



## CURRICULUM VITAE

### Faculty Personnel Record

**Scientific Rank:** **Riad Taha Al-kasasbeh**  
Professor (Dr. of Electrical Eng Electronics)  
**Department:** Mechatronics Engineering  
**Faculty:** School of Engineering  
**University:** Jordan  
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**Websites** Google scholar  
Scopus  
Research gate

**Principal Fields of Interest:** Biomedical engineering, biophysics, acupuncture, fuzzy logic decision-making, medical and ecology information systems, Processing EEG signals

**Riad Taha Al-Kasasbeh:** received his MS in Engineering Science and PhD in Controlling of Biological and Electronic Equipments. He is currently a Professor at Al-Balqa Applied University. He is a member of professional organisations, an auditor for quality of research and education and co-author of over 86 papers (Editions: Springer, IEEE, France Taylor, IASTED, Inderscience, Elsevier, etc). He is also a Visiting Professor along with other Universities like Philadelphia University and Konstanz University (HTWG), Karaganda State Industrial University. He was a Research Fellow of DFG at the HTWG. His research interests include biomedical engineering, biophysics, acupuncture, fuzzy logic decision-making, medical and ecology information systems. He presented his work at numerous international conferences as keynote speaker also he is currently member of the editorial boards of several journals.

### Education

- Master of Engineering Science–Specialized in electronic equipment from V.I Ulyanov( Lenin) Electrical Engineering Institute of Leningrad , U.S.S.R 1990.
- PhD, Doctor of philosophy (Ph. D) degree in (Technical science – Specialized in the controlling of biological and medical systems and electronic equipment) from Electrical Engineering University of Petersburg, Russia, 1993.

## **Participation as a Professor fellowship and a Post-doctoral Researcher:**

- DFG Post-doctoral Researcher, Konstanz University of Applied Sciences, Germany, June. – Sep., 2007.
- DFG Post-doctoral Researcher, Konstanz University of Applied Sciences, Germany, June. – Sep., 2008.
- DFG Post-doctoral Researcher Konstanz University of Applied Sciences, Germany, June. – Sep., 2009.
- DFG Post-doctoral Researcher, Konstanz University of Applied Sciences, Germany, June. – Sep., 2010.
- DFG Post-doctoral Researcher, Konstanz University of Applied Sciences, Germany, June. – Sep., 2011.
- DFG Post-doctoral Researcher, Konstanz University of Applied Sciences, Germany, June. – Sep., 2012.
- DFG Post-doctoral Researcher, Konstanz University of Applied Sciences, Germany, June. – Sep., 2013.
- DFG Post-doctoral Researcher, Konstanz University of Applied Sciences, Germany, June. – Sep., 2014.
- DFG Post-doctoral Researcher, Konstanz University of Applied Sciences, Germany, June. – Sep., 2015.

## **Visiting Professorship**

Visiting Professor of National Research University "Moscow Power Engineering Institute" (MPEI), Department of Biomedical Technology – February 2020.

Visiting Professor of Karaganda State Industrial University, Karaganda - Kazakhstan, Department of Electrical Engineering – September 2018.

## **Professional Academic Experience:**

<b>Employer</b>	<b>Position</b>	<b>Beginning</b>	<b>Ending</b>
University of Jordan	Professor	2/10/2022	Present
Faculty Engineering Technology Balqa Applied University	Professor	20/11/2011	1/10/2022
Zarqa University	Visiting professor	20/9/2012	20/9/2013
Konstanz University of Applied Sciences, Germany (Mechatronics engineering)	Professor fellowship Of DFG	2/7/2012	20/11/2012
Konstanz University of Applied Sciences, Germany (Mechatronics engineering)	Professor fellowship Of DFG	2/6/2011	20/10/2011
Konstanz University of Applied Sciences, Germany (Mechatronics engineering)	Professor fellowship Of DFG	2/6/2010	20/10/2010
Konstanz University of Applied Sciences, Germany (Mechatronics engineering)	Professor fellowship Of DFG	10/7/2009	10/9/2009
Konstanz University of Applied Sciences, Germany (Mechatronics engineering)	Professor fellowship Of DFG	23/6/2008	26/9/2008
Konstanz University of Applied Sciences, Germany (Mechatronics engineering)	Professor fellowship Of DFG	22/6/2007	22/9/2007

