Dr. Muhammad Farzik Ijaz

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Last updated: Oct, 2023

EMPLOYMENT

Assistant Professor: Faculty ***2019-Present***

Mechanical Engineering Department, College of Engineering, King Saud University
Riyadh, Saudi Arabia.

- ***Lecturer and Researcher*** ***2017-2019***
  Department of Control Engineering, Faculty of Electrical Engineering,
  Czech Technical University in Prague, Czech Republic.

- ***Mobility Academic Researcher*** ***2017-2018***
  Faculty of Metallurgy and Materials Engineering,
  VSB-Technical University, Czech Republic

- ***Materials Engineer/ Teaching Assistant*** ***2007-2009***
  Material Engineering Department, Ghulam Ishaq Institute,
  Pakistan

- **Assistant Works Manager** (Metallurgy), Heavy Industries Taxila, ***2006-2007***
  Pakistan

EDUCATION

- ***Teaching Fellowships (ATER) & Postdocs*** ***2015-2018***

  Attaché temporaire d'enseignement et de recherche (ATER)

  Specialization: Anisotropic Crystal Engineering

  ANR, CNRS, CIRIMAT-INP, **France**

  BIOMIMETIS (ANR-13-IS09-0008)

- ***Ph.D. in Material Science and Engineering*** ***2012-2015***

  Specialization: Bio Mechanical Engineering, Solid Mechanics

  Provost's Awardee for Year 2015, MEXT, University of Tsukuba, **Japan**

  https://www.timeshighereducation.com/world-university-rankings/university-tsukuba

- ***MS. in Material Science and Engineering*** ***2010-2012***

  Specialization: Mechanical Performance of Shape Memory alloys

  Institute of Pure and Applied Sciences, University of Tsukuba, **Japan**

  https://www.timeshighereducation.com/world-university-rankings/university-tsukuba

- ***BS. in Metallurgical and Materials Engineering*** ***2002-2006***

  University of Engineering and Technology,

  Lahore, **Pakistan**

SCIENTIFIC Focus Areas and Research Interests

1. Mechanical Engineering of Advance Materials for Biomedical and Aerospace Applications: Fabrication of Alloys by Design Process (ABD), Understanding elementary processing-mechanical properties relationship viz Biaxial deformation, Texture analysis, Lattice strain Testing via high energy synchrotron X-ray diffraction and TEM/SEM-FIB characterizations.
2. Water Treatment Membranes and Their Process Technologies.
3. Fabrication of Metal open –cell foam by Powder sintering techniques.
4. Development of new composition of superplastic alloys for potential Energy harvesting.
5. Redeficing the human body with metallic biomaterials: Corrosion Monitoring and Cyto compatibility evaluation via HUVEC cells.
6. Metallic Multi-layered alloys via magnetron sputtering for microelectromechanical systems.

PEDAGOGICAL EXPERIENCE and Courses Taught (to Graduate (MS) and Undergraduate (BS) students)

1. Mechanical Behavior of Solids (ME-552). King Saud University, Saudi Arabia.
2. Nanomaterials for Sustainable Energy and the Environment (NAN 562), King Saud University, Saudi Arabia.
3. Materials Engineering (ME-254). King Saud University, Saudi Arabia.
4. Mechanics of Materials (ME-352). King Saud University, Saudi Arabia.
5. Mechanical Behavior of Materials (MSE-552). King Saud University, Saudi Arabia.
6. Design for Manufacturing (ME513). King Saud University, Saudi Arabia.
7. Structure of materials (MSE 522). King Saud University, Saudi Arabia.
8. Special Topics in Solid Mechanics (ME-591). King Saud University, Saudi Arabia.
9. Special Topics in Materials Engineering (MSE-591). King Saud University, Saudi Arabia.
10. Materials Selection in Design (ME509). King Saud University, Saudi Arabia.
11. Corrosion Engineering (MSE 542) King Saud University, Saudi Arabia.
12. Nano Crystalline Materials (MSE556) King Saud University, Saudi Arabia.
13. Senior Design Projects (ME 496/497). King Saud University, Saudi Arabia.
14. Thesis Proposal Preparations (ME 596). King Saud University, Saudi Arabia.
15. ME 600-Master Thesis, King Saud University, Saudi Arabia.
16. Biomaterials Science. An Introduction to Materials in Medicine, VSB University Czech Republic.
17. Materials Lab, Faculty of Materials Science and Engineering, GIKI, Pakistan.

