

PERSONAL DETAILS

Name: Vos
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Nationality: Belgian

EDUCATION**High school**

Latin / Mathematics-Sciences

University

Diploma M.Sc. Engineer in materials science - University of Leuven (B) –1993
Thesis (in Dutch): Production and properties of Nicalon-fibre toughened glass ceramics
Certificates Courses on ‘Nuclear Science and technology’ - University of Leuven (B) – 1993-94
Certificate PhD. Education - University of Leuven (B) – 1994-98
Diploma PhD. in applied sciences – materials engineering - University of Leuven (B) –1999
Thesis (in Dutch): Plasma spraying of self-lubricating coatings with solid lubricants
Certificate Introduction to law for juridical experts – University of Ghent (B) - 2006

Industrial projects during my university studies

KU-Leuven, dept. MTM and Sulzer-Metco, 1991-92, extension of an existing plasma torch installation in function of the deposition of diamond coatings

Training

Overhaul of nuclear power stations Electrabel Doel 3-4, 1994

International contacts during my university studies

Study visits to Prague, Vienna, Boston, New Orleans, Orlando, including visits to several universities, research centres and companies. Exchange with the universities of Aachen, Hannover, Barcelona and Auckland.

Awards

Price for the best scientific poster at the Open Doors of the department of Metallurgy and Materials Engineering (MTM), University of Leuven, May 1998

PROFESSIONAL EXPERIENCE**October 1993 - July 1994**

University of Leuven, Belgium, study-consulting service, job student, IT administration and mailings

September 1994 - December 1994

University of Leuven, Belgium, department Metallurgy and Materials Engineering, scientific assistant, Technology Assessment of the thermodynamic methodology

January 1995 - December 1998

University of Leuven, Belgium, department Metallurgy and Materials Engineering, Ph.D.: Plasma spraying of self-lubricating coatings with solid lubricants

- List of publications in annex
- Ph.D. education, including additional education on non destructive testing, and electron- and ion-solid interactions
- Didactical assignments on microstructure analysis, mechanical testing, materials selection (Ashby-method and -software: Cambridge Materials Selector), project- and thesis guidance
- Industrial projects:
 - Optimisation of plasma spray parameters for Cr₂O₃ coatings – company: ‘Verwaest’.
 - Plasma spraying of Al₂O₃ on glass - in cooperation with ‘ICOS’.
- Responsible for planning the student practicals related to the courses on materials engineering
- Member of the departemental council, the faculty council and the faculty permanent education commission

January 1999 – May 2005

AIB-Vinçotte International, Notified Body, Material-Experts & Lab.

January - May 1999: Contract Manager Metallurgy

- Management of client dossiers: metallurgical failure analysis

June 1999 - December 2000: Product Unit Manager Material-Experts & Lab.

- Re-organisation and increase of profitability of the laboratories metallurgy
 - Daily organisational leadership
 - Scientific support of contract management
 - Financial and SQE responsibility (accreditation EN 45001)
- Preparation of the integration of the departments metallurgy, synthetic materials and coating technology: project ‘Materials’
- Co-organisation of seminars on ‘corrosion’, ‘metallurgy’ and ‘the origin, production, properties and use of fuels and lubricants’; a/o in assignment of the Royal society of Flemish Engineers (KVIV), the Union for rescue and tugboat Services (URS, Antwerp) and the school for maritime shipping (Antwerp).

January 2001 – May 2005: Activity Manager Materials

- Implementation and increase of profitability of the department ‘Materials’
 - Daily organisational leadership
 - Scientific support of contract management
 - Financial and SQE responsibility (accreditation ISO 17025 and EN 45004)
 - Preparation of business-plans and investments
- Project Coordination, e.g.
 - On-site inspection of polymer welders (gas distribution systems)
 - Automation of a production line for quality control of Al half products
 - Quality control of machining operations in the aviation industry
 - Failure analysis on machines, transport, corrosion, ...
- Organisation of seminars (cf. super)
- Support on behalf of ‘materials’ in the framework of the operational transfer to a new IT-system and -concept

Representations on behalf of AIB-Vinçotte International

- Contact person ‘Association for Materials Knowledge’ (NL) – member of the metals society and working groups on fractography and creep phenomena
- Belgian Normalisation Institute - commission on polymer ducting systems
- Society of gas transportation: advisor commission ‘welders PE-ducting systems’
- Task force ‘hydrogen damage’ of ‘the European Pressure Equipment Research Council (EPERC)’
- Administration board ‘Belgian Welding Association’
- Member of the Agoria sector committee ‘Metal products and polymers’
- Member of the “Advisory Board of the Brussels Innovation Relay Center”
- Member of several user commissions of research projects of the Belgian Welding Institute (BWI)

June 2005 – December 2005

Independent consultant on Materials science and technology

Since January 2006

Materials Consult bvba, Founder and General Manager – continued on the next page.