Konstanz University of Applied Sciences, Germany (Mechatronics engineering)	Professor fellowship Of DFG	2/6/2006	20/9/2006
Balqa Applied University, Faculty of Engineering Technology	Associated Professor	12/12/2006	20/11/2011
Philadelphia University	Sabbatical leaving	20/9/2007	20/9/2008
Balqa Applied University, Engineering College	Assistant.Prof	10/10/2000	10/10/2000
Balqa Applied University, Al-Salt College	Lecturer	1997	2000
Balqa Applied University, Tafila Polytechnic	Lecturer	1995	1997
Russian Academy, Petersburg, Russia Department of Biomedical Engineering	Researcher	1993	1995
Russian Academy, Petersburg, Russia Department of Biomedical Engineering	Research Assistant	1990	1993

### **Professional Administrative Experience.**

- 1.Consultant to the Presidency, Al-Balqa' Applied University (1997-2000)
- 2.Director of the Outreach Department, Deanship of Scientific Research and Higher Graduation, Al-Balqa' Applied University (2002-2003) .
- 3.Director of Consulting and Studies, Al-Balqa' Applied University (2002-2003)
- 4.Director of the Department of Strategic Planning, National Centre for Crisis Management, Royal Court (2010).

### **Scientific work:**

#### **Publications**

##### **A. Articles in Journals**

1-Nikolay Aleexevich Korenevskiy, Seregin Stanislav Petrovich,**Riad Taha Al-kasasbeh**, Ayman Ahmad Alqarallelh,Altyn A. Aikeyeva,Mohammad Al-Jund, Gennadij Vjacheslavovich Siplivj, Mahdi Salman Alshamasin , Ivan Mikhailovich Kholimenko ,Sofia N. Rodionova,Maksim Ilyash, Managing infectious and inflammatory complications in closed kidney injuries on the basis of fuzzy models, Int. J. Medical Engineering and Informatics, Vol. 15, No. 1, 2023

2-Nikolay Aleexevich Korenevskiy,Alexander V. Bykov,**Riad Taha Al-kasasbeh**, Moaath Musa Al-Smadi,Altyn A. Aikeyeva,Mohammad Al-Jund,Etab T. Al-Kasasbeh,Sofia N. Rodionova,Maksim Ilyash,Ashraf Shaqadan Development of a Fuzzy Diagnostic Model of Ischemic Disease of the Lower Limbs for Different Stages of



Patient Management, Critical Reviews™ in Biomedical Engineering, Volume 50, Issue 4, 2022, pp. 13-30, DOI: 10.1615/CritRevBiomedEng.2022044974

3-Sergey Filist, **Riad Taha Al-Kasasbeh**, Olga Shatalova, Nikolay Korenevskiy, Ashraf Shaqadan, Zeinab Protasova, Maksim Ilyash, Mikhail Lukashov, Biotechnical system based on fuzzy logic prediction for surgical risk classification using analysis of current--voltage characteristics of acupuncture points, Journal of Integrative Medicine, 2022, <https://doi.org/10.1016/j.joim.2022.02.007>.

4-Nikolay Alexeyevich Korenevskiy, Alexander Vladimirovich Bykov, **Riad Taha Al-Kasasbeh**, Altyn Amanzholovna Aikeyeva, Sofia Nikolaevna Rodionova, Ilyash Maksim and Ashraf Adel Shaqadan Developing hybrid fuzzy model for predicting severity of end organ damage of the anatomical zones of the lower extremities, June 21, 2022, pp 323-335, <https://doi.org/10.1504/IJMEI.2022.123925>

5-Nikolay A. Korenevskiy, **Riad Taha Al-Kasasbeh**, Ashraf Shaqadan, Yousif Eltous, Mahdi S. Alshamasin, Marina Anatolevna Myasoedova, Sofia N. Rodionova, Maksim Ilyash, Prediction of Occupational Diseases Due to Exposure to High Radiation Electromagnetic Environment Using a Fuzzy Logic Model, Critical Reviews™ in Biomedical Engineering, 49(6):41–55 (2022)

6-Filist, Sergey .Khatatneh, Khalaf,, **Al-Kasasbeh, Riad Taha**; \* Aikeyeva, Altyn Amanzholovna , Namazov, Manafaddine. Shatalova, Olga Shaqadan, Ashrafg Miroshnikov, Andreyh 'Hybrid Neural Networks with Virtual Flows in in Medical Risk Classifiers'. 1 Jan. 2022 : 1 – 12.