KEY ACADEMIC and PROFESSIONAL Skills Development

1. Familiarity with the "Credit Hour" academic system.
2. Ability to supervise student work.
3. Ability to provide academic advising for students.
4. Ability to conduct independent research and publish in reputable journals and conferences.
5. Ability to work effectively with diverse team members.
6. Knowledge of academic program planning and implementation.
7. Concurrent application for ABET and NCAAA accreditation in undergraduate and graduate programs.
8. Familiarity with Learning Management Systems (LMS) and other educational software.
9. Ability to contribute to the college activities such as membership of various college committees.

THESIS SUPERVISION and Co supervision: Individual Student Academic Advisory

(ongoing and completed Assignments)

Graduate Students

1. Engr . *Engr*. Tariq Ahmed M Qashash

   Under Main Advisement: Thesis: May 2023

   M.S. Thesis title: "Effect of Femtosecond laser Micromachining on the Microstructure and Mechanical Properties of Biomedical Alloys", College of Engineering at King Saud University.

2. *Engr*. Rubaian F. Alshahrani

   Under Co Advisement: PhD. Thesis: June2022

   PhD. Thesis title: "O-rings Behavior under Cyclic Exposure to High-Pressure Hydrogen Gas", College of Engineering at King Saud University.

3. *Engr*. Abdulaziz Khalid Alrudayni

   Under Co Advisement: MS. Thesis: June2022

   M.S. Thesis title: "Influence of Starting MFR and Processing Conditions on Molecular and Thermal Properties of Controlled Rheology Polypropylene", College of Engineering at King Saud University.

   Under Co- Advisement: MS. Thesis: Graduated June 2023: Thesis

4. *Engr*. Faraz Hussain Hashmi

   Under Main Advisement: MS. Thesis: Graduated June 2022: Thesis

   M.S. Thesis title: "Improvement of the Mechanical Properties of Al Cu Mg alloys through Compositional Design Microstructural Control", College of Engineering at King Saud University.

5. *Engr*. Ahemd Zaki Ahmed Al Saggaf

   Under Co Advisement: MS. Thesis: Graduated April 2022

M.S. Thesis title: "Modified electrospun PAN nanofiber membranes for efficient solar driven interfacial evaporation" College of Engineering, King Saud University.

6. *Engr*. Basim Tayeb Ismail Nashri

MS. Thesis: Under Main Advisement: Thesis

M.S. Thesis title: "Development of Bulk Nano Metal alloys via cryogenic rolling process"

College of Engineering, King Saud University.

7. *Engr*. Talal Talib Alshammari

Mentoring articles for potential publications/Co supervision in Thesis Writing

M.S. Thesis: "Influence of Cu/Mg ratio and pre-deformation on the mechanical properties of aged Al-Cu-Mg-Ag alloys".Corresponding author for Published article: "Effects of Mg Content on the Microstructural and Mechanical Properties of Al-4Cu-xMg-0.3Ag Alloys" Crystals 2020, 10(10) 895.

8. *Mr.*Vojtěch K [Ph D Thesis]

Mentoring articles for potential publications

PhD Thesis: Influence of processing technology on fracture feature of Ti6Al4V

VSB University, Czech Republic

A. Under Graduate Students and Main Final Year Capstone Projects Advisory

1. *Mr*. Naseer Mohammed Al Sultan, *Mr*. Fawaz Eid Awad, *Mr,* F. Tarki:

Under Main Advisement: Graduated in Fall 2019

B.S. Senior Capstone Design Graduation Project (ME496/ME497): "Design and Manufacturing of Fatigue testing machine for investigating functional fatigue life of thin metallic wire for biomedical applications", ME department, College of Engineering King Saud University.

2. *Mr*. Abdullah Alshehri, *Mr*. Mohammed Almaasri, *Mr*. Khalid Alturki

Under Main Advisement: Graduated Fall 2020 ME Department, KSU

B.S Senior Capstone Design Project (ME 496/ ME497): "Design, development and fabrication of human powered multipurpose sanitizer machine" ME department, College of Engineering at King Saud University.

