

Dr hab. inż. Jan Jezierski, (DSc., PhD. with ‘habilitation’)

Assistant Professor

at Silesian University of Technology

Faculty of Mechanical Engineering

Department of Foundry Engineering

Gliwice, Poland

Scientific Curriculum Vitae

A) Scientific publications in journals included in the Journal Citation Reports (JRC)

1. Janerka K., Bartocha D., Szajnar J., **Jezierski J.**, The carburizer influence on the crystallization process and the microstructure of synthetic cast iron, Archives of Metallurgy and Materials, 2010, vol. 55, nr 3 , s. 851-859, [IF 0,262; MNiSW 20]
2. **Jezierski J.**, Janerka K., Selected aspects of metallurgical and foundry furnace dust utilization, Polish Journal of Environmental Studies, 2011, vol. 20, nr 1, s. 101-105, [IF 0,508; MNiSW 13]
3. **Jezierski J.**, Janerka K.: The Lean Manufacturing Tools in Polish Foundries, Archives of Metallurgy and Materials, vol. 58, issue 3, 2013, p. 937-940, [IF 0,431; MNiSW 20]
4. Janerka K., **Jezierski J.**, Bartocha D., Szajnar J.: Analysis of the ductile iron production on the steel scrap base, International Journal of Cast Metals Research [IF 0,364; MNiSW 25]
5. Janerka K., Pawlyta M., **Jezierski J.**, Szajnar J., Bartocha D.: Carburiser properties transfer into the structure of melted cast iron, Journal of Materials Processing Technology, vol. 214, issue 4, s. 794-801, [IF 1,953; MNiSW 35].
6. Janerka K., Kondracki M., Jezierski J., Szajnar J., Stawarz M.: Carburizer Effect on Cast Iron Solidification, Journal of Materials Engineering and Performance, (2014) 23:2174–2181, [IF 0,981; MNiSW 20]
7. Jezierski J., Janerka K., Stawarz M.: Theoretical and practical aspects of pneumatic powder injection into liquid alloys with a non-submerged lance, Archives of Metallurgy and Materials, vol. 59, issue 2, 2014, p. 731-734, [IF 0,763; MNiSW 20]
8. Jan Jezierski, Zbigniew Buliński, Krzysztof Janerka, Marcin Stawarza & Konrad Kaczmarek, Numerical modelling and experimental validation of the pneumatic powder injection into liquid alloys, Indian Journal of Engineering & Materials Sciences, Vol. 21, June 2014, pp.322-328, [IF 0,641; MNiSW 20]
9. Jan Jezierski, Krzysztof Janerka, Parameters of a Gas-Solids Jet in Pneumatic Powder Injection into Liquid Alloys with a Non-Submerged Lance, METALURGIJA 54 (2015) 2, 365-367, [IF 0,755; MNiSW 25]

B) Polish patent

1. **Jezierski J.**, Szajnar J., Janerka K., 2010, Lance for powder injection into liquid alloys, Patent no. 206465, UPRP, [MNiSW 25]

C) Monographs, scientific publications in international and national journals

Publications of the so-called. "Philadelphia List" (source: Web of Science) excluding the publication mentioned above

1. Janerka K., **Jeziński J.**, Szajnar J., The evaluation of effectiveness of liquid cast iron recarburization process by using different carburizers and methods of recarburization, Proceedings of 20th Anniversary International Conference on Metallurgy and Materials METAL 2011, Brno, Czech Republic, 2011, CD, [MNiSW 10]
2. **Jeziński J.**, Janerka K., Waste utilization in foundries and metallurgical plants - selected aspects, Proceedings of 20th Anniversary International Conference on Metallurgy and Materials METAL 2011, Brno, Czech Republic, 2011, CD, [MNiSW 10]
3. Janerka K., Bartocha D., **Jeziński J.**, Szajnar J., Heat Up and Dissolution of Carburizers in Liquid Ferrous Alloys, 21st Anniversary International Conference on Metallurgy and Materials, 2012, 188-194 [MNiSW 10]
4. **Jeziński J.**, Janerka K., Analysis of The Gas-Solid Jet in Pneumatic Powder Injection Process, 21st Anniversary International Conference on Metallurgy and Materials, 2012, 40-45 [MNiSW 10]
5. **Jeziński J.**, Janerka K., The Analysis of Two-Phase Jet in Pneumatic Powder Injection into Liquid Alloys, ICMSE 2012, International Conference on Materials Science and Engineering, 2012, 1194-1199* [MNiSW 10]
6. Studnicki A, **Jeziński J.**: Stereological Parameters of Carbides in Modified Wear Resistant Fe-C-Cr Alloys, Metal 2012; International Conference on Metallurgy and Materials, Brno, Czech Republic, 23-25.05.2012 [MNiSW 10]
7. Janerka K., **Jeziński J.**, Bartocha D., Szajnar J., Microstructure of the Synthetic Cast Iron Carburized with Different Types of Carburizers, Advanced Materials Research, 2013, vol. 629, 122-126* [MNiSW 7]
8. Janerka K., **Jeziński J.**, Bartocha D., Szajnar J., Heredity of the Structure and Properties of Grey Cast Iron Melted on a Basis of Steel Scrap, Advanced Materials Research, 2013, vol. 622-623, 685-689* [MNiSW 7]
9. **Jeziński J.**, Janerka K., Two-phase jet in process of pneumatic powder injection into liquid alloy, Advanced Materials Research, vol. 622-623, 2013, 447-451* [MNiSW 7]
10. **Jeziński J.**, Janerka K.: Model Experiments with New Lance for Pneumatic Powder Injection, *Advanced Materials Research*, Vol. 702, 2013. pp. 62-67* [MNiSW 7]
11. **Jeziński J.**, Buliński Z., Janerka K.: Computer Modelling of Pneumatic Powder Injection Into Liquid Alloys, Metal 2013; International Conference on Metallurgy and Materials, Brno, Czech Republic, 15-17.05.2013* [MNiSW 10]
12. **Jeziński J.**, Janerka K., Stawarz M.: Verification of the Theoretical Considerations and Numerical Modeling of the Powder Injection Process in Real Conditions of Pneumatic Injection of Ferroalloys into Liquid Cast Iron, Metal 2014; International Conference on Metallurgy and Materials, Brno, Czech Republic, 21-23.05.2014* [MNiSW 10]
13. Stawarz M., Janerka K., **Jeziński J.**, Szajnar J.: Thermal Effect of Phase Transformations in High Silicon Cast Iron, Metal 2014; International Conference on Metallurgy and Materials, Brno, Czech Republic, 21-23.05.2014* [MNiSW 10]

* printed publications, waiting to be indexed on a list of Web of Science

Scientific publications indexed at SCOPUS database excluding the publications listed above

1. **Jeziński J.**, Janerka K., Pneumatic powder injection technique as a tool for waste utilization, International Journal of Environment and Waste Management, vol. 2, nr 6, 2008, 636-646, [MNiSW 5]

