



Europass Curriculum Vitae

Personal information

Name	Kappel Wilhelm
Address	11, Valea Argesului, Bucarest ,
Telephone	0744 548 939
Fax/ E-mail	+40-21-346 72 35 / kappel@icpe-ca.ro
Nationality	Romania
Date of birth	17, june, 1946

Desired employment / occupational field Project Partner Manager

Work Experience

- Dates (from – to) 1969-present at ICPE Bucharest (National Institute for Research and Development for Electrical Engineering ICPE – Advanced Research): researcher (1972), senior researcher III (1980), senior researcher II (1990), senior researcher I (1994)
1987-1990 head of the group of magnetic materials.
1990–1993, head of the department for inorganic electrotechnical materials.
1994-1998 ICPE Scientific Manager and Scientific Secretary of the Institute,
1998-2001 - Director of the Advanced Research Division, in present General Director of the institute.
Professor at University “Politehnica” of Bucharest from 1996
Professor at University “Valahia” of Targoviste from 1999
- Name and address of employer R&D National Institute for Electrical Engineering ICPE-Advanced Research (INCDIE ICPE-CA), 313 Splaiul Unirii, Bucharest - 3, RO 030138
- Type of business or sector R&D
- Occupation or position held General Director
 - Main activities and responsibilities R&D, management

Education and training

- Dates (from – to) 1965-1969 University of Bucharest, Faculty of Physics, Department for Solid State Physics, thesis “Magnetic properties of diluted alloys measured by neutron scattering”.
1999 Babes-Bolyai University from Cluj-Napoca, Faculty of Physics, Ph. D. Thesis “Study of the magnetic behaviour of some rare-earths based ternary compounds”
February-April 1987, specialisation in rare earth permanent magnets at the University of Birmingham-UK;
25 August-2 September 1999, French-Romanian Summer School “High performances permanent magnets”, Cluj-Napoca, Romania
- Name and type of organization providing education and training 1969-present at ICPE Bucharest (R&D National Institute for Electrical Engineering ICPE – Advanced Research): researcher (1972), senior researcher III (1980), senior researcher II (1990), senior researcher I (1994)
- Principal subjects/occupational skills covered

1987-1990 head of the group of magnetic materials.
1990–1993, head of the department for inorganic electrotechnical materials.
1994-1998 ICPE Scientific Manager and Scientific Secretary of the Institute,
1998-2001 - Director of the Advanced Research Division, in present General Director of the institute.

Professor at University "Politehnica" of Bucharest from 1996

Professor at University "Valahia" of Targoviste from 1999

Study of magnetic properties of the Al-Ni-Co-Fe alloys, isotropic and anisotropic high energy and high Ti-containing Alnico alloys and establishment of their manufacturing technologies. These technologies were applied in our own small-scale manufacturing unit and at two industrial manufactures. Beside of a number of technology reports, the results of my activity were scientific papers, communications and more than 10 patents regarding different technological steps (moulding, casting, heat treatments) and applications of Alnico permanent magnets;

Study of magnetic properties of rare earth based permanent magnets: Sm-Co and NdFeB permanent magnets, obtained by sintering, bonding and injection. The results (manufacturing technologies) were applied in the Institute and in one industrial manufacturing unit. Also, many works regarding the recovery of magnetic alloy waste in order to be reused in the magnet technology;

Characterization of hard and soft magnetic materials: establishment of measuring methods used in current industrial quality control, design of the appropriate devices, establishment of national standards in magnetics;

Study of Cu-Al-Ni compounds for shape memory alloys, magnetic soft Fe-Ni alloys, hard magnetic alloys like Fe-Cr-Co, Mn-Bi, Mn-Al-C, Mn-Al;

Study of the possibilities to reduce the total power losses in electrical steel sheets, by local stresses: it was established a method to reduce the power losses of grain oriented Fe-Si electrical steel sheets by electron beam irradiation, also design and building of a single sheet testing device for such sheets;

Experience in permanent magnet manufacturing technologies: cast, sintered and bonded for Alnico and rare earths-transition metals permanent magnets;

Participation in bilateral scientific cooperation with institutes from Russia (Institute for High Pressure in mechanical cold worked Mn-Al permanent magnets, Institute for Iron and Steel in the field of NdFeB permanent magnets), China (Academia Sinica: Physic Institute–Beijing, Institute for Metals-Shenyang and Institute for Metallurgy from Shanghai in the field of compounds and alloys of the system Nd-Fe-B), Poland (Polfer Institute, in the field of Sm₂Co₁₇ permanent magnets).

- Title of qualification awarded
- Level in national classification

Profesor, Ph.D
Senior researcher

Personal skills & competences

- Mother tongue
Other languages
- Reading skills
 - Writing skills
 - Verbal skills

german

romanian, excellent, english-good, french-good, russian-basic
romanian, excellent, english-good, french-good, russian-basic
romanian, excellent, english-good, french-basic, russian-basic

Social skills and competences

Living and working with other people, in multicultural environments, in

Fellow of the IEEE Magnetics from 1990
Vicepresident of Romanian Society of Magnetic Materials (1992), affiliated to UKMagn.Soc. (1993)
Vicepresident of the Romanian Association of Materials, since 1998

positions where communication is important and situations where teamwork is essential (for example culture and sports), etc.

President of the Romanian Technical Committee 68 for Steels and Magnetic Materials, belonging to the Romanian Electrical Committee, member of the IEC. Member in the Committee for "Advanced Materials and Materials Recycling" (1995–1998) and of the Commission for Science Policy (1999), of the Consulting Council for Research, Technology and Innovation of the Ministry for Education and Research and of different evaluating panels for materials belonging to the different national scientific research programmes.

Organisational skills and competences

Management in R&D activities
Over 35 projects in the national programmes: ORIZONT 2000, RELANSIN, MATNANTECH, CERES (1993 - 2008)
"Temperature Stability and Corrosion Resistance of Rare Earth - Transition Metals Magnets", project INCO – COPERNICUS No. ERBIC 15 CT 96 – 0758, 1997 - 1999
"Characterisation of industrial and magnetic steel", project INCO – COPERNICUS No. ERBIC 15CT 96 – 0817, 1997 - 1999
"Neutron diffraction and SANS study of magnetic phases in nanocrystalline Fe-Cu alloys", Joint Research Work Romania – Russia, since 17.05.2005
"The diversification of magnet series produced on the NdFeB magnets common line by realization of high coercivity permanent magnets with working points > 180oC" Joint Research Work Romania – Republic of China No. 37 – 09/31.05.2004, 2004
"Strengthening of the RDI potential for advanced materials and composites to enhance the performance of the electrical industry", Project FP 6 – INDUMAT, No. 17240/2004

Technical skills&competences

Basic computer works

Artistic skills & competences

Classical music (as hobby)

Driving licence(s)

Type B

Additional information

Medal and diploma "E. Hurmuzescu", about of the Romanian Electrotechnical Committee (1990);
National order "For Merit" in the degree of Knight (2000) of the Ministry for Science, Technology and Innovation