7-**Riad Taha Al-Kasasbeh**, Nikolay Alexeyevich Korenevskiy, Seregin Stanislav Petrovich, Chernega Marina Sergeevna, Aikeyeva Altyn Amanzholovna and Maxim Yuriovich Ilyash, Biotechnical system and fuzzy logic models for prediction and prevention of post-traumatic inflammatory complications in patients with blunt renal trauma International Journal of Biomedical Engineering and Technology, 2021 Vol. 37, No. 4, pp 395-416.

8- Mohammad Al-Jundih Nikolay A. Korenevskiy, Alexander V. Bykov, **Riad Taha Al-Kasasbeh**, Altyn A. Aikeyeva, d Mahdi S. Alshamasin, Sofia N. Rodionova, Ilyash Maksim, Sergey A. Parkhomenko, Moaath Musa Al-Smadi, Fuzzy Models of Choice of Prevention Schemes for the Occurrence and Development of Gangrene of the Lower Extremities, 2021, 49(1) ,Critical Reviews in Biomedical Engineering,

9- Olga Shatalova ,Sergey Filist, **Riad Taha Al-kasasbeh** , Altyn Aikeyeva, Nikolay Korenevskiy, Ashraf Shaqadan, Andrey Trifonov & Maksim Ilyash (2021) Developing neural network model for predicting cardiac and cardiovascular health using bioelectrical signal processing, Computer Methods in Biomechanics and Biomedical Engineering, DOI: 10.1080/10255842.2021.1986486.

10-.Korenevskiy NA, Seregin SP, **Al-Kasasbeh RT**, Sipliviy GV, Alqaralleh AA, Mihajloich KI, Alshamasin MS, Ilyash MU, Rodionova SN. 2021. Biotechnical System of Differential Diagnostics of Serous and Purulent Pyelonephritis in Pregnant Women Based on Fuzzy Logic for Decision Making, 2021, 49(1). Critical Reviews in Biomedical Engineering.

11-. Olga Shatalova, Sergey Filist, Nikolay Korenevskiy, **Riad Taha Al-kasasbeh**, Ashraf Shaqadan, Zeinab Protasova, Maksim Ilyash & Anatoly Rybochkin (2021) Application of fuzzy neural network model and current-voltage analysis of biologically active points for prediction post-surgery risks, Computer Methods in Biomechanics and Biomedical Engineering, 24:13, 1504-1516, DOI: 10.1080/10255842.2021.1895128

12- **Riad Taha Al-Kasasbeh**; Nikolay A. Korenevskiy; Altyn Amanzholovna Aikeyeva; Sofia Nikolaevna Rodionova; Ashraf Adel Shaqadan; Ilyash Maksim , Developing a biotech scheme using fuzzy logic model to predict occurrence of diseases using person's functional state, International Journal of Computer Applications in Technology, 2020 Vol.62 No.3, pp.257 – 267

13. **Riad Taha Al-Kasasbeh**; Nikolay Aleexevich Korenevskiy; Adnan Mukattash; Altyn Amanzholovna Aikeyeva; Dmitry Titov; Maksim Urievich Ilyash, A biotech measurement scheme and software application for the level determination of a person's functional reserve-based fuzzy logic rules, International Journal of Modelling, Identification and Control, 2019 Vol.33 No.3,pp 271-282,

14. **Riad Taha Al-Kasasbeh**, Nikolay Korenevskiy, Mahdi Salman Alshamasin, Florin Ionescu, Elena Boitcova, Etab Al-Kasasbeh, Fuzzy prediction and early detection of stomach diseases by means of combined iteration fuzzy models, International Journal of Biomedical Engineering and Technology Jan 2019, Vol. 30, Issue 3, pp. 228-254