2. **Jeziński J.**, Janerka K., Powder pneumatic injection as a tool for wastes utilization, Archives of Materials Science and Engineering, vol. 36, nr 2, 2009 118-124 [MNiSW 9]
3. Janerka K., Bartocha D, **Jeziński J.**, Szajnar J., The effect of the carburiser quality on the cast iron recarburisation process. Foundry Trade Journal International, United Kingdom, 2010, vol. 184, nr 3679, 282-286, [MNiSW 5]
4. Janerka K., **Jeziński J.**, Szajnar J, Quality and properties of the cast iron produced on the steel scrap base, Archives of Materials Science and Engineering, vol. 53, nr 2, 2012, 118-124, [MNiSW 9]
5. **Jeziński J.**, Janerka K.: Experimental evaluation of the new lance for powder injection, *Manufacturing Technology*, vol. 13, no. 1, March, 2013, pp. 55-59 [MNiSW 5]

Scientific publications published in international journals and monographs excluding the above

1. **Jeziński J.**, Janerka K., Wastes utilisation in foundries and metallurgical plants with pneumatic conveying techniques – selected aspects, Interdisciplinary Environmental Review, 2011, vol. 12, nr 2, 154-165, [MNiSW 5]
2. **Jeziński J.**, Szajnar J.: New lance and method of powder injection into liquid alloys, International Journal of Computational Materials Science and Surface Engineering, Volume 1, No. 3, 2007, pp. 292-305. [MNiSW 5]
3. **Jeziński J.**, Szajnar J., Diphase stream force in pneumatic powder injection, International Journal of Computational Materials Science and Surface Engineering, Volume 1, No. 4, 2007, pp. 479-493. [MNiSW 5]
4. Janerka K., Szajnar J., **Jeziński J.**, Pawlyta M., Quality and structure of carburizers used in foundry engineering, chapter 2 in monograph ed. by Borkowski S., Czaja P., Quality Engineering, Novosibirsk, 2009, 21-30, [MNiSW 5]
5. **Jeziński J.**, Janerka K., The 5S system in small cast iron foundry, chapter 5 in monograph ed. by Borkowski S., Tsoy E. B., Engineering and quality production, Donetsk, Ukraine 2010, 61-70, [MNiSW 5]
6. **Jeziński J.**, Janerka K., Solid waste utilization in foundries and metallurgical plants, Integrated waste management, chapter in international monograph, Intech, Rijeka, 2011, vol. 11, 239-264, [MNiSW 5]

Academic handbook or a chapter in an academic handbook

1. The collective work edited by M. Cholewa, Selected Casting Processes, Published by Silesian University of Technology, Gliwice 2008, No. 2425 [MNiSW 1 – for 1 chapter]
- Janerka K., **Jeziński J.**, Fluidization of bulk materials, pp. 229-244

Publications in scientific journals indexed by MNiSW

1. **Jeziński J.**, The influence of the ferroalloys grains velocity on the results of the pneumatic ferroalloys injection into liquid cast iron. Archiwum Odlewnictwa, Year 2003, Issue 10, pp. 307-314. [MNiSW 6]
2. Gawroński J., **Jeziński J.**, Janerka K., Powder injection into liquid alloys – a tool for quality and costs of casts production decreasing, Archiwum Odlewnictwa, 2004, vol. 4, nr 12, 67-72, [MNiSW 6]
3. Janerka K., Gawroński J., **Jeziński J.**, Diphase stream area in pneumatic powder injection process, Archiwum Odlewnictwa, 2004, vol. 4, nr 14, 189-196, [MNiSW 6]

4. **Jeziński J.**, Description of the powder injection process by the diphasic jet dynamic force. *Archiwum Odlewnictwa*, Year 5, nr 15, 2005, s. 182-189. [MNiSW 6]
5. Janerka K., **Jeziński J.**, Szlumczyk H., Szajnar J., Gawroński J., Pneumatic conveying and its use in foundries, *Przegląd Odlewnictwa*, vol. 55, nr 4, 2005, 246-255, [MNiSW 2]
6. **Jeziński J.**, Szajnar J., Relationship of the diphasic jet dynamic force and parameters of the powder injection process, *Archiwum Odlewnictwa*, Year 6, nr 22, 2006, pp. 246-253. [MNiSW 6]
7. **Jeziński J.**, Janerka K., Szajnar J., Powder injection into liquid alloys as a tool for its quality improving, *Archiwum Odlewnictwa*, 2006, vol. 6, nr 18/1, 535-540, [MNiSW 6]
8. Janerka K., **Jeziński J.**, Pawlyta M., The properties and structure of the carburisers, *Archives of Foundry Engineering*, 2010, vol. 10, nr 1, 67-74, [MNiSW 9]
9. Homa D., Janerka K., Szajnar J., **Jeziński J.**, The pneumatic conveying applications in foundry industry, *Archives of Foundry Engineering*, 2010, vol. 10, special issue 4, 19-26, [MNiSW 9]
10. Janerka K., Szajnar J., Bartocha D., **Jeziński J.**, The production of synthetic cast iron in aspect of less environmental nuisance, *Archives of Foundry Engineering*, 2010, vol. 10, special issue 2, 77-82, [MNiSW 9]
11. Janerka K., Szajnar J., **Jeziński J.**, Bartocha D., The factors affecting the recarburization process indicators, *Archives of Foundry Engineering*, 2011, vol. 11, special issue 3, 89-96, [MNiSW 6]
12. Janerka K., **Jeziński J.**, Szajnar J., Bartocha D.: Melting of the cast iron and ductile cast iron without the pig iron in the solid charge. *Archives of Foundry Engineering*, vol. 12, Special Issue 1/2012, pp. 81-86. [MNiSW 6]

Scientific publications in other journals

1. **Jeziński J.**, Szajnar J.: Method and new lance for powder injection into liquid alloys. *Journal of Achievements in Materials and Manufacturing Engineering*, vol. 17 issue 1/2, 2006, pp. 349-352. [MNiSW 5]
2. **Jeziński J.**, Szajnar J.: Relationship between stream forces and parameters of the powder injection into liquid metal bath, *Archives of Materials Science and Engineering*, Volume 28, Issue 4, April 2007, pp. 238-245. [MNiSW 5]
3. **Jeziński J.**, Bartocha D.: Properties of cast iron modifying with use of new inoculants, *Journal of Achievements in Materials and Manufacturing Engineering*, Volume 22, Issue 1, 2007, pp. 25-28. [MNiSW 5]
4. **Jeziński J.**, Szajnar J.: Character of diphasic stream force in powder injection technique, *Journal of Achievements in Materials and Manufacturing Engineering*, Volume 20, Issue 1/2, 2007, pp. 455-458. [MNiSW 5]
5. **Jeziński J.**, Janerka K., Powder injection. Method of the metallurgical and foundry wastes utilization – part II, *Stal Metale&Nowe Technologie*, 2010, no. 1-2, 26-29
6. Szajnar J., Homa D., Janerka K., **Jeziński J.**, Development of the technology of the pneumatic conveying of POLKO system, *Powder&Bulk Materiały Sypkie i Masowe*, 2010, no. 1, 18-21
7. **Jeziński J.**, Janerka K., Powder injection. Method of the metallurgical and foundry wastes utilization – part I, *Stal Metale&Nowe Technologie*, 2009, nr 11-12, 8-10
8. Janerka K., Homa D., **Jeziński J.**, Szajnar J., Technologies of the powder materials pneumatic injection into liquid or gaseous environments. *Powder&Bulk, Materiały Sypkie i Masowe*, 2010, no. 3, 19-24

