

## Curriculum Vitae

*Firstname and Name:* **Zenon IGNASZAK**, Professor (M)

*Date of birth:* September 17<sup>th</sup> 1948

Poznan University of Technology

Faculty of Mechanical Engineering and Management

Institute of Materials Technology

Cad/CAE & Foundry Laboratory of Material Technology

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### **Scientific branch, specialty:**

Modeling and virtual prototyping in material technologies.

Metallurgy and foundry of ferrous and aluminum alloys.

Computer systems for technological processes aided and its experimental validation

### **International scientific/industrial collaboration**

French Metallurgical Group: Ferry-Capitain and FAD Denain,

CTIF, Sèvres-Paris, CETIM Sunlis-Paris

CALCOM/ESI Group and prof.M.Rappaz (EPFL), ESI Group Rungis-Paris

NovaCast Systems AB (Sweden)

Volkswagen Foundry in Poznan, Foseco group (Poland branch)

Hutteness-Albertus group (Poland branch),

European Universities (France, Czech Republic, Switzerland, Sweden, Lithuania)

and others foundries in Poland

### **Scientific,academic & industrial work course:**

since April 1971 – Master of Science, Poznan University of Technology, Assistant

since September 1979 – Ph.D. Eng. , Poznan University of Technology, Dr assistant

october 1989 – Doctor Sc. Eng., Silesian University of Technology, Gliwice

1990-1992 – Assistant professor - dozent (by Ministry of Education)

1992 to 2004 – Associate professor at Poznan University of Technology,

1992 till now – Head of CAD/CAE Laboratory of Materials Technology in Institute of Materials Technology, Poznan University of Technology

1992-93 and 1995-96 – Visiting professor at Ecole Nationale Supérieure d'Arts et Métiers (ENSAM) - Paris

since 1990 till now – Recherche&Developpement Consultant, Ferry-Capitain (French Metallurgical Group), in the frame of scientific–industrial professional experience

since 1992 till now – Scientific adviser in 'Srem' Foundry – Cast Iron Foundry (Poland)

since 1993 till now – Scientific adviser in Volkswagen Foundry in Poznan (Poland)

since October 2004 – Full Professor title, nomination by president of Poland (the highest academic–scientific degree in Poland)

since 2009 till now – Professor (permanent position in PUT Poznan)

since 2011 till now – member of Metallurgy Committee of Polish Academy of Science

**Scientific publications (10 selected, 2011-2012) –total: about 350 papers included books:**

1. Z. Ignaszak – Study of Data Base of Modeling Concerning Casting Phenomena in Cast-Iron-Mould Simulation Systems. Key Engineering Materials, vol. 457 (2011) pp.305-311.
2. Z. Ignaszak (50%), P. Popielarski, T. Stręk – Estimation of Coupled Thermo-Physical and Thermo-Mechanical Properties of Porous Thermolabile Ceramic Material using Hot Distortion Plus® Test, Defect and Diffusion Forum Vols. 312-315 (2011) pp 764-769
3. Z. Ignaszak (70%), P. Popielarski – Sensitivity Tests of Simulation Models used in Chosen Calculation Codes on Uncertainty of Thermo-Mechanical Parameters during Virtual Mechanical Stress Estimation for Ferrous Alloy Castings, Defect and Diffusion Forum Vols. 312-315 (2011) pp 758-763
4. Z. Ignaszak (70%), P. Popielarski – Application of simplified inverse solution to estimate the thermo-physical parameters of granular porous materials bonded by different resins. Defect and Diffusion Forum Vols. 326-328 (2012) pp 605-611
5. Z. Ignaszak (40%), P. Popielarski, J.Hajkowski, J-B.Prunier – Problem of acceptability of internal porosity in semi-finished cast product as new trend – “tolerance of damage” present in modern design office, Defect and Diffusion Forum Vols. 326-328 (2012) pp 612-619
6. Z. Ignaszak (80%), P. Popielarski – Contribution to Thermal Properties of Multi-Component Porous Ceramic Materials Used in High-Temperature Processes in the Foundry Industry, Heat and Mass Transfer in Porous Media, Springer-Verlag Berlin Heidelberg 2012, pp 187–218
7. Z. Ignaszak – Contribution to determination of the life time of chemically self-hardening mould sand, Archives of Foundry Engineering ISSN (1897-3310), Vol. 11/4 pp.55 – 60, Gliwice 2011.
8. R.Sika, Z. Ignaszak – Data acquisition in modeling using neural, networks and decision trees, Archives of Foundry Engineering ISSN (1897-3310), Vol. 11/2 pp.113-122, Gliwice 2011
9. Z. Ignaszak, Joanna Ciesiółka – Conditions and prospects for non-destructive testing (NDT) of castings prior to their use, Przegląd Spawalnictwa (Welding Revue), in polish, 13/2011, part I – ss.36-40. part I– ss.41-45
10. Z. Ignaszak, R.Sika – Specificity of SPC Procedures Application in Foundry in Aspect of Data Acquisition and Data Exploration, Archives of Foundry Engineering ISSN (1897-3310), Vol. 12/4 pp.65 – 70, Gliwice 2011

**Staff education:**

Director of 4 PhD Engineer Thesis; Scientific tutor of habilitation (professor) thesis, Scientific tutor of few PhD post-graduate Students, and about 70 diploma works.

Reviewer: 2 foreign PhD theses, 10 habilitations (professors) thesis, 6 professors (state academic title dossier), and reviewer of numerous scientific papers