

Prof. Dr. Alexandru Cecal – 70 years anniversary



Prof. Dr. Alexandru Cecal was born at July 18-th 1940, in Cahul (Republic of Moldova). Firstly, he was pupil at the Primary School from Pianu de Sus / Alba (1947-1951), followed the Secondary (Lyceum) School in Alba Iulia (1951-1957). Between 1958-1963 was student at the Faculty of Chemistry, Bucharest University (Radiochemistry / Physical Chemistry specialization). He finished his PhD Thesis “Isotopic exchange reactions between ^{204}Tl (I) – Tl (III) in complex compounds”, in 1972 by the “Al.I.Cuza” University of Iasi, under the supervision of Prof. Dr. habil. H.-A. Schneider.

Professional experience

Prof. Dr. Alexandru Cecal began his didactic activity in “radiochemistry” and “inorganic chemistry” since 1963, as assistant professor at “Al.I. Cuza” University, Faculty of Chemistry and afterwards followed all romanian didactic degrees as: lecturer (1973), associate professor (1990) and full professor (1991). Between 1974-1990 Prof.Dr. Alexandru Cecal activated by the Politechnic Institute of Iasi, Faculty for

Chemical Engineering). During these years he had teaching competencies in : Radiochemistry and Nuclear Chemistry, Inorganic Chemistry, Isotopes, Atomic and Nuclear Physics, Nuclear Fuel Elements, Complex Compounds...

Prof. Dr. Alexandru Cecal scientifically worked in the following domains: Kinetics of isotopic exchange reactions, Radiopolarography, Analytic applications of radioactive indicators, Internal isotopic dilution, Thermodynamics of solvation of the ion-exchanging resins charged with uranyl, thorium, plutonium and other ions, Synthesis and characterization of complex combinations, Preparing colloidal graphite needed in the fabrication of nuclear fuels (IRNE – Pitesti), Removal of CRUD products out of the Mixer-Settler installations at the “R” Industrial Factory - Feldioara, Leaching of uranyl ions from uranium-containing ores which are poor in useful minerals, Syntheses of chemical compounds with marked atoms (both stable and radioactive), Treatment and safely disposal of radioactive waste having medium and low activity, Purification of chemically and radioactively contaminated residual waters using some microbiological collectors, or hydrophyte plants, Kinetics of corrosion of metals and alloys through beta rays retrodiffusion - or absorption, Distribution of U(VI) and U(IV) species in among uranium-containing ores in connection with the α and β radiolysis processes, Radiokinetics studies of crystal growth in gels (including Liesegang rings), or from different aqueous solutions, or from mixtures of solvents, Obtaining hydrogen from catalyzed radiolysis of water, etc.

He guided 15 young scientist to preparing their PhD-Thesis, since 1990.

Scientific papers, published books, patents and research grants:

- 17 books (written alone or in cooperation) for students and scientists.
- 215 scientific papers : 72 published abroad in ISI journals, 70 appeared in Romanian ISI journals and the rest - in non ISI romanian and foreign journals.
- more as 150 published papers in ISI journals were cited by foreign researches.
- 40 patents appeared in Romania and Republic of Moldova; among them 14 were applied in industry (Dorohoi, Feldioara, Pitesti, Turda, Crucea, Iasi)
- 61 grants achieved in collaboration with several colleagues, by 48 – as research director.

Specialization stages abroad:

- a) “Lomonosov” State University of Moscow: 2 months in 1970 (by professors Nesmeianov and Busev)
- b) Dresden Technical University: 4 months in 1973 (working with professor Dreyer)
- c) Munich Technical University, Institute of Radiochemistry in Garching : 14 months in 1975/ 1976, as a Humboldt scholarship holder (by prof. Born and dr.Kim)
- d) Short 1 month training periods at Kernforschungszentrum in Karlsruhe, in 1984 and 1989
- e) “ Senior Stipendium “ received from Quebec Gouvernment (3 months in 1998/1999) in the Laboratory for Molecular Endocrinology, Laval University ,Quebec City, Canada

Managerial positions:

- Educational director for T-9 Student hostel (Politechnic Institute of Iasi); 1984-1988,
- Dean of the Faculty of Chemistry, “Al.I.Cuza” University of Iasi : 1990-1996,
- Chief of the Inorganic Chemistry Department from “Al.I.Cuza” University: 1996-2000,
- Dean of the Faculty of Chemistry, “Al.I.Cuza” University : 2000-2004,
- Vice-Rector for university strategies, “Al.I.Cuza” University: 2004-2005

Received awards:

International (obtained after international competitions):

- “Humboldt” scholar in 1975-1976 (for 15 months) at the Garching Institute of Radiochemistry of the Technical University of Munich;
- the “Senior Stipendium” excellence scholarship of the Government of Quebec Province in 1998-1999 (for 3 months), acting as researcher at the University of Laval, Institute of Molecular Endocrinology CHUL in Quebec-City.

National:

- “Gh.Spacu” award of the Romanian Academy in 1997;
- National award of Romania “The Merit for Education” – the degree of Officer, in 2004
- Diploma of Excellence awarded by the Romanian Ministry of Education and Research in 2007

Domestic and foreign invention salons:

- “Henry Coanda” golden medal - for elite inventor – of the Romanian Inventors Association (oct. 1996);
- “L. Van den Brande” cup accompanied by the gold medal at Eureka in Brussels, 1997;
- Several awarded medals :18 gold, 2 silver and 3 bronze medal at different international patents salons in Brussels, Geneva, Pittsburgh, Casablanca, Zagreb, Iasi, etc., between 1994 and 1999;
- Jubilee medals awarded in honour by the University of Konstanz, the National University of Chisinau, the University of Cernauti, the University of Medicine and Pharmacy of Iasi and the “Al.I.Cuza” University of Iasi.

Participations to the international scientific life (1990-2007):

As a visiting professor, A.C. **presented lectures and scientific papers** in around 50 universities or within congresses and conferences held abroad: Konstanz (5), Berlin, Dresden (3), Dubna, Sofia (2), Chisinau (3), Lille, Dunkerque (2), Paris Orsay (2), Paris VI (2), Budapest, Halle, Leipzig, Jena, Chemnitz, Munich (3), Aachen (2), Karlsruhe (2), Quebec City, Wuertzburg, Koeln, Poitiers, Freiburg, Pontresina, Muenster (2), Braunschweig (2), Regensburg.

Happy anniversary, dear Professor!