Chapters in Polish monographs

1. Janerka K., **Jeziński J.**, Szajnar J., Szlumczyk H., Pneumatic conveying in foundry, Monograph Progress Foundry Theory and Practice, edited by J. Szajnar, 2009, 173-188, [MNiSW 3]

D) Management and participation in international and national research projects

1. The theory of liquid ferrous alloys recarburization by pneumatic blowing of powdered carburizer. Develop guidelines of recarburization in electric arc and induction furnaces, (2002 – 2004), KBN, primary executive
2. Reclamation of used molding sands in pneumatic linear regenerator, (2004 – 2006), KBN, primary executive
3. Influence of dynamics of two-phase gas-powder flow during injection processes of powder to the liquid alloys, (2005 – 2007), KBN, primary executive
4. Heredity of the structure and properties of synthetic cast iron depending on the charge materials, (2009 – 2011), MNiSW, primary executive
5. The effectiveness of the process of powder injection into the liquid metal in terms of the phenomena occurring in the area of penetration of particles inside a liquid medium, (2010 – 2013), NCN, project manager
6. High-strength cast steel for cast parts of machinery and equipment, (2010-2013), NCN, executive

E) International and national awards for scientific activity

1. Diploma of the Institute of Cast Metals Engineers ICME in the United Kingdom for an article The effect of the carburiser quality on the cast iron recarburisation process, included in Foundry Trade Journal International, United Kingdom 2011

F) Oral presentations at national and international conferences

1. 44. International Conference 'Solidification and Crystallization of Metals' 2003, 22-24.09.2003, Sielcia k/ Kielc
2. 12th Int. Metallurgical & Materials Conference METAL 2003, Hradec nad Moravici, Czechy, 20-22.05.2003
3. 13th Int. Metallurgical & Materials Conference METAL 2004, Hradec nad Moravici, Czechy, 20-22.05.2003
4. 45. International Conference 'Solidification and Crystallization of Metals'- 2004", Sielcia k Kielc,
5. 14th Int. Metallurgical & Materials Conference METAL 2005, Hradec nad Moravici, Czechy, 22-24.05.2005
6. 46. International Conference 'Solidification and Crystallization of Metals'– 2005, Sielcia k Kielc,
7. 15th Int. Metallurgical & Materials Conference METAL 2006, Hradec nad Moravici, Czechy, 23-25.05.2003
8. 11th International Scientific Conference on the Contemporary Achievements in Mechanics, Manufacturing and Materials Science CAM3 S 2005

9. IX International Conference on Pneumatic Conveying 2005, Sielpia k Kielc
- 10.IV Scientific and Technical Conference 'Modern Technologies and Materials for Industry' 10-11.05. 2007, Toruń, „Modern methods of cast iron inoculation” - unpublished
- 11.VI Scientific and Technical Conference 'Modern Technologies and Materials for Industry', 21-22.05. 2009, Toruń, „Cast iron desulfurization with use of the calcium components” - unpublished
- 12.VII Scientific and Technical Conference 'Modern Technologies and Materials for Foundry Industry' Gliwice May, 6th 2010
- 13.20th Anniversary Int. Conference on Metallurgy and Materials METAL 2011, 18-20.05.2011, Brno, Czech Republic
- 14.Scientific and Technical Seminar during International Technology Fair SyMas, 5-6.10.2012, Krakow, „Development of the pneumatic conveying technologies of Polko system” - unpublished
- 15.ICMSE 2012: International Conference on Materials Science and Engineering, Paris, France, 22-23.08.2012, Session Chair
- 16.International Conference on Applied Physics and Materials Science APMS 2012, 05 – 06.12.2012, Dalian, China
- 17.3rd International Conference on Manufacturing Science and Technology (ICMST 2012), New Delhi, India 18-19.08.2012, (accepted for oral presentation but time collision with conference in Paris)
- 18.Int. Conference on Frontiers of Mechanical Engineering, Materials and Energy (ICFMEME 2012), 20-21.12.2012, Beijing, China, (accepted for oral presentation but impossible to attend the conference)
- 19.21th International Conference on Metallurgy and Materials METAL 2012, 23-25.05.2012, Brno, Czech Republic
- 20.Eco-Internship Project Launch Conference, University of Silesia 20.11.2012, „Role of the R&D sector cooperation with industry” – delegate of FSNT NOT Gliwice
- 21.First International Conference on Solid State and Materials (ICSSM 2013), 30-31.01.2013, Los Angeles, USA, (accepted for oral presentation but finally did not attend the conference)
- 22.XIX. International Conference of Slovak, Czech and Polish Casters SPOLUPRÁCA 2013, Tatranská Lomnica, 17. 4.-19. 4. 2013
- 23.22nd International Conference on Metallurgy and Materials Metal 2013, Brno, Czech Republic, 15-17.05.2013
- 24.ModTech 2013, Modern Technologies in Industrial Engineering, Sinaia, Romania, July 11-14, 2013.
- 25.VI International Scientific Conference 'Trends and development in mechanization of foundry processes' „The Lean Manufacturing Tools in Polish Foundries”, Inwałd, Poland, 2013.
- 26.XX Międzynarodowa Konferencja Naukowa Odlewników Polskich, Czeskich i Słowackich, 24-26.04.2014, Izbicko k/Opola
- 27.23rd International Conference on Metallurgy and Materials METAL 2014 May 21st - 23rd 2014, Brno, Czech Republic – 2 referaty
- 28.International Conference on Atmospheric Dust 2014, Italy, Castellaneta Marina (TA)

01.06 - 06.06.2014r. – 2 referaty
29.11th International Symposium of Croatian Metallurgical Society, Chorwacja, Sibenik,
Solaris Beach Resort, 22-26.06.2014.

