

When in Section I (1987-1995), I was theme responsible for the projects:

- 60-90-20 – Measurement and control system for air radioactivity monitoring and supervision, stage 'development and testing work programs', deadline 10/06/1992
- Contract 681C, Theme A4, in 1992
- Contract 150B Theme A52, in 1992
- Contract 681C, Theme 66
- 60-90-22
- 10122 for Nuclear Plant unit U1 Summ 1.889.125 lei
- FM-05/6418 specifications for the construction and installation, the permitting process
- 12076 Contract responsible, 50,000 lei, for "Programs for application, wear measurement method with radioactive tracers TIMKEN car with computing system that uses SPOT - 83 ', deadline 09/30/1988
- 10122 for Nuclear Plant units U1+U2
- 10127 for Nuclear Plant unit U1
- 10252 for Nuclear Plant unit U3
- 60-90-21

While working at Section I (1987-1995), I collaborated on projects:

- 60-91-54
- 60-90-1
- 65-90-45
- 62-91-6
- 60-91-56
- 60-91-49
- 60-91-43
- 83-91-31
- 83-91-41

And I fulfilled:

Standards, specifications, test reports

1. Technical Study: System for the detection and measurement of radioactive noble gases 60-90-21
2. Technical Procedures: Functional Testing for gaseous effluent Monitor AC-PT-01-18 (Approved)
3. Technical procedure: calibration for the gas effluent monitor equipment MEG1 AC-PT-01-19 (Approved)
4. Standard branch - gaseous effluent monitor STR-CSEN-132-89 (Approved)
5. Standard branch: Cartridge filter with active coal STR-CSEN-211

Plus

Technical assistance tracking records (total number of 11 panels and assemblies)

While working for my PhD thesis at Section III (1995-2000), I collaborated to the bellow projects:

1. M. Petrascu, C.Bordeanu, A.Isbasescu, H.Petrascu, F.Negoita, L. Marinescu
Energetic calibration for the TANDEM accelerator (1999) using analog izomer isobar resonance in ^{13}N , 14.214 MeV, by elastic scattering on carbon –
4940/18.11.1999 SUMM : 164.7125.267 lei
2. M.Petrascu, H.Petrascu, A.Isbasescu, C.Bordeanu
Extension '0' alignment for the TANDEM accelerator (1999)
3. M. Petrascu, C.Bordeanu, A.Isbasescu, H.Petrascu, R.Dima, L. Marinescu
Gas purity from inside the TANDEM accelerator measurements(2000)
4. M. Petrascu, C.Bordeanu, A.Isbasescu, R.Ruscu

- Neutron Scintillation probes characterization using a $^{241}\text{AmBe}$ neutron source (1999)
5. M. Petrascu, C.Bordeanu, A.Isbasescu, R.Ruscu
Neutron Scintillation probes characterization using deuteron beams from the TANDEM accelerator (d+Au) (1999)
 6. M. Petrascu, C.Bordeanu, A.Isbasescu, H.Petrascu
Biological probes characterization using ERDA method (bones, brain tissue) (1998-2000)
 7. M. Petrascu, D.Pantelica, C.Bordeanu, A.Isbasescu, H.Petrascu
Thin sample profiling using nuclear methods (1998-2000)
 8. C. Bordeanu
Programs for experimental data analysis in beam by recoil atoms element analysis (1999)
 9. M. Petrascu, C.Bordeanu, A.Isbasescu, I.David
Characterization of material impurities by atoms recoil method (1997) $^{16}\text{O}+^{27}\text{Al}$
 10. A.Fomicev, M.Petrascu, C.Bordeanu
Energy calibration and efficiency curves for thick Si detectors for Dubna
 11. C.Bordeanu
Programs for determining the pre-emission probability for the halo neutrons for the fusion of ^{11}Be with light and heavy targets (1998)
 12. C.Bordeanu
Programs for determining the pre-emission probability for the halo neutrons for the fusion of ^{11}Be with light and heavy targets (1999)

Grants

1. M.Petrascu, A.Isbasescu, H.Petrascu, C.Bordeanu, I.Cruceru, M.Giurgiu, I.Tanihata
Experimental measurements and theoretical calculations for the neutron pre-emission when halo nuclei interact with light targets
SCIENCE ACADEMY GRANT 79/1999 (January)
Summ: 17 million lei
2. M.Petrascu, A.Isbasescu, H.Petrascu, C.Bordeanu, I.Cruceru, M.Giurgiu, I.Tanihata
Halo ^{11}Li nuclei fusion investigation to Si light targets in energy range 15-25 AMeV
GRANT ANSTI 5194/1999 (3 years)
For 1999 year, summ: 25 million lei

Unique product used abroad

1. M Petrascu, C.Bordeanu, I.Cruceru, A.Isbasescu, D.Mangeac, R.Ruscu, H.Petrascu, C.H.Giolu
Array neutron detector: design and construction, delivered to RIKEN-Japon (I.F.I.N. 1997-2000)

