

I moved from ICPE to IFIN in fall of 1987, while following evening classes at the Faculty of Technology Physics, Magurele, started since 1985.

1987 - 1995 - IFIN-Magurele (National Institute of Physics and Nuclear Engineering). I was part of the **Nuclear Electronics Laboratory (Section I)** as an engineer, then as technology engineer, since 1988, and since 1991, as researcher. My contribution was the preparation of dosimetry devices for plant # 1 in Cernavoda (see list of projects for a complete listing of activities and accomplishments).

My contribution was on:

- •calibration program for gaseous effluents monitor (ASM 8080) (in charge of software)
- •program for monitoring of aerosols, iodine and noble gases in air gaseous effluent monitor (ASM 8080) (collaboration)
- •program for computer-aided measuring analog values using CUBZ (Z80) for reading the experimental photographic films (charge):
- •metallic coating thickness measurement program using beta backscattering method (Z80) (collaboration)
- •software for the staff contamination measurement from the Nuclear Plant activity (hands, feet) AVERCONT (Z80)
- •software for measurement and control system for monitoring air radioactivity (Z80) (charge on the software)
- •software package for area system monitoring using intelligence probe (PASCAL 6.0 + C + microcontroller 80C32) (possibility of coupling to the project RODOS) (charge on the software)
- Connecting different computers software
 - PC286 - HC90
 - PC286 - PC286
 - PC286 - homemade computer using Z80
 - PC286 - microcontroller M80C32

Parts of the results:

- *-Modern system for monitoring the environmental radioactivity,*
- *-Beta radioactive aerosol monitor with gamma compensation MAB-2,*
- *-Monitor for Radioactive Gases,*

- *-A digital instrument for nondestructive measurements of coating thickness by beta backscattering*

were presented at:

- *Valenii de Munte 1988, 22-23 Sept ,The IIIrd Symposium on peripheric equipments*
- *Baia Mare 1995, National Conference on Physics.*

I participated at the courses organized by the institute:

- 1988-Numerical Methods in Physics,
- 1989-FORTRAN for VAX –courses,
- 1989-PASCAL(programming language) – courses.

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)