15. **Riad Taha Al-Kasasbeh**, Nikolay A. Korenevskiy, Mahdi Salman Alshamasin, Ilyash Maksim Hybrid fuzzy logic modelling and software for ergonomics assessment of biotechnical systems International Journal of Computer Applications in Technology Jan 2019, Vol. 60, Issue 1, pp. 12-26

16. **Riad Taha Al-Kasasbeh**, Nikolay Korenevskiy, Sergey Filist, Olga Vladimirovna Shatalova, Mahdi Salman Alshamasin, Ashraf Adel Shaqadan, Biotechnical monitoring system for determining person's health state in polluted environment using hybrid decisive rules, International Journal of Modelling, Identification and Control Jan 2019, Vol. 32, Issue 1, pp. 10-22

17. **Riad Taha Al-Kasasbeh**, Nikolay Korenevskiy, Mahdi Salman Alshamasin, Dmitry Klionskiy, Florin Ionescu, Numerical software algorithms for monitoring control processes and correcting health by synthesis of hybrid fuzzy rules of decision-making on the basis of changes in energetic characteristics of biologically active points , International Journal of Modelling, Identification and Control Jan 2016, Vol. 25, Issue 2, pp. 119-137

18. **Riad Taha Al-Kasasbeh**, Nikolay Korenevskiy, Mahdi Alshamasin and Dmitry Klionskiy, Bioengineering System for Prediction and Early Prenosological Diagnostics of Stomach Diseases based on Energy Characteristics of Bioactive Points with Fuzzy Logic. J Biosens Bioelectron 2015, 6:4 <http://dx.doi.org/10.4172/2155-6210.1000182>

19. Nikolay Korenevskiy, Mahdi Alshamasin, **Riad Taha Al-Kasasbeh**, Krupchatnikov Roman Anatolevich, Florin Ionescu. Prediction and prenosological diagnosis of stomach diseases based on energy characteristics of acupuncture points and fuzzy logic- Int. J. of Modelling, Identification and Control 2015 - Vol. 23, No.1 pp. 55 - 67

20 Oksana V. Mandrikova, Nadezda V. Fetisova (Glushkova), **Riad Taha Al-Kasasbeh**, Dmitry M. Klionskiy, Vladimir V. Geppener, Maksim Y. Ilyash. Ionospheric parameter modelling and anomaly discovery by combining the wavelet transform with autoregressive models- ANNALS OF GEOPHYSICS 2015, , 58, 5, A0550; doi:10.4401/ pp.2-12

21. **Riad Taha Al-Kasasbeh**, Mohammad Ali Abdalla Zaubi, Nikolay Korenevskiy, Fawaz Al-Shawawreh, Mahdi Salman Alshamasin, Florin Ionescu. A biotech measurement software system using controlled



features for determining the level of psycho-emotional tension on man-machine system operators by bio-active points based on fuzzy logic measures- Int. J. of Modelling, Identification and Control 2014 - Vol. 22, No.4 pp. 375 - 395.

22. **Riad Taha Al-Kasasbeh**, Nikolay Korenevskiy , Florin Ionescu , Mahdi Alshamasin , Andrew P. Smith and Abdullah Alwadie, Samir Aljbour ,Application of fuzzy analysis with the energy condition of bioactive points to the prediction and diagnosis of gastrointestinal tract diseases, Int. J. Biomedical Engineering and Technology, Vol. 11, No. 2, 2013, pp; pp. 136-154

23. **Riad Taha Al-Kasasbeh** , Nikolay Korenevskiy , Florin Ionescu , Mahdi Alshamasin , Andrew P. Smith and Abdullah Alwadie, Biotechnical Measurement and software system for the prediction and diagnosis of osteochondrosis of the lumbar region based on acupuncture points with the use of fuzzy logic rules, DOI 10.1515/bmt-2012-0081 Biomedical Engineering -Biomedizinische Technik , ISSN: 1862-278X ,DE GRUYTER ,2013; 58(1),PP 51–65.

