

PERSONAL INFORMATION

Gabriel Valentin Gheorghe



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Sex M | Date of birth 17/01/1990 | Nationality Romana

WORK EXPERIENCE

Replace with dates (from - to)

Scientific researcher - Team Leader - Technologies and technical equipment for soil work, adapted to climate change

NATIONAL RESEARCH AND DEVELOPMENT INSTITUTE FOR MACHINERY AND INSTALLATIONS FOR AGRICULTURE AND FOOD INDUSTRY – www.inma.ro

- Making project proposals for the Ministry of Research and Innovation;
- Carrying out case studies;
- Theoretical and experimental research for writing national and international articles;
- Participation to international conferences and symposiums with articles and patents;
- Designing technologies, preparation of drawings and technical assistance to meet technical requirements and quality.

Business or sector: Machinery and installations for agriculture and food industry

EDUCATION AND TRAINING

01.10.2015-present

Ph.D. engineer

Polytechnic University of Bucharest, Faculty of Biotechnical Systems Engineering

- Name of PhD thesis: STUDIES AND RESEARCH ON THE WORKING PROCESS OF EQUIPMENT FOR CUTTING THE WEEDS FROM ROWS IN AGRICULTURAL CROPS

01.10.2013-01.10.2015

Master degree

Polytechnic University of Bucharest, Faculty of Biotechnical Systems Engineering
 Profile Mechanical Engineering, Specialization ENGINEERING AND DESIGN ASSISTED BY COMPUTER FOR MACHINES AND MECHANICAL STRUCTURES

- Subjects studied
- Computer Aided Design
 - Vibrations
 - Dynamics of mechanical equipment

01.10.2009-01.10.2013

Mechanical Engineer

Polytechnic University of Bucharest, Faculty of Biotechnical Systems Engineering

- Subjects studied
- fluid mechanics
 - mechanical vibrations
 - physical properties of agrifood materials
 - machinery and installations for dosing and packaging

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B1

- Communication skills
- Good communication skills, including listening and speaking through my experience at international conferences and symposiums
 - Setting goals and prioritizing
 - Developing interpersonal relationships, negotiation skills and teamwork

- Organisational / managerial skills
- leadership (currently responsible for a team of 7 people)

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Independent user	Proficient user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

ADDITIONAL INFORMATION

- Publications
 - Presentations
 - Projects
 - Conferences
 - Seminars
 - Honours and awards
 - Memberships
 - References
 - Citations
 - Courses
 - Certifications
- List of activities on the next page.

- **Courses and visits abroad**

1. Certificate Cranfield University, England, Course: Computational Fluid Dynamics in Gas turbines 2018
2. Certificate European Commission, Training on Inspection and Calibration of Pesticide Application Equipment in professional use, Braunschweig, Germany, 07-10 June 2016
3. Visit the infrastructure of Bologna University, 2018
4. Summer school Modelling sustainable farming systems under climate change, 23-27 July, 2018, Nuoro, Italy
5. Certificate of completion “Training course of SOLIDWORKS Essential”, 11.02.2019-15.02.2019, Bucharest, Romania
6. Certificate of completion granted by FiaTest “Auditors of the Quality Management System in an accredited laboratory / in the process of accreditation according to the standards SR EN ISO / IEC 17025/2018 and SR EN ISO 19011: 2018”, 18-21.06.2019.
7. Certificate of completion granted by European Summer School for course “Project Management: From Theory to Practice”, 15-26.07.2019.