3. *Mr*. Naseer Alhantoshi, *Mr* Hamad Almadi, *Mr* Alwaleed Alsurayyi, *Mr* Fahad Alswilmi

Under Main Advisement: Graduated Fall 2020, ME Department, KSU

B.S Senior Capstone Design Project (ME 496/ ME497): "Design of a Front Suspension System for Battery –Based Motorcycle" ME department, College of Engineering at King Saud University.

4. *Mr*. Fahad Asiri, *Mr*. Mohammed Alotaibe, *Mr*. Abdulwahab Alessa

Under Main Advisement: Graduated Fall 2021 ME Department, KSU

B.S Senior Capstone Design Project (ME 496/ ME497): "Design and Analysis of Automated Pneumatic Jack System deploying vehicle Exhaust Power"

ME department, College of Engineering at King Saud University.

5. *Mr* Khalid Almuhaya, *Mr.* Reyan Alajlan, *Mr* Meshari Aloraini

Under Main Advisement: Graduated in May 2022, ME Department, KSU

B.S Senior Capstone Design Project (ME 496/ ME497):" Design and Fabrication of a Cost-Effective Medical Implant"

ME department, College of Engineering at King Saud University.

6. *Mr.* Mansour Abdul Aziz Almohaimeed, *Mr.* Nawaf fayez alatig, *Mr.* Saad Abdulrahman almuqren

Under Main Advisement: Graduated in November 2022, ME Department, KSU

B.S Senior Capstone Design Project (ME 496/ ME497):" Development of Emergency Stretcher Cum trolley system by Material-Fabrication and Design scheme[MFD] "

ME department, College of Engineering at King Saud University.

Member of Department Committees and Service Activities King Saud University

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1. Member of the council for Joint program "Master of Science in Applied Nanotechnology [program joint between several colleges] at King Saud University, Riyadh, Saudi Arabia.

2. Member of the Graduate Studies Accreditation Committee, Department of Mechanical Engineering, College of Engineering, King Saud University, Riyadh, Saudi Arabia.

3. Member of ME department's committee attributed for "Accreditation Board for Engineering and Technology (ABET) Committee 2020-2021" and NCAAA Year 2021, College of Engineering, King Saud University, Riyadh, Saudi Arabia. My Responsibility was to Adopts ABET terminology for creating Criterion 3 and Criterion 5 specifically which is bridge between the department's student learning outcome and curriculum of the Mechanical Engineering Program KSU.

4. Member of ME department's committee attributed for Research and Development King Saud University, Riyadh, Saudi Arabia.

5. Member of ME department's committee associated to Community Relation Development, King Saud University, Riyadh, Saudi Arabia.

6. Member of the ME Department's committee associated to design curriculum for Material Science Program for KSU, Riyadh Saudi Arabia.

7. Designing course and preparing syllabus for: *Radiation Biophysics*, NE -560, to be potentially taught in MSc Nuclear Engineering Program, KSU, Saudi Arabia.

8. Designing course and preparing syllabus for: *Biomechanics and Implant Technology* to be potentially taught in ME/MSE Program, KSU, Saudi Arabia.

9. Reviewer of the Graduate thesis work in ME/MSE Program, KSU, Saudi Arabia. Three graduate thesis has been successfully reviewed.

PUBLICATIONS and RESEARCH Grants (Accomplishments)

A. List of Peer Reviewed Publication [ISI publications]

If you need some of the reprints, please either contact me by email or download from publisher's website: More than 95% of the published work is in Q1. kindly visit: https://www.scimagojr.com , Google scholar [for latest Impact factor and citation].

1. **Muhammad Farzik Ijaz,** Wataru Tasaki, Hee Young Kim, Shuichi Miyazaki, Achievement of Ultralow Elastic Modulus through Optimization of Phase Stability and Recrystallization Texture in Ti–Nb–Fe–Sn Alloys, Adv. Eng. Mater. **2023**, 23004682300468 2023 Wiley-VCH GmbH. https://doi.org/10.1002/adem.202300468
2. Khalid Mujasam Batoo , **Muhammad Farzik Ijaz**, Ahamad Imran, Saravanan Pandiaraj, Piezo-plasmon phototronically enhanced direct solar-chemical translations from Au decorated perovskite BiFeO3 sea urchin-like 3D nanostructures Surfaces and Interface, Volume 40, August 2023, 103137 https://doi.org/10.1016/j.surfin.2023.103137
3. Book Chapter::New Materials and Devices for Thermoelectric Power GenerationAzam, S., & Farzik Ijaz, M. (2023). Organic Thermoelectric Materials. IntechOpen. doi: 10.5772/intechopen.1002446
4. NorAmalinaMuhayudin, KhairulSallehBasaruddin, **Muhammad Farzik Ijaz**, RuslizamDaud, Finite Element Modelling of a Synthetic Paediatric Spine for Biomechanical Investigation. Materials **2023**,16,4514. https:// doi.org/10.3390/ma16134514
5. Hassan Mehboob, Abdelhak Ouldyerou, **Muhammad Farzik Ijaz**, Biomechanical Investigation of Patient-Specific Porous Dental Implants: A Finite Element Study, *Appl. Sci.* **2023**, *13*(12), 7097; https://doi.org/10.3390/app13127097