24. Oksana Mandrikova,Igor Solovjev, Vladimir Geppener, **Riad Taha Al-Kasasbeh**, Dmitry Klionskiy, " Analysis of the Earth's magnetic field variations on the basis of a wavelet-based approach", Digital Signal Processing, ISSN: 1051-2004, Elsevier Inc, Volume, January 2013, PP 329–339

25. **Riad Taha Al-Kasasbeh** , Biotechnical measurement and software system controlled features for determining the level of psycho-emotional tension on man–machine systems by fuzzy measures, Advances in Engineering Software, ISSN: 0965-9978, Elsevier, 45 (2012) PP, 137–143

26..Mahdi shamasin, Florin Ionescou, **Riad Taha Al-kasasbeh**,Investigation of Kinematics for Articulated Robot Arm with SolidDynamics 2004+ and validation by MATLAB/Simulink, , International Review on Computers and Software (IRECOS)Print ISSN:2012,1828-6003, pp. 928-937.

27.**Riad Taha Al-Kasasbeh**, Alshamasin Mahdi Salman, Ionescu Florin. Korenevskiy N,Modelling and parameter estimation for operator intelligence in Man-Machine Systems, IJMIC , International Journal of Modeling, Identification and Control, 2012.ISSN online:1746-6180, Inderscience Publishing Ltd, (2011), Vol. 15, No. 1, PP, 69–85

28.. **Riad Taha Al-Kasasbeh**, "Software Features for the Estimation of an Operators' Group Activity in Man-machine system, Advances in Engineering Software, ISSN: 0965-9978, Elsevier, 42 (2011), pp547–554.

29. **Riad TahaAl-Kasasbeh** , Nikolay Korenevskiy , Mahdi Alshamasin a , Florin Ionescou , Andrew Smith, Prediction of gastric ulcers based on the change in electrical resistance of acupuncture points using fuzzy logic decision-making, Computer Methods Biomech Biomed Engin,ISSN 1025-842,Taylor&Francis,doi:0.1080/10255842.2011.618926, 2013 Mar;16(3):302-

30. M. Alshamasin , **Riad Taha Al-Kasasbeh**, F. Ionescou, "Modeling and Simulation of a SCARA Robot using Solid Dynamics and Verification by MATLAB/Simulink", IJMIC, International Journal of Modelling,Identification and Control, Inderscience Publishing Ltd,.ISSN online: 1746-6180, Vol. 15, No. 1, 2012, pp.28 - 38.

31. **Riad Taha Al-Kasasbeh** , Nikolay Korenevskiy, Florin Ionescou, Mahdi Alshamasin, Alexander Kuzmin, "Synthesis of Fuzzy Logic for Prediction and Medical Diagnostics by Energy Characteristics of Acupuncture Points", J Acupunct Meridian Stud , Elsevier ISSN 2005-2901, 2011; 4(3): pp 175-182,
32. **Riad Taha Al-Kasasbeh**, F. Ionescou, N. A. Korenevsky, M. Alshamasin , "Prediction and Prenosological Diagnostics of Heart Diseases Based on Energy Characteristics of Acupuncture Points and Fuzzy Logic". , Computer Methods in Biomechanics and Biomedical Engineering, Francis Tylor, ISSN 1025-842, Taylor&Francis, iFirst article, 2011, pp 1–9
33. **Riad Taha Al-Kasasbeh**, Yan Pekker, Sergey Glushchuk, Design of Auonomous Gastroinesinal tractelecrosimulator-Brobos", Biomedical Engineering, Springer US ISSN: 1573-8256, Vol. 45, No. 4, November, 2011, pp. 145\_149
34. N. A. Korenevsky, D. E. Skopin, **R. T. Al- Kasasbeh**, and A. A. Kuz'min, System for Studying Specific Features of Attention and Memory ,Vol. 44, No. 1, 2010, pp. 32\_35., Vol. 44, No. 1, 2010, pp. 36\_40., Biomedical Engineering, Springer, US ISSN: 1573-8256.
35. **Riad Tata Al-Kasasbeh** and B.V. Lvov. Classification of EEG signals with artifacts, based on fractal dimension analysis, wavelet transform and neural network, Dirasat Journal, v.32. pp. 78-90, 2005, Amman, Jordan, ISSN 1560-4551
36. Mahdi Alshamasin, **Riad Taha Al-Kasasbeh**, F. Ionescou, "Modeling and Simulation of a SCARA Robot using Solid Dynamics and Verification by MATLAB/Simulink" accepted for publication in the journal: International Journal of Modelling, Identification and Control (IJMIC)
37. N. A. Korenevsky, D. E. Skopin, **Riad Taha Al-Kasasbeh**, and A. A. Kuz'min, "System for Studying Specific Features of Attention and Memory. Biomedical Engineering", Vol. 44, No. 1, 2010, pp. 32\_35. Vol. 44, No. 1, 2010, pp. 36\_40. Springer US ISSN: 1573-8256.
38. **Riad Taha Al-Kasasbeh**, F. Ionescou, A. Mukattash, R. Btoush "Confidence Estimates of Operators' Group Activity in Man-Machine Systems", Jordan Journal of Mechanical and Industrial Engineering, Volume 4, Number 2, March. 2010, ISSN 1995-6665, Pages 324 – 329,
39. Korenevskiy, N. A., Ionescu, Fl., Kuzmin, A.A. and **Riad Taha Al-Kasasbeh**. "Synthesis of the Combined Fuzzy Rules for Medical Applications with Using Tools of Exploration Analysis", Journal of Biomedical electronics, ISSN 1560-4136 ,5-2009. pp .65-76.
40. Korenevskiy, N. A., Ionescu, Fl., Kuzmin, A.A. and **Riad Taha Al-Kasasbeh**. "Prediction of Occurrence, Aggravation and Pre-Nosological Diagnostics of Osteochondrosis of a Backbone's Lumbar Region with Use of Reflexology Methods ", Journal of Biomedical electronics, ISSN 1560-4136 ,5-2009. pp .60-64
41. A.S. Khraiwish, M. Alshamasin, **Riad Taha Al-Kasasbeh**, Y. Al shiboul, Z. Al-Qudah and M. Al-Busoul, 2009. " The Effect of the Harmonics, the Fault Location and the Fault Resistance on the Performance of the Impedance-Type Distance Relay", Science Publications, American Journal of Applied Sciences 6 (4): 788-796, 2009, ISSN 1546-9239.