International experimental arrangement

1. M.Petrascu, C.Bordeanu, I.Cruceru, A.Isbasescu, R.Ruscu, H.Petrascu, M.Giurgiu, I.Tanihata, A.Ozawa, K.Morimoto
International experimental arrangement for the halo ^{11}Li nuclei fusion investigation to light targets – accomplished at RIKEN-Japon in 2000

Member of a research team responsible for the development of an international project

1. Collaboration to Institute of Physical and Chemical Research RIKEN-Japon (1997-2000)

Contract	Financial value IFIN-HH	Financial value for Cristina Bordeanu	Contract's responsible
2005 - return to	---	---	--

Romania			
IMPACT Accelerator based laboratory in a salt mine for stellar processes understanding			Dr.Florin Negoita
CEEX M3 nr.165/2006	5996.07 ron	2554.00 (2006)	Dr.Florin Carstoiu
PN 06 35 02 01	1635875.00 ron	31459.00 (2006)	Dr. Dan Pantelica
CEEX M3 nr.165/2006	53416.8 ron	17399.00 (2007)	Dr.Florin Carstoiu
PN 06 35 02 01	2618000.00 ron	17425.00 (2007)	Dr. Dan Pantelica
CEEX 05 D10 71	1115929.66 ron	1389 (2007)	Dr.Florin Negoita
CORINT EURISOL 80	3100000.00 ron	11686 (2007)	Dr.Florin Negoita
PN 06 35 02 01	7037211.00 ron	27135 (2008)	Dr. Dan Pantelica
CORINT EURISOL 80	3100000.00 ron	9852 (2008)	Dr.Florin Negoita
American Physical Society's International Travel Grant 2008	\$1000	~\$4500 (2008)	Dr.Michael Famiano <u>Dr. Cristina Bordeanu</u>
PN 09 37 01 05			Dr.Nicolae Marginean
EuroGENESIS (ESF) – CRP3, IP6	Winner, no implementation	2010-2013	<u>Dr.Cristina Bordeanu</u>
NKTH-OTKA-EU FP7 (Marie Curie Actions)., HUMAN- MB08 B	24.000.000 HUF (~100.000 euro)	2010-2012	<u>Dr. Cristina Bordeanu</u>

During my studies at the Faculty of Electrical Engineering, I participated to student scientific communication session, where I won a prize II. The graduating project was “Numerical control for driving a synchronous motor for self-driving”.

The double placements at college graduation made me work one period to the Enterprise of apparata for electrical installations - Titu, through rotation by all company departments. When I moved to ICPE in 1983, I was working on ultrafast fuses and Design department at Titu. To make me remain at IA EI-Titu, the general director of the company, at that time, proposed me to become head of the department of ultrafast fuses, which I refused.

From 1983 to 1987, I worked at the Institute of Design and Research for Electrotechnique, Computer Center.

During this period I worked on:

- Computerized access to the pieces of the warehouse (FORTRAN) (collaboration)
- a computer-design asynchronous motors (FORTRAN) (collaboration)
- systematization of the types of laminations for electric rotary machines and transformers using the computer (FORTRAN) (collaboration)
- Designing and execution-diagnosis for the thyristor-metro (ASM 8080) (collaboration)
- Investigation and diagnosis program for the control equipment for the thyristor-metro (collaboration)
- design and execution of the drive system for DC micromotor MAA13/6000 (in charge of the theme)
- software package for measuring the deviations from circularity, perpendicularity, flatness, parallelism, concentricity of the cylindrical parts on a turntable (FORTRAN + ASM 8080) (collaboration)

I moved from the ICPE to IFIN, in 1987, as I was following the evening courses of the Technology Faculty of Physics, Magurele, starting in 1985.

From 1987 to October 1995, at IFIN, I worked in Section I, known at that time as “nuclear electronics” or “Nuclear Instrumentation and Methods”, as part of the “Dosimetry and Radiological Environmental Monitoring” team.

Here I realized:

- •calibration program for gaseous effluents monitor (ASM 8080) (in charge for the software)
- •aerosols monitoring software, for the iodine and noble gases in air gaseous effluent monitor (ASM 8080) (collaboration)
- •measuring analog values program with the aid of computer CUBZ (Z80) for reading the experimental photographic films (charge):
- •-metallic coating thickness measurement program using the beta backscattering method (Z80) (collaboration)
- •contamination measurement program for the staff from the nuclear plant (hands, feet) AVERCONT (Z80)
- •software for the measurement and control system for monitoring the air contamination (Z80) (charge on the software)
- •software package for area monitoring system using an intelligence probe (PASCAL 6.0 + C + microcontroller 80C32) (possibility of coupling to the project RODOS) (charge on the software)
- -software for computer communications
 - PC286 - HC90
 - PC286 - PC286

- PC286 - homemade microcontroller using Z80
- PC286 - microcontroller M80C32