6. El-Sayed, Yassir A. Bahri, Hamad F. Alharbi, **M.F. Ijaz,** Corrosion Passivation in Simulated Body Fluid of Ti-Zr-Ta-xSn Alloys as Biomedical Materials, Materials **2023,** 16(13), 4603; https://doi.org/10.3390/ma16134603
7. Norsyakina Husain, Muhammad Nazrin Shah, Khairul Salleh Basaruddin, **Muhammad Farzik Ijaz** Hiroshi Takemura , Shafriza Nisha Basah , Design optimization and integrated simulations Analysis of a Cable-Driven Ankle Rehabilitation Robot, Journal of Disability Research, https://www.scienceopen.com/document/read?vid=d878a2c4-c0c9-484f-b29d-48e42f7348d2
8. Izzawati Basirom, Ruslizam Daud, **Muhammad Farzik Ijaz,** Mohd Afendi, Rojan, Khairul Salleh Basaruddin, Stability Analysis of Plate-Screw Fixation for Femoral Midshaft Fractures, Materials 2023. https://doi.org/10.3390/ma16175958
9. Amran, N.N.; Basaruddin, K.S.; **Ijaz, M.F**.; Yazid, H.; Basah, S.N.; Muhayudin, N.A.; Sulaiman, A.R. Spine Deformity Assessment for Scoliosis Diagnostics Utilizing Image Processing Techniques: A Systematic Review. Appl. Sci. 2023, 13, 11555. https://doi.org/10.3390/app132011555
10. Talal Talib Alshammari,**Muhammad Farzik Ijaz**, Hamad F. Alharbi and Mahmoud S. Soliman, Effect of the Cu/Mg Ratio on Mechanical Properties and Corrosion Resistance of Wrought Al–Cu–Mg–Ag Alloy Crystals 2023, 13(6), 908; https://doi.org/10.3390/cryst13060908
11. **Muhammad Farzik Ijaz**, Abdulhamid A Al-Abduljabbar, Khalid Suliman Alluhydan , Meshari Aloraini , Reyan Alajlan, Khalid Almuhaya. A prospective outlook on the development of exoskeletal knee joint for prostheses: via design concept evaluation approach, JDR. 2023. Vol. 2(1):47-62. DOI: 10.57197/JDR-2023-0006
12. Lorène Héraud, Philippe Castany, **Muhammad Farzik Ijaz**, Doina-Margareta Gordin , Thierry Gloriant, Large-strain functional fatigue properties of superelastic metastable β titanium and NiTi alloys: A comparative study.Journal of Alloys and Compounds 953 (2023) 170170, https://doi.org/10.1016/j.jallcom.2023.170170
13. **M.F. Ijaz,** Hamad F. Alharbi, Aspects of Polymeric-Based Membranes in the Water Treatment Field: An Interim Structural Analysis, *Water* **2023**, *15*(6), 1114; **https://doi.org/10.3390/w15061114**
14. **M.F. Ijaz**, F.H. Hashmi, Revisiting Alloy Design of Al-Base Alloys for Potential Orthotics and Prosthetics Applications, *Crystals* **2022**, *12*(12), 1699; https://doi.org/10.3390/cryst12121699
15. **M.F. Ijaz,** Hamad F. Alharbi, Yassir A. Bahri, El-Sayed, Alloy Design and Fabrication of Duplex Titanium-Based Alloys by Spark Plasma Sintering for Biomedical Implant Applications, *Materials **2022**,15,8562*. https://doi.org/10.3390/ma15238562
16. R. Kalia, A. Chauhan, R.Verma, , ..Khalid Mujasam Batoo, **M.F. Ijaz** et al "Photocatalytic Degradation Properties of Li-Cr Ions Substituted CoFe2O4 Nanoparticles for Wastewater Treatment Application" physica status solidi (pss), (2022) https://doi.org/10.1002/pssa.202100539

17. **M.F. Ijaz**, M.S. Soliman, A.S. Asmari, A.T. Abbas, F.H. Hashmi, Comparison of Mechanical and Microstructural Properties of as-Cast Al-Cu-Mg-Ag Alloys: Room Temperature vs. High Temperature" New Trends in Crystals at Saudi Arabia, Crystals **2021**, 11(11), 1330. https://doi.org/10.3390/cryst11111330.