42. A.S. Khraiwish, M. Alshamasin, **Riad Taha Al-Kasasbeh**, Y. Al shiboul, Z. Al-Qudah and M. Al-Busoul, 2009. " The Effect of the Harmonics, the Fault Location and the Fault Resistance on the Performance of the Impedance-Type Distance Relay", Science Publications, American Journal of Applied Sciences 6 (4): 788-796, 2009, ISSN 1546-9239.
43. Mahdi Alshamasin, **Riad Taha Al-Kasasbeh**, A. Khraiwish, Y. Al-shiboul and Dmitriy E. Skopin, 2009. "Acceleration of Image Processing Using New Color Model", Science Publications, American Journal of Applied Sciences 6 (5): 1015-1020, ISSN 1546-9239 .
44. Mahdi Salman Alshamasin, Florin Ionescu and **Riad Taha Al-Kasasbeh**. "Kinematic Modeling and Simulation of a SCARA Robot by Using Solid Dynamics and Verification by Robot by Using Solid Dynamics and Verification by MATLAB/Simulink", European Journal of Scientific Research, Vol.37 No.3 (2009), © EuroJournals Publishing, Inc. 2009, ISSN 1450-216X.
45. **Riad Taha Al-Kasasbeh**, R. A. Shapovalnikov, D. E. Skopin and Mahdi Salman Shamaseen. "Diagnosis of Fetal State by ECG Detection", Biomedical Engineering, Volume 43, Number 2 - March, 2009 .Springer US ISSN: 1573-8256.
46. **Riad Taha Al-Kasasbeh**, Mahdi Alshamasin, D. E. Skopin, Omar Barbarawi and V. V. Geppener . "Automated Detection of Artifacts in Electroencephalography Signals Using a Linear Prediction Model" Biomedical Engineering, Volume 43, Number 1 / January, 2009 Springer US ISSN: 1573-8256.
47. **Riad Taha Al-Kasasbeh**, Mahdi Salman Shamaseen and D. E. Skopin " Automated Detection and Selection of Artifacts in Encephalography Signals Biomedical Engineering", Volume 42, Number 6 / November, 2008 Springer US ISSN: 1573-8256.
48. **Riad Taha Al-Kasasbeh**. and Shepovalnikov R A. " Two –Dimensional Representation spatial structure changes in brain bioelectric potential field", Applied Bionics and Biomechanics Journal , Volume 4 Issue 1, Taylor & Francis Group-2007, ISSN 1754-2103.
49. **Riad Taha Al-Kasasbeh** and Yousif El-tous " Selection of Artifacts in EEG-signals Using Kullback information", Engineering Science Journal, v.22 -2006, Assiut, Egypt, ISSN1687-0530.
50. **Riad Taha Al-Kasasbeh** and B.V. Lvov " Detection of Eye Movement and Muscle Artifact in EEG of Normal Subjects by Classification of Fractal Dimension Dynamics ", Dirasat International Journal, v.33-2006, Amman, Jordan, ISSN 1560-4551.
51. Alshamasin Mahdi and Ionescu, Florin and **Al-Kasasbeh Riad** "Modeling and Simulation of a SCARA Robot using Solid Dynamics and Verification by MATLAB/Simulink", International Journal of Modelling Identification and Control 15(1):28 – 38
52. **Riad Taha Al-Kasasbeh**, "Serdyukov, N.N. and A.N. Shepovalnikov. The use of biotechnical measuring–computing controlled training system for the treatment of stutter". Problems in Pathology, Development, and Collapse of Speech Function.1999, Petersburg State University. ISBN 5-228-03256-4 (in Russian)