Articles published in the conference proceedings of these conferences

1. **Jeziński J.**, Jura S., Janerka K., Use of the fine ferroalloys fractions by the way of its pneumatic injection into liquid cast iron, Conference Proceedings of the International Conference 'Cooperation 2003' Krakow 28.04.2003 [70%]
2. **Jeziński J.**, Pneumatic injection of ferroalloys into liquid cast iron. 12th Metallurgical & Material Conference, 20-22.05.2003r. Hradec nad Moravici. Czech Republic.
3. Janerka K., Gawroński J., **Jeziński J.**, Parameters of the process in pneumatic liquid metal carburizing. 12th Metallurgical & Material Conference, 20-22.05.2003r. Hradec nad Moravici. Czech Republic. [10%]
4. **Jeziński J.**, Possibilities of using the fine ferroalloys fractions in its pneumatic introduction into liquid cast iron, Proceedings of the 12th International Scientific Conference AMME 2003, Gliwice – Zakopane 2003.
5. **Jeziński J.**, Pneumatic powder injection into liquid alloys as a tool of quality improving, 13th Metallurgical & Material Conference, 20-22.05.2004r. Hradec nad Moravici. Czechy Republic.
6. **Jeziński J.**, Diphas stream forces in pneumatic powder injection into liquid metal. Contemporary achievements in mechanics, manufacturing and materials science. CAM3S'2005. Program and abstracts of the eleventh international scientific conference, Gliwice - Zakopane, 6th-9th December 2005. Ed. L.A. Dobrzański. Gliwice: International Organizing Committee of the Scientific Conferences AMME World Press, 2005, s. 37
7. **Jeziński J.**, Szajnar J., Influence of the diphas jet dynamics on the efficiency of the powder injection process' IX International Conference on Pneumatic Conveying 2005, Sielcia k Kielc 27-29.09.2005, Publishing House of the Silesian University of Technology, Gliwice 2005, s. 136-142. [70%]
8. **Jeziński J.**, Szajnar J., Diphas stream forces in pneumatic powder injection into liquid metal, Contemporary achievements in mechanics, manufacturing and materials science. CAM3S'2005. Proceedings of the eleventh international scientific conference, Gliwice - Zakopane, 6th-9th December 2005. Ed. L.A. Dobrzański. Gliwice: International Organizing Committee of the Scientific Conferences AMME World Press, 2005. [70%]
9. **Jeziński J.**, Analysis of diphas stream forces in pneumatic powder injection, 14th Metallurgical & Material Conference, 22-24.05.2005r. Hradec nad Moravici. Czechy.
10. **Jeziński J.**, Description of the powder injection process by the diphas jet dynamic forces. Materials, Mechanical and Manufacturing Engineering. MMME'2005. Proceedings of the third scientific conference on the occasion of the 60th Anniversary of the Faculty of Mechanical Engineering of the Silesian University of Technology, Gliwice - Wisła, Poland, 16-19 May 2005. Ed. by L. A. Dobrzański. Gliwice: Organizing Committee of the International Scientific Conferences Institute of Engineering Materials and Biomaterials of the Silesian University of Technology, 2005, s. 537-540.

11. **Jeziński J.**, Description of powder injection process by diphasic stream pressure force. Worldwide Congress on Materials and Manufacturing Engineering and Technology. COMMENT'2005, Gliwice-Wiśła, 16th-19th May 2005. Congress proceedings - short papers. Ed. L.A. Dobrzański. pp. 1-4.
12. **Jeziński J.**, Szajnar J., New injection lance construction for powder injection into liquid alloys, 15th Metallurgical & Material Conference, 23-25.05.2006r. Hradec nad Moravicí. Czech Republic. [70%]
13. **Jeziński J.**, Selected tools of the quality management and foundry production optimization, Modern materials and technologies for foundry industry, VII Scientific and Technical Conference, 06.05.2010, Toruń, Sinograf, 2010, pp. 13-14
14. Jeziński J., Buliński Z., Janerka K.: computer modeling and experimental validation of the pneumatic powder injection into liquid alloys, ModTech International Conference, Modern Technologies in Industrial Engineering, June 27-29. 2013, Sinaia, Romania
15. Jeziński J., Janerka K., Stawarz M.: Verification of the Theoretical Considerations and Numerical Modeling of the Powder Injection Process in Real Conditions of Pneumatic Injection of Ferroalloys into Liquid Cast Iron, Metal 2014; International Conference on Metallurgy and Materials, Brno, Czech Republic, 21-23.05.2014
16. Stawarz M., Janerka K., Jeziński J., Szajnar J.: Thermal Effect of Phase Transformations in High Silicon Cast Iron, Metal 2014; International Conference on Metallurgy and Materials, Brno, Czech Republic, 21-23.05.2014
17. **Jeziński J.**, Janerka K., Furnace Dust Utilization with use of Pneumatic Injection method, International Conference on Atmospheric Dust 2014, Italy, Castellaneta Marina (TA), 01.06 - 06.06.2014r.
18. Dańko R., **Jeziński J.**, Holtzer M., Physico-chemical characteristics of dust generated during mechanical reclamation of used sands moulds, International Conference on Atmospheric Dust 2014, Italy, Castellaneta Marina (TA), 01.06 - 06.06.2014r.
19. **Jeziński J.**, Janerka K., Parameters of gas-solids jet in pneumatic powders injection into liquid alloys with a non-submerged lance, 11th International Symposium of Croatian Metallurgical Society, Chorwacja, Sibenik, Solaris Beach Resort, 22-26.06.2014.

Teaching achievements and information about international cooperation

A) Participation in European Programs and other national and international programs

1. An interactive web-based platform of the quarterly Archives of Foundry Engineering the Human Capital Operational Program co-financed by the European Social Fund 2011 – 2013, Deputy Manager
2. UDA-POKL.04.01.01-00-204/09-00. Human Capital Operational Program co-financed by the ESF INTEREDU Interactive engineering education, 2010-2012, coordinator in Department of Foundry Engineering
3. Expert in project entitled: 'Foresight of the priority, innovative technologies for the automation, robotics and measuring technique' Co-financed by European Union in Operational Program Innovative Economy, 2009.

4. Expert in external experts team in project entitled: 'National Foresight Poland 2020' during the years 2006-2008
5. Coordinator of the series of visits of professor Andrzej Pawlak from Lawrence Technological University, Southfield, USA in project 'Bridge of technology transfer USA-Poland' cooperation in roadmaps of knowledge for Silesian University of Technology, 09.2009 – 02.2010
6. Team member of the project entitled: 'Making the studies more attractive for the students of the specialty Automation and Robotics on Faculty of Mechanical Engineering of Silesian University of Technology' co-financed by Human Capital Operational Program by the European Social Fund 2010-2013.
7. Apprenticeship in Eco-Internship Project – Apprenticeship for the researcher in industry in Silesia Region, 10.2013-04.2014
8. Participant of the Project „Scientists closer to the industry' co-financed by Human Capital Operational Program by the European Social Fund and coordinated by PIAP in Warsaw.