18. El-Sayed, Yassir A. Bahri, Hamad F. Alharbi, **M.F. Ijaz,** Ibraim Al Nasir**,** Influence of Tantalum Addition on the Corrosion Passivation of Titanium-Zirconium Alloy in Simulated Body Fluid, Materials. 2022; 15(24):8812. https://doi.org/10.3390/ma15248812

19. **M.F. Ijaz**, L. Heraud, P. Castany, I. Thibon, T. Gloriant, "Superelastic Behavior of Biomedical Metallic Alloys" Metallurgical and Materials Transactions A volume 51, pages3733–3741(**2021**) https://doi.org/10.1007/s11661-020-05840-y. *Outstanding Contribution Paper Award for Metallurgical and Materials Transactions 50th Anniversary Collection*

20. G.B. Todkar, R. A. Kunale, K.M. Batoo, **M.F. Ijaz *et al.,*** "Ce-Dy substituted barium hexaferrite nanoparticles with large coercivity for permanent magnet and microwave absorber application" Journal of Physics D: Applied Physics ,**202**1 IOP Publishing Ltd, Accepted Manuscript online 15th April 2021 https://doi.org/10.1088/1361-6463/abf864

21. K. Desai, S. Alone, S..Wadgane,..**M.F.Ijaz,** R..Kadam *et al.*, "X-ray diffraction analysis by Williamson Hall and Rietveld refinement for strain mechanism in Mg-Mn co-substituted $CdFe^2O_4$ nanoparticles" Physica B: S0921-4526(21)00247-7(**202**1) https://doi.org/10.1016/j.physb.2021.413054

22. R. Verma, A. Chauham, K.M.Batoo, M. Hadi, R. Kumar, **M.F. Ijaz *et al.,*** "Structural, optical, and electrical properties of vanadium-doped, lead-free BCZT ceramics" Journal of Alloys and Compounds, 869 (**2021**) 159520. https://doi.org/10.1016/j.jallcom.2021.159520

23. S. Sivakumar, Khalid Mujasam Batoo, **M.F. Ijaz *et al.,* "**Conserved crystal phase and morphology: Electrochemical supremacy of copper (Cu) and iron (Fe) dual-doped nickel oxide and its supercapacitor applications." Inorganic Chemistry Communications. volume 134, pages108959 (**2021**) https://doi.org/10.1016/j.inoche.2021.108959

24. Ritesh Verma,Muhammad Hadi, Ahamad Imran,Y. Slimani,M.F. Ijaz, Impact of Sintering Temperature on Structural, Morphological, Dielectric and Ferroelectric Properties of BCZT and Sr-doped BCZT nanocomposites, *Submitted to : Journal of Applied Physics A: APYA-D-21-02678,September 2021.*

25. R. Verma, A. Chauham, K.M.Batoo, **M.F. Ijaz *et al.,*** , Facile Synthesis of High Lateral Graphene Oxide Sheets for Visible, Light-driven Photocatalytic Degradation of Industrial Dyes *"Submitted to : Cleaner Engineering and Technology. Manuscript Number: CLET-D-21-00256: April 2021"*

26. A. Chauham, K.M.Batoo, **M.F. Ijaz *et al.***, Enhancing visible-light-driven Photocatalytic degradation properties of magnetic CoFe2-2xO4 nanoparticles with dual substitution of Li-Cr ions. *"Submitted to: Journal Advanced Materials Interfaces Manuscript Number:* admi.202101353*: July 2021"*

27. Performance assessment of bio-functionalized Carica papaya - Co3O4 nanoparticles for photocatalytic degradation of industrial dye. Chemical Engineering Journal, *Submitted on 27 Nov,2022*