- **List of papers published:**

1. **Gheorghe G.** -TechnoMarket,nr.2/2014, pag 6. Technical equipment specific to the technology of Amaranth culture mechanization
2. **Gheorghe G.**, David A., Kolozsvari C., Mateescu M.,-TechnoMarket, nr.4/2014, pag.10- Technical equipment for the harvesting of energy poplar
3. Manea D., Marin E., **Gheorghe G.**-TechnoMarket, nr.4/2014, pag.16- Technical equipment for application of phytosanitary treatments in fruit plantations
- 4.Davia A., Kolozsvari C., Mateescu M., **Gheorghe G.**-TechnoMarket, nr.4/2014, pag.8- Technical equipment for removing stones from agricultural land
5. Alexandru I., Bracacescu C. ,Constantin N., David A., **Gheorghe G.** -TechnoMarket, nr.1/2014, pag.30 – Technologies with minimal soil works promoted by INIMA Bucharest
6. David A. ,Voicu Gh., Persu C.,**Gheorghe G.** -INMATEH vol 43, nr.2/2014- Determination of forces resistant to deep soil lifts with active coulters
7. David A.,Voicu Gh., Matache M., **Gheorghe G.** -,,Journal of Engineering Studies and Research” -Balancing the deep loosening machine with active furrows
8. Marin E., Manea D., Mateescu M., **Gheorghe G.**, Cherciu D., Mihailovici C., Cheptea C., Istrate B.- TechnoMarket , nr.1/2015,pag.10- Meadow regeneration machines
9. Marin E., Manea D., Mateescu M., **Gheorghe G.**- TechnoMarket, nr.1/2015, pag.14- Field preparation and spring sowing in the field of onion seed culture

10. Kolozsvari C., Manea D., David A., **Gheorghe G.**, -ISB-INMATEH 2014, pag. 341 Maintaining energy poplar culture by using precision tapered spray equipment
11. Ciuperca R., Lazar G., Zaica A, Zaica Al., Ivancu B., Petcu A, **Gheorghe G.**, Popa L.- ISB-INMATEH 2014, pag. 673 Sistem ecologic de gestionare a deșeurilor vegetale și animale
12. Al. David, **G. Gheorghe**, E.Marin, D. Manea, V. Vlăduț, I. Dutu- TE-RE-RD-2015, Methods for applying the composite materials / nanotechnologies to active parts of technical equipments for soil processing
13. M. Mateescu M, A. Păun, E. Marin, **G. Gheorghe**-TE-RE-RD-2015, Innovative technology for establishment of onion culture in sustainable system
14. I.D. Vlăduț, E. Marin, S.St Biriș, B. Ivancu, D. Manea, Al. David, **G. Gheorghe**, N. Ungureanu, M. Duțu, S. Bungescu, D.I. Mircea-TE-RE-RD-2015, Conservative soil tillage technologies
15. D. Cujbescu, Gh. Voicu, Gh. Bolintineanu, V. Vlăduț, I. Găgeanu, **G. Gheorghe**, S. Ș Biriș, G.Paraschiv-TE-RE-RD-2015, Considerations on factors influencing seeding precision of seeders for weeding plants
16. **G. Gheorghe**, C. Persu, V. Vlăduț, E. Marin, S. Andrei, D. Manea, D. Cujbescu, M. Mateescu, TE-RE-RD-2016, The benefits of using films for soil mulching
17. C. Persu, M. Matache, D. Cujbescu, **G. Gheorghe**, C. Mircea, M. Ionescu, N. Ungureanu, I. Găgeanu, K.Ç.Selvi, S. Andrei, TE-RE-RD-2016, Applications of image processing algorithms in the agricultural sector
18. D.I. Vlăduț, L. David, E. Marin, S.Șt. Biriș, I. Voiculescu, E. Maican, N. Ungureanu, V. Vlăduț, O. Kabas, I.C. Duțu, K. Selvi, I. Kiss, **G. Gheorghe**, I. Găgeanu, S. Andrei, TE-RE-RD-2016, Aspects regarding the increase of durability for active working bodies of equipment for working the soil in a conservative system
19. E. Marin, M. Mateescu, D. Manea, **G. Gheorghe**, I. Caba, TE-RE-RD-2017, Considerations regarding the soil compactibility evaluation in orchards
20. M. Mateescu, **G. Gheorghe**, D. Manea, E. Marin, C. Persu, M. Bota., TE-RE-RD-2017, The CAE study of the air velocity over a greenhouse for the installation of a wind turbine
21. D. Cujbescu, M. Matache, Gh. Bolintineanu, V. Vlăduț, C. Persu, I. Găgeanu, **G. Gheorghe**, I. Caba, Gh. Voicu, C. Vlad, TE-RE-RD-2017, Considerations on the estimation of fuel consumption and production norms (working capacity) by power classes, depending on the agricultural work of sowing
22. **G. Gheorghe**, P. Cardei, L. Vlăduțoiu, M. Matache, I. Grigore, M. Bota, M. Marcu, TE-RE-RD-2017, CAD-CAE model for the structural analysis of scarifier SCAR-ART main load bearing structure
23. D. Manea, **G. Gheorghe**, E. Marin, M. Mateescu, TE-RE-RD-2017, Experimental researches on soil temperature optimization in roots area
24. Marin E., Cherci D., Păun A., Cheptea C., Manea D., Istrate B., **Gheorghe G.**, Mateescu M., David A., Neacșu F., ISB-INMATEH 2015, Parametric modeling of the impulse gearbox in oil from grasslands regeneration machine