53. **Riad Taha Al-Kasasbeh.** " Homeostatic models of the information system of small groups of operators", published in the Interdepartmental Digest of Control Processes in Complex Systems, 1995–Ufa, Published in UGATU pp. 112 –120. ISBN ISBN 5-86911-057-2 (in Russian)

54. **Riad Taha Al-Kasasbeh:** " Investigation of groups of operators based on fuzzy logic, published in the scientific periodical News of State". Electromechanical University -Petersburg N 468, P.P 89 – 93, 1994, ISBN 5-228-02258-5 (in Russian)

## **Publications**

### **B. Published Contribution to Academic Conference**

1-Riad Taha Al-Kasasbeh,Nikolay Korenevskiy,Mahdi Salman Alshamasin,Osama Al-Habahbeh,Ashraf Shaqadan,Sofia Nikolaevna Rodionova,Sergey Filist, Fuzzy Mathematical Models for Predicting and Diagnosing Occupational Diseases of Workers in the Agro-industrial Complex in Contact with Pesticides, Conference: 3rd 2022 International Conference on Intelligent Computing, Automation and Applications (ICAA2022), At: Hangzhou, Zhejiang, China

2-Al-Kasasbeh, R., Korenevskiy, N., Aikeyeva, A., Alshamasin, M., Rodionova, S., Shaqdan, A., Shaqadan, A., Filist, S., Eltous, Y. (2022). Influence of Ergonomics of Electric Power Industry Enterprises on Nervous System Diseases. In: Jay Kalra and Nancy Lightner (eds) Healthcare and Medical Devices. AHFE (2022) International Conference. AHFE Open Access, vol 51. AHFE International, USA.  
<http://doi.org/10.54941/ahfe1002113>

3-Al-Kasasbeh R.T. et al. (2021) Biotech Scheme for the Prediction Occupational Disease of the Railway Locomotive Crews. In: Kalra J., Lightner N.J., Taiar R. (eds) Advances in Human Factors and Ergonomics in Healthcare and Medical Devices. AHFE 2021. Lecture Notes in Networks and Systems, vol 263. Springer, Cham. [https://doi.org/10.1007/978-3-030-80744-3\\_29](https://doi.org/10.1007/978-3-030-80744-3_29)

4-Riad Taha Al-Kasasbeh ,Nikolay Korenevskiy, Ityn Amanzholovna Aikeyeva,Sofia Nikolaevna Rodionova, Ilyash Maksim, Mahdi Salman Alshamasin,Etab Taha Al-Kasasbeh,International Conference on Applied Human Factors and Ergonomics, Virtual Conference ,AHFE 2020: Advances in Human Factors and Ergonomics in Healthcare and Medical Devices ,The Influence of Ergonomics of Human-Machine Systems on the Emergence and Development of Cognitive Function Disorders, Part of the Advances in Intelligent Systems and Computing book series (AISC, 2020 volume 1205), pp 106-114|

5- **Riad Taha Al-Kasasbeh**, Nikolay Korenevskiy, Aikeyeva Altyn, Maksim Ilyash, Evaluation of the Impact of the Ergonomics of Technical Systems on the State of Health of a Human Operator with Regard to His Functional Reserve, AHFE Washington DC 2019/7/24: Part of the Advances in Intelligent Systems and Computing book series (AISC, volume 957), pp 156-166 International Conference on Applied Human Factors and Ergonomics.