B) Active participation in international and national scientific conferences (excluding mentioned above)

1. 47. International Conference 'Solidification and Crystallization of Metals' - 2006", 23-25.09.2006, Sielcia k/Kielc
2. Achievements in Mechanical and Materials Engineering AMME'2006, Gliwice-Wisła, 4-8.06.2006
3. Achievements in Mechanical and Materials Engineering AMME'2009, Gliwice-Gdańsk 14-17.06.2009,
4. 50. International Conference 'Solidification and Crystallization of Metals' 2009, Cedzyna k Kielc, 28-30.09.2009
5. 51. International Conference 'Solidification and Crystallization of Metals', 2010, Cedzyna k Kielc
6. FOSECO Technical Conference 'Mass Heavy Cast Iron Castings Production' 17-18.2011, Katowice
7. 52. International Conference 'Solidification and Crystallization of Metals', 2011, Cedzyna k Kielc, 27-29.09.2011
8. Seminar and Workshop '2D and 3D motion analysis with use of Tema software', Krakow 22-23.03.2011
9. National Foundrymen Day Technical Conference 2011, Krakow, 08-09.12.2011
10. International Conference 'Solidification and Crystallization of Metals', 2012, Cedzyna k Kielc, 24-26.09.2012
11. Technical Conference 'Round Table' during National Foundrymen Day Technical Conference 2012, Krakow 14-15.12.2012

C) Participation in the organizing committee of international and national scientific conferences

| Conference Name | Position |
|--|--|
| IX International Conference on Pneumatic Conveying 2005, Sielpia k Kielc 27-29.09.2005 | Member of the Organizing Committee |
| VI Scientific and Technical Conference 'Modern Technologies and Materials for Industry', 21-22.05. 2009, Toruń | Member of the Organizing Committee |
| 50 International Conference 'Solidification and Crystallization of Metals', 2009, Cedzyna k Kielc, 28-30.09.2009 | Member of the Organizing Committee |
| 51 International Conference 'Solidification and Crystallization of Metals', 2010, Cedzyna k Kielc, 27-29.09.2010 | Member of the Organizing Committee, Poster Session Chair |
| International Conference 'Solidification and Crystallization of Metals', 2011, Cedzyna k Kielc, 27-29.09.2011 | Member of the Organizing Committee, Poster Session Chair |
| 53 International Conference 'Solidification and Crystallization of Metals', 2012, Cedzyna k Kielc, 24-26.09.2012 | Member of the Organizing Committee, Poster Session Chair |
| 54 International Conference 'Solidification and Crystallization of Metals' 2013, Cedzyna k Kielc, 23-25.09.2013 | Member of the Organizing Committee |
| I Students Circle 'Spheroid' Scientific Seminar, Ustroń, 23-24 kwietnia 2005 | Member of the Organizing Committee |
| Foundry Automation Day, Students Circle 'Spheroid' Scientific Seminar "CO-KÓŁ'06", Gliwice-Mysłenice-Wisła, 2-5 June 2006 | Member of the Organizing Committee |
| CO-KÓŁ'07". III Students Circle 'Spheroid' Scientific Seminar, COMMENT 2007, Ustroń Jaszowiec, 25-27 May 2007 | Member of the Organizing Committee |
| "CO-KÓŁ'09". V Students Circle 'Spheroid' Scientific Seminar. COMMENT 2009, Bystra k. Bielska Białej, 29-31 May 2009 | Member of the Organizing Committee |
| VII Scientific and Technical Conference 'Modern Technologies and Materials for Foundry Industry' Gliwice May, 6 th 2010 | Organizing Committee Chairman |
| VI Students Circle 'Spheroid' Scientific Seminar, Ustroń-Jaszowiec, 28-30 May 2010. | Member of the Organizing Committee |
| VII Students Circle 'Spheroid' Scientific Seminar '2011, Ustroń-Jaszowiec, 2-4 June 2011 | Member of the Organizing Committee |
| VIII Students Circle 'Spheroid' Scientific Seminar '2012, Ustroń-Jaszowiec, 31 May - 2 June 2012 | Member of the Organizing Committee |
| ICMSE 2012: International Conference on Materials Science and Engineering, Paris, France 22-23.08.2012 | Plenary Session Chair |
| IX Students Circle 'Spheroid' Scientific Seminar '2013, Ustroń-Jaszowiec, 20-22 May 2013 | Member of the Organizing Committee |
| DUST 2014 International Conference on Atmospheric Dust, Castellaneta Marina, Italy, 01-06.06.2014 | Scientific Committee Member, Session HE6 Chair |

D) Received awards other than those listed earlier

1. Bronze Medal for Long Service, President of Poland, 2008
2. Medal of Dean of the Faculty of Mechanical Engineering of the Silesian University of Technology, on the 60th anniversary of the Faculty of Mechanical Engineering of the Silesian University of Technology, Gliwice 2005

3. Award of the Rector of the Silesian University of Technology of Team Award of the First Degree for the organizational achievements, Gliwice 2007.
4. Award of the Rector of the Silesian University of Technology Team Award of the First Degree for the didactic achievements, Gliwice 2010.
5. Award of the Rector of the Silesian University of Technology of Team Award of the First Degree for the organizational achievements, Gliwice 2011.
6. Award of the Rector of the Silesian University of Technology Team Award of the First Degree for the didactic achievements, Gliwice 2012.
7. Golden Badge of Honor The Polish Foundrymen's Association, STOP Krakow, 2011
8. Award of the Rector of the Silesian University of Technology of Team Award of the First Degree for the organizational achievements, Gliwice 2013.

E) Managing of the projects realized in cooperation with other scientists from Polish and International Universities and with the entrepreneurs, and participation in such projects

1. NB-36/RMT3/2001 „Estimation of the parameters of the feeder and optimum process parameters for the pneumatic conveying of dusts from electric arc furnace” Work made for ENPOL Gliwice and ELSTAL Łabędy, 2001, executive
2. NB/186/RMT-1/2006 „Efficiency of the cast iron inoculation with the use of selected inoculant” Sinograf S.A, Toruń-Gliwice, 2006, executive
3. NB-80/RMT-3/2002 „Estimation of the inoculation ability of the new inoculant FeSiCaAlBaSr developed in Huta Łaziska S.A.”, executive, project in cooperation with AGH University of Technology in Krakow, 2002
4. NB-302/RMT/2013: „Experiments in the range of reconstruction of the technical documentation and prototypes manufacturing of the technological tools for the latex balloons production for medicine industry” 12.2013-01.2014, executive, coordinator in Department of Foundry Engineering

Other fields of cooperation with industrial partners

1. Workshop trainer for the industrial plants engineering crew:
 - Bombardier Transportation Polska Sp. z o.o.– 24 hours’ of workshops and courses/lectures „*Modern Foundry Technologies*” for engineers 03-05.2007
 - ISUZU Motors Poland Sp. z o.o. – 6 hours’ workshop „Cast iron and aluminum alloys castings defects and their prevention”, May 2011
2. Several years of cooperation with Sinograf S.A. in Toruń (od 2005) as a technical documents, procedures and articles translator English-Polish and Polish-English, examinations of their products: ferroalloys, carburizers, workshops for their staff and for their clients (3 workshops)
3. Consultancy with potential partners as an Silesian University of Technology Expert

jointly with Regional Innovation Centre and Technology Transfer S.A. in Katowice and Centre of Innovation and Technology Transfer of Silesian University of Technology in Gliwice.