25. Mateescu M., Marin E., Păun A., Manea D., **Gheorghe G.**, Neacșu F., ISB-INMATEH 2015, Innovative technology for works mechanization of modeling and direct seeding in field for onion crop innovative technology for works mechanization of modeling and direct seeding in field for onion crop
26. Ganea-Christu I, Brăcăcescu C., **Gheorghe G.**, Ganea-Christu I., Neacșu F., Marian M., Selvi K.C, ISB-INMATEH 2015, Considerations on the use of ecodesign elements in the construction of agricultural machinery
27. E Brăcăcescu C., Găgeanu I., Popa L., **Gheorghe G.**, Pruteanu A., Voicea I., Ganea-Christu I., Marian M, ISB-INMATEH 2015, Theoretical contributions to the study of the dynamics of electromagnetically driven vibrating separators used for the primary processing of cereals seeds
28. **Gheorghe G.**, Matache M., Manea D., Voicea I., Marin E., Vlăduț V., Voicu Gh., Brăcăcescu C., ISB-INMATEH 2015, Intelligent hoeing equipment based on the method of images recognition
29. **Gheorghe G.**, Mateescu M., Păun A., Marin E., Matache M., Brăcăcescu C., ISB-INMATEH 2015, New trends concerning the maintenance of crops through unconventional methods
30. Vlăduț V., Biriș S., Bungescu S., Marin E., Persu C., Grigore I., Ungureanu N., **Gheorghe G.**, Voicea I., Ilea R., Hărmănescu M., Cujbescu D., Bolintineanu Gh., Dumitru I., Caba I.L., ISB-INMATEH 2016, Researches on determining the wear of active parts of chisel type in heavy soils
31. **Gheorghe G.**, Persu C., Matache M., Mateescu, M., Cujbescu D., ISB-INMATEH 2016, Finite element method use in the calculation and optimization of the active parts of mulch films applying equipment
32. **Gheorghe G.**, Persu C., Matache M., Mateescu, M., Cujbescu D, ISB-INMATEH 2016, Innovative method of implementing the algorithms for processing images in precision agriculture
33. Găgeanu P., Marin. E., Găgeanu I., **Gheorghe G.**, ISB-INMATEH 2016, Experimental researches on planting energy willow using the eis technical equipment
34. Manea D., Dumitrașcu A., Marin E., Mateescu M., **Gheorghe G.**, Dumitru I, ISB-INMATEH 2016, Study on irrigation systems in areas threatened by desertification-review
35. Matache Mihai, Persu Catalin, Nitu Mihaela, **Gheorghe Gabriel**, *Engineering for rural development, Jelgava, 2017*, Vision system for spraying machine adaptive control
36. **Gheorghe Gabriel**, Catalin Persu, Marin Eugen, Manea Dragos, *Engineering for rural development, Jelgava, 2017*, Structural analysis of technical equipment for setting up row crops and applying degradable film
37. Marin Eugen, Matache Mihai, Nitu Mihaela, **Gheorghe Gabriel**, *Engineering for rural development, Jelgava, 2017*, Experimental researches regarding assessment of coverage degree obtained by orchard spraying machine
38. **Gabriel GHEORGHE**, Cătălin PERSU, Dan CUJBESCU, Marinela MATEESCU, *Influence of attack angle to draft force variation of a furrow opener at mulch foil planter*, Actual Tasks on Agricultural Engineering 2018, ISSN 1848-4425
39. **Gabriel GHEORGHE**¹, Cătălin PERSU, Marian MIHAI, Dan CUJBESCU, Sorin BIRIȘ, Edmond MAICAN, *Theoretical simulation for protective structure of operator cabin against falling object*, Actual Tasks on Agricultural Engineering 2018, ISSN 1848-4425