May 2007 – April 2009

Metalogic nv, Corrosion Engineer, part-time

- Risk Based Inspection (RBI) implementation for chemical process installations
- Instructor corrosion and materials selection courses for European Welding Engineer students and notified body weld inspectors

Since January 2006

Materials Consult bvba, Founder and General Manager

- Failure analysis and failure prevention
 - Determination of the nature and cause of failures such as cracking, rupture, wear and corrosion of metals and their coatings
 - Advise to prevent failure occurrence
- Project coordination related to materials technology
 - Literature reviews
 - Participation to congresses as a client representative
 - Assistance to metallurgical laboratories
 - Coordination of R&D projects
- Advice and Consultancy on materials testing, properties and application
 - Materials selection
 - Quality control: products and production
 - As a third party: independent advise
- Developer and instructor of training courses on metallurgy, materials selection and corrosion, e.g. for technical staff of energy producers and pump suppliers/users.

Professional memberships

- Active on internet business platforms LinkedIn, Xing and ecademy
- Black Star Member of ecademy
- Royal Flemish society of engineers, Belgium
- Belgian Chamber of Commerce – participant to Plato, a business networking forum
- Association for Materials Knowledge, the Netherlands – member of the metals society and task forces on fractography and creep phenomena
- The Belgian Welding Institute
- ASM, the American Society for Metals
- ASTM, the American Society for Testing and Materials
- NACE, the Association of Corrosion Engineers

OTHER QUALIFICATIONS

Entrepreneur

Founder of B-Force - event-support

PC

Conventional: Microsoft office Pro, Lotus Notes, Outlook, Coreldraw, Visio, ...

Special software: Cambridge Materials Selector, HSC chemistry, ThermoCalc, Risk Based Inspection software

Languages

Dutch: native language

French: good in speaking and writing
specialised courses, 1999-2001

English: fluent in speaking and writing

German: simple conversations
starters course, 2001

Leisure activities

Project coordination for the Royal concert band of Peer,

- organisation rehearsal weekends
- editor-in-chief of the band's journal (till end 1999)
- stage manager (till end 2008)
- project coordination of the China concert tour 2008

Musician of the university concert band at the university of Leuven

Former monitor-in-chief of the youth services of the Christian Mutuality,

- organisation of youth holidays in Belgium and Switzerland
- guidance and evaluation of monitors
- member of the working groups 'evaluation' and 'have a say'

Cultural interests: concerts and movies, classical music, jazz

Sports: Walking and mountain bike trials

Annex: PUBLICATIONS**Internationally reviewed journals**

- F. Vos, L. Delaey, M. De Bonte, L. Froyen, Reactivity in the Cr₂O₃-CaF₂ system: an empirical approach, *Journal of Materials Science*, 14, 6, 1999, p. 2518-2523.
- F. Vos, Plasma Spray Self-Lubricating Coatings, *Advanced Coatings & Surface Technology Alert*, 4, 1999.

Congress and symposium proceedings

- F. Vos, L. Delaey, M. De Bonte, L. Froyen, Thermal spraying of self-lubricating coatings with solid lubricants, in: *Proceedings of the 5th. European Conference on Advanced Materials and Processes and Applications; Materials, Functionality and Design*, 21-23 April 1997, Maastricht, Vol. 3, Surface Engineering and Functional Materials, Netherlands Society for Materials Science (FEMS), Zwijndrecht, 1997, p. 187-190
- F. Vos, L. Delaey, M. De Bonte, L. Froyen, Plasma Spraying of Self-Lubricating Cr₂O₃-CaF₂ coatings, in: *Thermal Spray: A United Forum for Scientific and Technological Advances*, ed. C.C. Berndt, ASM International, Ohio, 1997, p. 49-54
- F. Vos, L. Delaey, M. De Bonte, L. Froyen, Plasma Sprayed Self-Lubricating Cr₂O₃-CaF₂ Coatings: Friction and Wear Properties, in: *Thermal Spray: Meeting the Challenges of the 21st Century*, ed. C. Coddet, ASM International Ohio, 1998, p. 117-122
- F. Vos, Qualification of welders and welding equipment for the construction of distribution networks of plastic piping (in Dutch), in: *New techniques, accessories and equipment for plastic piping systems, symposium proceedings*, ed. P. Vanspeybroeck, Becetel, Melle, 2002
- F. Vos, Don't forget quality (in Dutch) , in: *proceedings of the weld symposium*, the Belgian Welding Institute, Brussels, 2007

Available as abstract

- F. Vos, Thermal spraying of self-lubricating coatings with solid lubricants, *proceedings of European conference Junior Euromat '96*, August 26-30 1996, Lausanne (CH), Deutsche Gesellschaft für Materialkunde e.v., 1996, p. 463.

Other publications

- F. Vos, Production and properties of Nicalon-fiber toughened glass ceramics, M.Sc. thesis (in Dutch), KU-Leuven, department MTM, Heverlee, 1993
- F. Vos, Materials for the storage of high level radioactive waste (in Dutch), SCK (Mol) - MTM (Leuven), 1994
- F. Vos, M. De Bonte, Thermal spraying of Ni-graphite coatings (in Dutch), MTM - WTCM, 1995
- F. Vos, Plasma spraying of self-lubricating coatings with solid lubricants, Ph.D. Thesis (in Dutch), KU-Leuven, department MTM, Heverlee, May 1999
- More than 100 proprietary reports on subjects related to materials science and technology.