University of Cluj-Napoca (2012-2016)  
 Member in the Council of the Faculty of Materials and Environmental Engineering (2008-2016)  
**Director/Cordinator** of more research projects:  
International projects  
 1. Director, Institutspartnerschaft UTCN-Universitatea Ulm, Germania, financed by Alexander von Humboldt foundation by international competition (2003-2006; value 51000Euro);  
 2. Director, Institutspartnerschaft UTCN-Universitatea Tehnica Ilmenau, Germania, financed by Alexander von Humboldt foundation by international competition (2011-2014; value 55000Euro);  
 3. Member in the management committee of the **COST** action **CA15209** - European Network on NMR Relaxometry: <http://eurelax.uwm.edu.pl/>  
National projects  
 1. Director of the grant **CNCSIS 411/2004** (financed by the Romanian Ministry for Education and Research), 1.01.2003-31.12.2005: *Diffusion phenomena in partially saturated porous media investigated by nuclear magnetic resonance*  
 2. Director of the project **CERES 4-36/4.11.2004** (financed by the Romanian Ministry for Education and Research), 15.11.2004-15.11.2006: *Principles and unconventional aspects of NMR diffusometry*

of confined liquids.

3. Director of the grant **CNCSIS type A/ 1292/2006** (financed by the Romanian Ministry for Education and Research) 1.03.2007-15.09.2008: *Dynamics of polar and non-polar molecules under confinement in nanometric and micrometric pores.*

4. Coordinator of the project **CEEX MATNANTECH 58/2006-2008**: *NMR studies of molecular dynamics inside polymeric nanocapsules.*

5. Director for UTCN of the cooperative project **PN2-NANOQMED 61-002/2007-2010**: *Obtaining and characterization of new target nano-medicines with naftochinonic active substance.*

6. Director of the project **PNII ID PCE 3-0238/2011-2014**: *Nuclear magnetic resonance studies of surface effects on dynamics of molecules confined inside porous media with magnetic impurities.*

7. Director of the project **PED 125/2017-2018**: *Developing and testing of new concrete materials with increased mechanical strength and lower permeability.*

Job-related skills

Mentoring, evaluation and communication skills:

- I have prepared and examined thousands of undergraduate or master students over the years;
- I have successfully coordinated **7 doctoral theses**
- I participated in the advisory boards of several Ph.D. students;
- I did dozens of presentations at international conferences (oral or poster);
- I evaluated dozens of research projects (UEFISCDI and International)

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Independent user	Proficient user	Independent user	Independent user	Independent user

Digital skills - Self-assessment grid

Familiar with some software specific to the research activity: Origin, Mathcad, Matlab.