40. Dragoș MANEA, Costin MIRCEA, Eugen MARIN, Petru CÂRDEI, **Gabriel GHEORGHE**, Florin POP, The effect of roots area cooling on tomatoes yield in solar, Actual Tasks on Agricultural Engineering 2018, ISSN 1848-4425
41. **Gabriel Valentin Gheorghe**, Marinela Mateescu, Catalin Persu, Iuliana Gageanu, *Theoretical simulation of air circulation inside cyclone mounted at exhaust outlet of pneumatic seed drill to optimize it*, Engineering for rural development, Jelgava, 2018
42. **Gabriel Valentin Gheorghe**, Catalin Persu, Iuliana Gageanu, Dan Cujbescu, *Structural and modal analysis in solidworks of basic structure of equipment to prepare germinative bed in strips*, Engineering for rural development, Jelgava, 2018
43. **Gabriel GHEORGHE**, Cătălin PERSU, Iulia GAGEANU, Dan CUJBESCU, *Structural and modal analysis of the subsoiler equipment to prepare the germinative bed*, Actual Tasks on Agricultural Engineering 2019, ISSN 1848-4425
44. Dan CUJBESCU1, Cătălin PERSU, Iuliana GĂGEANU, Iulian VOICEA, **Gabriel GHEORGHE**, Nicoleta UNGUREANU, *Mechanizing the garlic bulbs detaching into cloves*, Actual Tasks on Agricultural Engineering 2019, ISSN 1848-4425
45. Iuliana Gageanu, Catalin Persu, Dan Cujbescu, **Gabriel Gheorghe**, Gheorghe Voicu, Influence of using additives on quality of pelletized fodder, Engineering for rural development, Jelgava, 2019

- **Scientific papers presented:**

1. International Exhibition of Inventions Brussels Innova 12-16.11.2014 - Poster presentation: *Technical equipment for planting willow energy*
2. International Exhibition of Inventions Brussels Innova 12-16.11.2014 - Poster presentation: *Sorting machines gravimetric apples*
3. Manea D., Paraschiv G., Voicu Gh., Eugen M., **Gheorghe G** - Poster presentation ICNAR 2014- „Grasslands management through overseeding to reduce the risk of degradation”
4. Presentation at the Innovation Forum „INNOVATIVE IRRIGATION TECHNOLOGY IN LEGUME OILS” 17 octombrie 2014
5. Paun A., Marin E., Manea D. **Gheorghe G.**- Scientific papers presented at SYMPOSIUM, Braila, 12.06.2015, pag. 154- Renewable Energy - Green Energy. Awareness of environmental management and protection

- **Patent applications:**

1. Modular equipment for the energy plant culture maintenance, A 00920/27.11.2014, Manea Dragoș, Marin Eugen, Pirnă Ion, Mateescu Marinela, **GHEORGHE Gabriel**
2. Installation watering accurately, A 00919/27.11.2014, Eugen MARIN, Dragoș MANEA, Anișoara PĂUN, Marinela MATEESCU, **GHEORGHE Gabriel**
3. Mechanical device distribution for small and very small seeds on a single row, A00382/08.06.2015, Eugen MARIN, Dragoș MANEA, Anișoara PĂUN, Marinela MATEESCU, **GHEORGHE Gabriel**
4. Precision water installation, A-00919/27.11.2014, Marin Eugen, Manea Dragoș, Păun Anișoara, Mateescu Marinela, **Gheorghe Gabriel**
5. Equipment module for soil loosening, modelling on layer and sow, A-00383/08.06.2015, Mateescu Marinela, Marin Eugen, Păun Anișoara, Manea Dragoș, **Gheorghe Gabriel**