4. Handbook elaboration „Using of the FeTi and FeCa (FeCaSi) as a cored wire in metallurgy and foundry industry” for Sinograf S.A. – 2008.
5. Partnership with Kooperacja POLKO Mikołów in the development of the technology of the pneumatic powder injection into cupolas in Foundry Livar conditions in Slovenia.
6. Parameters estimations for the project „Project and application of the installation for the pneumatic injection of grainy sulfur reagent into liquid copper in Department of Continuous Copper Casting in Huta Miedzi Legnica” 09.2013-02.2014

F) Participation in committees and editorial boards of scientific journals

1. *Archives of Foundry Engineering* – research journal of Commission of Foundry PAN; Associate Editor responsible for cooperation with international partners and authors; B list and 9 points acc. MNiSzW
2. *World Academy of Science and Engineering* – Member of the Scientific Committee and Editorial Review Board; indexed in ISI Web of Science
3. *International Journal of Nonferrous Metallurgy* – Member of Editorial Board; published by SCIRP (Science Research Publishing) publisher over 200 journals in Open Access
4. *International Journal of Science and Engineering Investigations* – Member of Academic Board, indexed by Index Copernicus and Scirus
5. *Central European Journal of Engineering* – Subject Editor: Metallurgy and Material Science and Engineering, published by deGruyter, indexed by Scopus
6. *Materials Science and Applications* – Member of Review Committee, published by SCIRP (Science Research Publishing)
7. *American Journal of Materials Engineering and Technology* – Member of Editorial Board; published by Science and Education Publishing (SciEP) publisher over 80 journals Open Access

G) Membership in international and national organizations and scientific societies

| Organization or Association | Membership level | Since |
|--|--|--------------|
| Commission of Foundry Engineering of Polish Academy of Sciences, Katowice Branch | Member | 2004 |
| Institute of Cast Metals Engineers (United Kingdom) | Professional Member (the only one in Poland) | 2009 |
| FSNT NOT City Council in Gliwice | V-ce Director | 2004 |
| | Delegate on Silesian Branch Election Meeting | 2008, 2012 |
| Polish Association of Composite Materials | Member | 2001 |

| | | |
|--|---|--------------------|
| Polish Foundrymen Association the STOP | Member | 1998 |
| | Head of the Circle in Department of Foundry Engineering | 1999 |
| | Gliwice Branch Secretary | since 2000 to 2003 |
| | Head of the Gliwice Branch | 2003 |
| | Member of Main Review Commission in General Management | 2011 |
| | Delegate for XXXI General Meeting | 8-9.12.2011 |
| Croatian Metallurgical Society | Member | 24.06.2014 |

H) Didactic achievements and the popularization of science

- co-authorship of the chapter in collective work edited by M. Cholewa, „*Selected Foundry Processes. Laboratory*”, no. 2425, Silesian University of Technology Publisher, Gliwice 2008,
Janerka K., **Jeziński J.**, „*Bulk materials fluidization process*”, pp. 229-244, [50%]
- finalist of the 1st Polish edition of FameLab® Talking Science contest co-organized by Science Center Kopernik and British Council, under the patronage of Minister of Science and Higher Education, 2012
- author and co-author of 6 technical articles published in technical journals for engineering branches (metallurgy, foundry industry, materials transportation)
- idea creator, application writer and then deputy manager of the project Interactive web platform of the Archives of Foundry Engineering journal, dedicated to promoting of the foundry science and technology among the students and engineers.
- didactic package creator (lectures .ppt presentation, conspectus, laboratory instructions etc.) and main lecturer of the following subjects:
 - *Foundry Machines and Automation of Foundry Processes* (MiBM),
 - *Manufacturing Technologies – Foundry Engineering, Faculty of Engineering and Environment*
 - *Machines and Foundry Mechanization*, (ZiIP)
 - *Foundry Machines and Foundry Mechanization*, (AiR)
 - *Automation and Sealing of Foundry Transport*, AiR
 - *Foundry Engineering*, (ZiIP), laboratory (ZiIP, MiBM, AiR)
 - *Automation and Robotics in Foundry Processes*, (AiR)
 - *Automation and Robotics in Welding and Foundry Processes*, (AiR)
 - *Automation and Robotics of the Metals and Alloys Melting*, (AiR)
 - *Quality Control, Quality Systems and Environmental Protection*, (MiBM)
 - *Quality Control in Foundry Industry*, (MiBM)
 - *English in Mechanical Engineering*, (MiBM)
 - *English in Materials Engineering*, (MiBM)
 - *English in Automation and Robotics*, (AiR)

- *English in Technics*, (ZiIP)
 - *Robotics in Automatic Foundry Lines*, (AiR)
 - *Development of Small Company and its Management*, (MiBM)
- invited lecturer during Sophia Science Festival „*Serious and funny things about castings*” – three days lectures in English, 10-14.05.2012.
 - prize winner in the contest of Polish Teachers’ Associations on the 100 years jubilee. The teachers diary entitled: *My teacher job yesterday, today and tomorrow*. Almost 500 diaries submitted and I was awarded by Silesian ZNP Branch Director, 10.2005
 - appointed teacher degree awarded by President of Zabrze, after the extraordinary apprenticeship period as a result an additional employment in Technical Secondary School, 09.2004
 - visits in secondary schools in the Silesia region as a promotion of the Faculty and the University in years 2005-2007 (almost 40 visits in total)
 - lecturer in international project Comenius – Partnership between the schools in Europe: “*European Technology and Vocation in Past and Present*” – two lectures for the teens group from Germany, Spain, United Kingdom and Poland.
 - expert of the Central Examination Commission for the exams test for the professional degree and qualification in project „*Evaluation of the professional qualifications exams*” co-finance by EU, 2013.
 - invited lecturer on the invitation of High School of Safety Engineering and Ecology in Sosnowiec, 6 hours (2h lectures and 4h laboratory)
 - Development of the materials for classes carried in accordance with the National Qualifications Framework 2011r.
 - Cooperation with Primary School in Kamieniec in the field of Didactic Innovation „*Do it yourself – children scientific laboratory*”, 01.2014

I) Patronage on students and doctors over the course of specialization

In the years 2002 - 2013 I was the promoter of 11 Master's theses, patron of 17 Master's theses, the promoter of 6 theses in engineering and patron of 8 and reviewer of 6 engineering projects. All works were carried out in the Faculty of Mechanical Engineering Department of Foundry Engineering, Silesian University of Technology.

I was a patron of student groups, day trips for Mechanical Engineering, Automatics and Robotics, and Management and Production Engineering students who were doing casting specialization to the industrial plants in order to familiarize them with the cycle of production and machinery. These were the following companies: Iron Teksid Poland in Skoczow, NTP Kędzierzyn Kozle, Elektrocarbon in Tarnowskie Gory, GZUT in Gliwice and cast steel foundry in Łabędy, General Motors Opel Gliwice, Śrem Cast Iron Foundry, Volksvagen Poznań.