6- **Riad Taha Alkasasbeh**,Nikolay Korenevskiy,Mahdi Salman Alshamasin,Sofia Korenevskya,Etab Taha Al-Kasasbeh,Ilyash Maksim,International Conference on Applied Human Factors and Ergonomics AHFE July 21-25, 2018, Loews Sapphire Falls Resort at Universal Studios, Orlando, Florida, USA: Advances in Social and Occupational Ergonomics pp 143-154| ,Fuzzy Model Evaluation of Vehicles Ergonomics and Its Influence on Occupational Diseases ,24 June 2018,Part of the Advances in Intelligent Systems and Computing book series (AISC, volume 792

7- **Riad Taha Alkasasbeh**,Nikolay Korenevskiy,Mahdi Salman Alshamasin, International Conference on Applied Human Factors and Ergonomics AHFE 2017: Advances in Human Factors and Ergonomics in Healthcare and Medical Devices , Method of Ergonomics Assessment of Technical Systems and Its Influence on Operators Health on Basis of Hybrid Fuzzy Models,pp 581-592, Part of the Advances in Intelligent Systems and Computing book series (AISC, volume 590)

8- **Riad Taha Al-Kasasbeh** , Nikolay Korenevskiy , Mahdi Alshamasin , Bioengineering System for Prediction and Early Prenosological Diagnostics of Stomach Diseases Based on Energy Characteristics of bioactive Points with Fuzzy Logic, 2nd Biomedical Engineering Conference and Expo November 30-December 01, 2015 San Antonio, USA.

9-Nikolay Korenevskiy, **Riad Taha Al-Kasasbeh**, Florin Ionescuc, Mahdi Alshamasin, E. Alkasasbeh, Andrew P. Smith, FUZZY DETERMINATION OF THE HUMAN'S LEVEL OF PSYCHO-EMOTIONAL ,4th International Conference on Biomedical Engineering in Vietnam, IFMBE Proceedings, Springer, Volume 40, 2013, pp 213-216 ,ISBN: 978-3-642-32182-5 (Print) 978-3-642-32183-2 (Online)

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## **Publications**

### **D.Reports**

1. Mahdi Salman Shamaseen , **Riad Taha Al-Kasasbeh** and Fl. Ionescu. "Modelling and Simulation of Robots". End-Report of the DFG-Research Stage, June-August 2007, 33 pages, 28 figures.

2. **Riad Taha Al-Kasasbeh** , Mahdi Salman Shamaseen and Fl. Ionescu. "Developping of a Generalised Mathematical Model for the Selection of the Acupuncture Points towards and Optimised Design of Biomedical Equipment ". End-Report of the DFG-Research Stage, June-August 2007, 18 pages, 11 fig.

3. **Riad Taha Al-Kasasbeh** and Fl. Ionescu. "Developping of a Multi Atribute Decision Making for Phyhomotoric Selection of Human Operators towards and Optimised Design of Biomedical Equipment". End-Report of the DFG-Research Stage, June-August 2007, 28 pp., 11 fig.



4. Mahdi Salman Shamaseen , **Riad Taha Al-Kasasbeh** and Fl. Ionescu. "Modelling and Simulation of Robots". End-Report of the DFG-Research Stage, June-Sept 2008, 33 pp., 28 fig.
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11. Report of the Achieved Results during the DFG Research Stage in HTWG- Topic: "Modeling, Simulation & Control of Robots" Assist.-Prof.Dr.-Eng. Mahdi Salman Alshamasin, Assoc.Prof.Dr.-Eng. Riad Taha Al-Kasasbeh, Konstanz June 25 – September 22, 2010,30 pp.,13 fig.
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- 8-Introduction to Biomedical Engineering .
- 9-Power Electronics.
- 10- Electrical Measurement.