6. Intelligent equipment for cutting between row of plant and between plants on same row, A-00972/04.12.2015, **Gheorghe Gabriel**, Persu Ioan Cătălin, Manea Dragoș, Marin Eugen
7. Method of applying the diatomite micrograms concomitently with their concentration in sol method of applying the diatomite micrograms concomitently with their concentration in sol, A-00189/29.03.2017, Vlăduț Valentin, Marin Eugen, Mateescu Marinela, Manea Dragoș, **Gheorghe Gabriel**, Jinga Vasile, Lupu Carmen
8. Method of assessing soil compaction in pomical plants, A-00376/14.06.2017, Marin Eugen, Mateescu Marinela, Manea Dragoș, **Gheorghe Gabriel**
9. Intelligent system kit to optimize the application of phytosanitary treatments in field crops, A-00558/09.08.2017, Persu Ioan Cătălin, Matache Mihai G., Cujbescu Dan Iulian, Voicea Iulian Florin, Nițu Mihaela, **Gheorghe Gabriel**
10. Irrigation system with industrial rod, A-00629/ 08.09.2017, Manea Dragoș, Marin Eugen, Mateescu Marinela, **Gheorghe Gabriel**
11. Modulated equipment for high precision planting and applied biodegradable foil, A-00815/11.10.2017, **Gheorghe Gabriel**, Mateescu Marinela, Marin Eugen, Manea Dragoș, Persu Ioan-Cătălin, Cujbescu Dan-Iulian
12. Method of assessing the growing structure in strips for optimization, A-01038/06.12.2017, **Gheorghe Gabriel**
13. Method of testing the protection structures of the operator of self-processed agricultural equipment for exceptional restoration cases, A-00331/11.05.2018, Persu Ioan-Cătălin, Biriș Sorun Ștefan, Maican Edmond, **Gheorghe Gabriel**, Cujbescu Dan-Iulian, Găgeanu Iuliana
14. Optimization kit for the working process of released peltated equipment, A-00592/20.08.2018, Găgeanu Iuliana, Persu Ioan-Cătălin, **Gheorghe Gabriel**, Voicea Iulian Florin
15. Cizel work organ type reversible with intermediate overhead capes, A-00614/28.08.2018, Cârdei Petru, Vlăduțoiu Laurențiu, Marin Eugen, **Gheorghe Gabriel**
16. Ecological seeder with washing plane deflector, A-00623/29.08.2018, Mateescu Marinela, Marin Eugen, Manea Dragoș, **Gheorghe Gabriel**
17. Method of determining aggregular culture vegetation with the help of an air type drive system, A-00670/11.09.2018, Cujbescu Dan, Voicea Iulian, Persu Ioan Catalin, Găgeanu Iuliana, Matache Mihai, **Gheorghe Gabriel**
18. Seder for agricultural crops in western rods, A-00928/21.11.2018, Marin Eugen, Mateescu Marinela, Manea Dragoș, **Gheorghe Gabriel**
19. Automatic drying system of a agroforestry device equipment, A-00954/26.11.2018, Marin Eugen, Mateescu Marinela, Manea Dragoș, **Gheorghe Gabriel**
20. intelligent equipment loosening the soil among vine cuttings, A-01004/29.11.2018, **Gheorghe Gabriel**, Marin Eugen, Persu Catalin, Gageanu Iulia

- **Awards at salons of inventions**

1. Diploma of excellence at INVENTICA Salon, Baia Mare 28-29.05.2015
2. Two diplomas and Bronze Medals at International Fair of Inventions and Innovations "Traian Vuia", Timisoara, 11-13.06.2015
3. Diploma and Gold Medal at International Fair INVEST - INVENT, Iasi, 19.20.10.2015
4. Two diplomas and Silver Medals at International Fair of Inventions and Innovations "Traian Vuia", Timisoara, 25-27.05.2016
5. Two diplomas and Gold Medals at International Fair INVEST – INVENT, Iasi, 15-17.09.2016
6. Diploma and Silver Medal at International Fair INVEST – INVENT, Ungheni, 12-15.11.2017
7. Three Diploma and Medal (Gold, Silver, Bronze for different invention patents) at International Invention Salon PROINVENT Cluj-Napoca, 21-23.03.2018
8. **Silver medal at International Geneva Salon**, 11-15.04.2018

9. One Gold and Two Bronze Medal of at International Fair of Inventions and Innovations "Traian Vuia", Timisoara, 13-15.05.2018
10. Two diplomas and Gold Medals at International Fair INVENTICA, Iasi, 27-29.06.2018
11. Diploma and Gold Medal at International Fair of inventions and practical ideas INVEST-INVENT, Chisinau, Moldova, 09-11.11.2018