Moreover I was organizer and supervisor of scientific-didactic students of Department of Foundry Engineering trip (13 students and 2 PhD students) to Germany on 11-17.06.2011 thanks to the money granted as a scholarship from DAAD in Bonn in Germany. The report after the trip was evaluated with very high rank by the foundation and was sent to Germany as a model report.

I was one of the creators of the Seminar of Students Scientific Circle 'Spheroid' (nine editions so far). In years 2011 and 2012 I was a main organizer of this event.

I am an co-author of 14 publications with participation of students, of whom I have been taking care on realizing MEng and MSc theses.

1. Garnek A., **Jeziernski J.**: The ultrasonic testing of castings, I Seminar of Students Scientific Circle 'Spheroid', Ustroń, 23-24 April, 2005, pp. 107-116.
2. Pleskacz P., **Jeziernski J.**: The use of the various gases in foundry industry, I Seminar of Students Scientific Circle 'Spheroid', Ustroń, 23-24 April, 2005, pp. 117-128.
3. Twardzik W., Ślężona E., **Jeziernski J.**, Szajnar J.: Pneumatic injection of the refining agents and inoculants into the aluminium alloys, Seminar of Students Scientific Circle 'Spheroid' CO-KÓŁ'06", Gliwice-Myślenice-Wisła, 2-5 June, 2006, pp. 83-88.
4. Zagórny A., **Jeziernski J.**: Influence of the lance construction on the pneumatic parameters of the diphasic gas-solids jet flow, Seminar of Students Scientific Circle 'Spheroid' "CO-KÓŁ'06", Gliwice-Myślenice-Wisła, 2-5 June, 2006, pp. 95-100.
5. Niemczyk M., **Jeziernski J.**: CFD software as a tool for the optimization of the pneumatic powders injection into liquid alloys, III Seminar of Students Scientific Circle 'Spheroid' COMMENT 2007, Ustroń Jaszowiec, 25-27 May 2007, pp. 63-68.
6. Sebzda W., **Jeziernski J.**: Waste plastics pneumatic injection into blast furnace, III Seminar of Students Scientific Circle 'Spheroid' COMMENT 2007, Ustroń-Jaszowiec, 25-27 May 2007, pp. 85-92.
7. Ziemińska J., **Jeziernski J.**: 5s system as a simple tool of the foundry plant functioning improvement, V Seminar of Students Scientific Circle 'Spheroid' COMMENT 2009, Bystra k. Bielska Białej, 29-31 May 2009, pp. 105-110.
8. Sitarski Ł., **Jeziernski J.**: Analysis of the production management systems in the selected Polish foundries, VI Seminar of Students Scientific Circle 'Spheroid', Ustroń-Jaszowiec, 28-30 May 2010. ed. Jan Szajnar, Andrzej Studnicki, Jacek Suchoń. Gliwice: Foundry Commission PAN. Katowice Branch, 2010, pp. 191-198.
9. Sozański M., Szajnar J., **Jeziernski J.**: Examinations of the pneumatic conveying on the new laboratory stand in the Department of Foundry Engineering, VI Seminar of Students Scientific Circle 'Spheroid', Ustroń-Jaszowiec, 28-30 May 2010. ed. Jan Szajnar, Andrzej Studnicki, Jacek Suchoń. Gliwice: Foundry Commission PAN. Katowice Branch, 2010 pp. 199-204.
10. Kozakiewicz Ł., **Jeziernski J.**: Modern manufacturing technologies assisting the casting production, VI Seminar of Students Scientific Circle 'Spheroid', Ustroń-Jaszowiec, 28-30

May 2010. ed. Jan Szajnar, Andrzej Studnicki, Jacek Suchoń. Gliwice: Foundry Commission PAN. Katowice Branch, 2010 pp. 53-58.

11. Sporek R., **Jezierski J.**: Preliminary analysis of the particles motion on the lance outlet with the use of high speed camera, VII Seminar of Students Scientific Circle 'Spheroid' 2011, Ustroń-Jaszowiec, 2-4 June 2011, pp. 159-164.
12. Boroń K., **Jezierski J.**: Analysis of the diphas gas-powder jet injection into model liquid wuth use of the high speed camera, IX Seminar of Students Scientific Circle 'Spheroid' '2013, Ustroń-Jaszowiec, 20-22 May 2013, Students Research Papers „Sferoid”, Issue no 14, pp. 23-28.
13. Gągol M., **Jezierski J.**: Examinations of the solids penetration into liquid with the use of high speed camera, IX IX Seminar of Students Scientific Circle 'Spheroid' '2013, Ustroń-Jaszowiec, 20-22.05 2013, Students Research Papers „Sferoid”, Issue no 14, pp. 23-28.
14. Szymaszek A., **Jezierski J.**: Lean Manufacturing philosophy and tools in Polish foundries – the analysis on the base of industrial survey, IX Seminar of Students Scientific Circle 'Spheroid' Ustroń-Jaszowiec, 20-22.05.2013, Students Research Papers „Sferoid”, Issue no 15, pp. 117-122.
15. Noworolnik Ł., Jezierski J.: Transport pneumatyczny materiałów sypkich e rurociągach o znacznej długości przewodów, X Seminarium Studenckiego Koła Naukowego Odlewników SFEROID '2013, Ustroń-Jaszowiec, 22-24 maja 2014, Zeszyty Studenckich Prac Naukowych „Sferoid”, zeszyt nr 16, s. 155-162
16. Radecki D., Jezierski J.: Zużycie elementów instalacji podczas transportu biomasy, X Seminarium Studenckiego Koła Naukowego Odlewników SFEROID '2013, Ustroń-Jaszowiec, 22-24 maja 2014, Zeszyty Studenckich Prac Naukowych „Sferoid”, zeszyt nr 16, s. 187-192

J) Internships in foreign and domestic research centers and universities

| Country, exact place, time period and activity |
|---|
| United Kingdom , Livingston, research and engineering internship in the Metallurgy Department in Wyman Gordon Ltd. (part of the PCC Precision Castparts Corporation, official position Senior Metallurgist), 15 months, 9.07.2007-30.09.2008. I was awarded among the others: 1. „Titanium Metallurgy” Course Certificate, 22.04.2008 NAMTEC National Metals Technology Center, 2. Certificate of Competency in Titanium, Nickel and their Alloys Metallography issued by PCC Company, 26.10.2007. 3. Several certificates in "Process Control", „TOC Theory of Constraints”, „Financial Management” and „The Lean Process” – all after courses provided by PCC University |
| Germany , Freiberg, visit in Technical University in Freiberg, 3 days, July 2010, the negotiation about bilateral cooperation issue and prospective joint researches |
| Germany , visits in 2 Technical Universities (TU Freiberg, TU Clausthal) and visits in 4 modern German foundry plants (Sächsisches Metallwerk Freiberg GmbH, Druckguss Heidenau GmbH, Georg Fischer GmbH and Neue Halberg Guss GmbH), 7 days, June 2011 |
| Czech Republic , Ostrava, VŠB-Technical University of Ostrava, visits regarding to our Universities cooperation, joint grant applications, students exchange etc. 4 days in 2010 |
| USA , University of Illinois, Urbana-Champaign, 17 days, 2011; lectures, laboratories and consultancy with the world class specialist in the field of virtual reality, 3D images etc. and their use in didactic and research activity, consultancy with the world class specialists in foundry technology and continuous casting |