28. Ritesh Verma; Ankush Chauhan; Rohit Jasrotia; Khalid Mujasam Batoo , Manpreet Kaur; Rajesh Kumar; **M F Ijaz** Investigation of Electrical and Ferroelectric properties of Strontium doped lead-free BCZT ceramics. "*Submitted to: Materials research Bulletin, Feb 2022"*

29. K.M.Batoo, **M.F. Ijaz *et al***., Phase Structure Refinement, Electric Modulus Spectroscopy, Urbach Energy Analysis, and Magnetic Properties of Ce^{3+}–Ni^{2+}-Substituted Y-Type Barium Hexaferrites "*Submitted to: Material Science and Engineering B. Manuscript Number:MSB-D-21-00537, April 2021"*

30. Ankush Chauhan, khalid Mujasam batoo, **M.F. Ijaz *et al.,*** Enhancing visible-light-driven Photocatalytic degradation properties of magnetic CoFe2-2xO4 nanoparticles with dual substitution of Li-Cr ions. "*Submitted to: Journal of Nanoparticle Research. Manuscript Number: NANO-D-21-01209, July 2021"*

31. Nazir Ahmad Mala, Mohd Arif Dar, K.M.Batoo, **M.F. Ijaz *et al*.,** Synthesis, Transport Electrical and Magnetic Properties of Mn2+ doped NiO Nano particles for supercapacitor applications" "*Submitted to:* Journal of Cleaner Production"

32. Ankush Chauhan, Ritesh Verma, Ritesh Verma,Mansi Sharma, Rajesh Kumar, **M.F. Ijaz *et al.,*** Enhancing visible-light-driven Photocatalytic degradation properties of magnetic CoFe2-2xO4 nanoparticles with dual substitution of Li-Cr ions. *Submitted to: Journal of Alloys and Compounds. June15, 2021"*

33. Talal.T. Alshammari, Hamad F. Alharbi, Mahmoud S. Soliman, **M.F.Ijaz***. "Effects of Mg Content on the Microstructural and Mechanical Properties of Al-4Cu-xMg-0.3Ag Alloys" Crystals **2020**, 10(10), 895; https://doi.org/10.3390/cryst10100895

34. Bandar AlMangour, Monis Luqman, , Dariusz Grzesiak, Hamad Al-Harbi, **M. F. Ijaz** "Effect of processing parameters on the microstructure and mechanical properties of Co–Cr–Mo alloy fabricated by selective laser melting"Materials Science and Engineering: A Volume 792, **2020**, https://doi.org/10.1016/j.msea.2020.139456

35. M. Luqman, A. H. Sheikh, A. Sarkar, S. A. Ragab , J. A. Mohammed , **M. F. Ijaz** , Hany S. Abdo, A Comparative Study of the Electrochemical Behaviorof α and β Phase Ti6Al4V Alloy in Ringer's Solution" Crystals **2020**, 10, 190; doi:10.3390/cryst10030190

36. V. Sheremetyev, **M.F. Ijaz**, S. Dubinsky, S.D. Prokoshkin, V.Brailovski, "Characterization of the superelastic and structural characteristics of β-Ti alloys by strain- controlled cycling" In: Journal of Metastable and Nanocrystalline Materials, ISSN: 2297-6620, 31, pp 43-50 https://doi.org/10.4028/www.scientific.net/JMNM.31 publisher: **2019** Trans Tech Publications, Switzerland.

37. Fedelich, A. I. Epishin, G. Nolze, **M.F Ijaz**, T. Feldmann, B. Viguier, D. Poquillon, Y. Le Bouar, A. Ruffini, A. Finel. "Creep of single-crystals of nickel-base superalloys at ultra-high temperature" In: Metallurgical and Materials Transactions A. 49, pp:1-15, **2019** ISI Impact factor 2.0, [https://doi.org/10.1007/s11661-018-4729-6,] publisher: Springer, USA.