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| Germany , Dusseldorf, International Trade Fair for Foundry, the world biggest foundry fair, discussion panels and mini-seminars of producer, clients and scientists, promotion of the project „Interactive web platform of the Archives of Foundry Engineering” on the meetings with the delegates from other international universities, 4 days, |
| Bulgaria , Sofia, invitation of Polish Institute in Sofia and invited lectures (6 hours) during the Sofia Science Festival, 4 days, 2012 |
| Germany , Freiberg, visit in TU Freiberg, discussion about further cooperation between Department of Foundry Engineering and Giesserei Institute, I was an official Department delegate in University delegation, 28-29.11.2012 |
| Slovakia , Tatrzanska Łomnica, 3 days visit including scientific conference, meetings in the subject of the international development of the Archives of Foundry Engineering journal, 17-19.04.2013 |
| Slovenia , Ivančna Gorica, Crnoljce, visits in two Slovenian foundries to start a project of pneumatic conveying for wastes utilization, 3 days, 24-27.07.2013 |
| Italy , Turyn, COMAU (Fiat Group), industrial robots workshop and manufacturing plant visits, 17-19.12.2013 |
| Mexico , Tecnológico de Monterrey, Toluca Campus, Invited Professor, Foundry Engineering lectures, Industrial workshops, 7 days, 24.10.-01.11.2014 |

K) Expertise or other works on customer demand

1. Janerka K., 2006, **Jeziński J.**, Evaluation of the effectiveness of recarburization with selected carburizers, Sinograf S.A., Toruń
2. Janerka K., 2012, **Jeziński J.**, The examination of ductile cast iron sample microstructure, GZUT S.A., (for Lloyd's), Gliwice
3. Janerka K., **Jeziński J.**, The examination of grey cast iron samples microstructure, GZUT S.A., (dla Lloyd's), 2012
4. Janerka K., **Jeziński J.**, Analysis of the supplied carburizing materials quality, ParioFarma Ltd. of the United Kingdom, United Kingdom, 2011.
5. 2 expert's opinions regarding Technological Loan on the FSNT NOT request, 2011.
6. 10 expert's opinions regarding Technological Innovations on the FSNT NOT request 2012-2013
7. Expert's opinion regarding the 4.4. POIG Innovations in MŚP
8. Huta Zabrze S.A. – opinion about the documents of „Method Statement” type for the court process, 2012
9. Expertise/opinion for the Customs Office in Toruń regarding the material qualification (ferroalloys) supplied by one of the importers, 2010.
10. Expertise and consultancy for the Wyman Gordon Ltd. engineers regarding the potentials Polish raw materials suppliers and cooperation with WSK PZL Rzeszów, 2008-2010

L) Participation in experts teams and competition juries

1. Member of the Polish-Norwegian Fund for the Researches Experts Team
2. Member of the Experts Team in Operational Program Innovative Economy (POIG) in Metallurgy and Materials Engineering fields
3. Expert of the National Centre for the Research and Development (NCBiR)
4. Jury Member in the Best Oral Presentation Competition during Students Scientific Circle 'Spheroid' Seminars since 2005
5. Member of the Commission for the recruitment process for the positions in Innovation Centre of NOT in Gliwice

6. Registered expert of European Commission Experts' Database – for the grant applications review in 7PR and Horizon 2020
7. Expert in Project „Innovative Design” co-financed in Operational Program Human Capital, 2010-2012.
8. Registered Expert in Expert's Database of the Silesian University of Technology
9. Registered Expert Expert's Database of the National Program Foresight – results application
10. Jury Member in the University Final of the VII European Best Engineering Competition Poland, 2013

M) Reviewing of national and international projects

1. Operational Program Innovative Economy in the fields of Metallurgy and Materials Engineering; I have reviewed so far:
 - 2 finished projects - reports
 - 2 grant applications on the Research Projects
2. The National Centre for Research and Developments (NCBiR); I have reviewed so far:
 - 16 grant applications for Research Application Projects
 - 1 closing report after Research and Development Project
 - 2 grant applications on the GEKON Projects – Generator of the Ecological Ideas

N) Reviewing of publications in national and international journals

| Journal Title | Since |
|---|-------|
| Archives of Materials Science and Engineering | 2006 |
| Archives of Computational Materials Science and Surface Engineering | 2007 |
| Journal of Achievements in Materials and Manufacturing Engineering | 2008 |
| Central European Journal of Engineering | 2010 |
| World Academy of Science and Engineering | 2011 |
| Materials Science and Applications | 2012 |
| International Journal of Nonferrous Metallurgy | 2012 |
| International Journal of Science and Engineering Investigations | 2012 |
| International Journal of Applied Science and Technology | 2012 |
| American Journal of Materials Engineering and Technology | 2012 |
| International Journal of Productivity and Quality Management | 2013 |
| Nanoscience and Nanotechnology Research | 2013 |
| Materials Science and Metallurgy Engineering | 2013 |
| International Journal of Environmental Science and Technology | 2014 |
| Metalurgija | 2014 |
| Archives of Foundry Engineering | 2014 |
| Solid State Phenomena | 2014 |

O) Other achievements, not listed earlier

I have developed the following didactic laboratory stands:

- installation for the analysis of the diphas gas-powder jet dynamic force

- setup for the diphasic jet parameters analysis with the use of high speed camera
- fully functional pneumatic conveying installation
- stand for the bulk materials fluidization process analysis
- stand for the air jet parameters measuring with use of the anemometer.

Organizational activities for the Department of Foundry Engineering and Faculty of Mechanical Engineering of the Silesian University of Technology after obtaining the PhD

- Member of Recruitment Commission of Faculty between 2000-2002
- Faculty Commission for recruitment within 'combined examination for the secondary-school certificate' 2002-2006
- Faculty Committee of Teaching Quality on the Faculty of Mechanical Engineering since 2007 (Internal Auditor Certificate ISO 9001:2000 issued by BSI Poland on 14.06.2006)
- Chief of the Pneumatic Conveying Laboratory in Department of Foundry Engineering, since 2008
- Vice-Chair of Faculty Stipends Commission for PhD Students, since 2006
- Vice-Chair of Faculty Stipends and Hostels Commission for Students, since 2006
- Member of the Faculty Commission for the Subject Description Forms Elaboration (syllabus), 2000- 2010
- Coordinator of preparation of didactic proceedings according to the National Qualifications Framework in Department of Foundry Engineering for Automation and Robotics, 2011
- Commission for Engineering Examination for Automation and Robotics and Mechatronics specialties.