38. Ion R, **M.F Ijaz**, Vasilescu C, Osiceanu P, Gordin , DM, Cimpean A, Gloriant T. "Surface characterization , corrosion resistance and in Vitro Bicompatibility of a new Ti-Hf-Mo-Sn Alloy" In: Mater.9,1-15.**2018** [ISI impact factor Journal, Impact factor 2.8, number of citation 4 journal ISSN:1996-1944: CODEN: MATEG9, doi: 10.3390/ma9100818] publisher: MDPI, USA

39. **M. F Ijaz**, S. Dubinsky, Y. Zhukova, S.D. Prokoshkin, V.Brailovski, "Effect of Ta addition on the electrochemical behavior and functional fatigue life of metastable Ti-Zr-Nb based alloy for indwelling implant applications". In: Journals of alloys and compound, 748(**2018**) 51-56, [ISI impact factor Journal, Impact factor 3.7, number of citations 3 journal ISSN: 0925-8388, https://doi.org/10.1016/j.jallcom.2018.03.033,] publisher: Elsevier B.V, USA.

40. **M.F Ijaz**, S. Dubinsky, Y. Zhukova, S.D. Prokoshkin, "Novel electrochemical test bench for evaluating the functional fatigue life of biomedical alloys" In: Journal of the Minerals, metals, and Materials Society JOM (J. Occup. Med.) 69 (**2017**) 1334-1339. [ISI impact factor Journal, Impact factor 2.1,

number of citations 3 Jour. ISSN: 1543-1851, https://doi.org/10.1007/s11837-017-2375-x], publisher: Springer, USA.

41. **M.F Ijaz**, Vasilescu C, Drob SI, Osiceanu P, Kim HY, Miyazaki S, Gordin D.M, Gloriant T. "Electrochemical Characterization of biomedical (Ti-Zr)-Mo-Sn alloy exhibiting large superelastic recovery strain" In: Mater. Corros., 68 (**2017**), 1220. [ISI impact factor Journal, Impact factor 1.8, number of citation 2, journal ISSN : 1521-4176,https://doi.org/10.1002/maco.201709484] publisher: WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim,Germany.
42. **M.F Ijaz,** Laille D, Heraud L, Gordin D, Castany P, Gloriant T. "Design of novel superelastic Ti-23Hf-3Mo-4Sn biomedical alloy combining low modulus, high strength and large recovery strain" In: Mater. letters., 177 (**2016**), pp.39-41. [ISI impact factor Journal, Impact factor 2.6, numberofcitations6, journalISSN:0167-577X https://doi.org/10.1016/j.matlet.2016.04.184] publisher: Elsevier B.V,USA.
43. **M.F Ijaz**, Kim HY, Hosoda H, Miyazaki S. "Superelastic properties of biomedical (Ti-Zr)-Mo-Sn Alloys" In: Mater. Sci. Eng. C. (Mater. Biol. Appl.), 48 (**2015**), pp. 11-20. [ISI impact factor Journal, Impact factor 5.1, number of citations 62, journal ISSN :1873-0191 https://doi.org/10.1016/j.msec.2014.11.010] publisher: Elsevier B.V USA
44. **M.F Ijaz**, Kim HY, Hosoda H, Miyazaki S. "Effect of Sn addition on stress hysteresis and superelastic properties of a Ti-15Nb-3Mo alloy" In: Scripta Materilia, 72-73 (**2014**), pp. 29-32. [ISI impact factor Journal, Impact factor 5, number of citations 43, journal ISSN :1359-6462 https://doi.org/10.1016/j.scriptamat.2013.10.007] publisher: Elsevier B.V USA.

B. List of Conference Publication and Presentation at International Venues

1. M.F. Ijaz, ABSTRACT: Improvisation of phase stability and texture in biomedical Ti-based alloys for ultra low modulus applications , TMS 2024 Annual Meeting & Exhibition,March 3–7, 2024 | Hyatt Regency Orlando | Orlando, Florida, USA
2. M.F. Ijaz . Improvement of superelastic properties of Ti-Zr-based biomedical alloy by thermomechanical treatment; Session chair and speaker at the "INTERNATIONAL CONFERENCE AND EXHIBITION OF SCIENCE" College of Science, King Saud University, Riyadh, Saudi Arabia February 2023 [ICES 2023 https://www.ices-ksa.org/] Riyadh , Saudi Arabia.
3. Bassin Tayyeb Nashiri, M.F. Ijaz; 479# A novel approach to envisage the sustainable bulk Nano structuring of Al alloys sheets via simple cryorolling plus annealing treatment: An interim study. INTERNATIONAL

CONFERENCE AND EXHIBITION OF SCIENCE" College of Science, King Saud University, Riyadh, Saudi Arabia February 2023 [ICES 2023 https://www.ices-ksa.org/] Riyadh Saudi Arabia.

4. M.F.Ijaz, Ahmed Zaki Alsaggaf , Hamad Al-Harbi, Prospects of Polymer based Nanofiber Membranes in developing sustainable clean water technologies, Workshop on Applications of Advanced Sustainable Materials, AFML , Center for Applied Materials, Qatar University : 17-May-2022.

5. M.F.Ijaz , Design and Fabrication of a cost -effective orthopedic medical implant The 6th International conference on disability and Rehabilitation . King Salman Center for Disability Research, Riyadh, Saudi Arabia. 4-6 Dec, 2022. https://icdr.org.sa

6. Muhammad Farzik Ijaz, ICES-23-P420, Shape memory alloys in Medical Implants-Overview, Mechanical properties and Application. International Conference and Exhibition for Science ICES 2023, KSU, RIYADH, Saudi Arabia. https://ices-ksa.org/

7. M.F.Ijaz, Bassim T. Nashiri, Faraz Hussain Hashmi, **Paper id:85** Title: Aspect of Thermomechanical Processing routes in the sustainable development of high strength-to-weight ratio materials, INTERNATIONAL CONFERENCE ON SUSTAINABILITY: DEVELOPMENTS AND INNOVATIONS (ICSDI 2022) Riyadh, Saudi Arabia February 19 - 22, 2022.

8. Fahad Asiri, **M.F.Ijaz**, Mohammed Alotaibi , Abdul Wahab Alessa , Bassam A. Albassam, **Paper id: 75** Title: Design and Analysis of Automated Pneaumatic Jack System deploying Vehicle Exahust Power, INTERNATIONAL CONFERENCE ON SUSTAINABILITY: DEVELOPMENTS AND INNOVATIONS (ICSDI 2022) Riyadh, Saudi Arabia February 19 - 22, 2022.

9. Meshari Aloraini, Muhammad Farzik Ijaz*, Rayan Alajlan, Khalid Almuhaya, **Paper id: 124** Title: Design and Fabrication of a Cost-effective Lower Artificial Limb, INTERNATIONAL CONFERENCE ON SUSTAINABILITY: DEVELOPMENTS AND INNOVATIONS (ICSDI 2022) Riyadh, Saudi Arabia February 19 - 22, 2022.

10. Bassim T. Nashiri, **M.F. Ijaz,** Faraz Hussain Hashmi, Mechanical Properties Improvement of Ultrafine-Grained Al alloys Sheets by Cryorolling: A Review, Lecture Notes in Mechanical Engineering, Springer. ICAMEMS-**2022**, VIT-AP university.

11. Fahad Asiri, **M.F.Ijaz**, Mohammed Alotaibi , Abdul Wahab Alessa , Bassam A. Albassam Design and Analysis of Automated Pneaumatic Jack System deploying Vehicle Exahust Power, The 3rd International Conference on NEW TRENDS IN SUSTAINABLE ENERGY "FROM WASTE ENERGY" ICNTSE 2021, ICNTSE'21,Egypt.[Poster Presentation]
12. Bassim T. Nashiri, **M.F. Ijaz,** 033 -- 'Al-Li for Aerospace and Space Launch Applications: A Review ICAMEMS_V1_2022,033 VIT-AP university

13. Abdullah Asir Alshehri, **M.F. Ijaz**, Faraz Hussain Hashmi, Mohammed Khalid Almasri, Khalid Fahad Alturk, Design and Manufacturing of human Powered Sanitizer Machine, 4th-Pak-Turk-Conference-Paper,03-04Nov,**2021**.

14. **Muhammad Farzik Ijaz**, Fahad Asiri, Faraz Hussain Hashmi, Design and Manufacturing of test bench for Predicting Fatigue Life of Metallic Implants, 1st Conference on Sustainable Process Systems Engineering, October, **2021**.

15. **M.F. Ijaz, B. Viguier, et al.** Revealing Nanoscale deformation during high temperature creep of Ni-based single crystal super alloys, International Conference on Multidisciplinary Nano Research (ICMNR-2021) (Virtual Conference), August 02-04, **2021**, AUST Pakistan. **KEY NOTE SPEAKER:** https://aust.edu.pk/international-conference-on-multidisciplinary-nano-research/

16. Losertova, **M.F. Ijaz** *et. al*, "Microstructure of Ti– Mo–Zr–Ta–Sn alloy prepared by plasma melting" 28th International Conference on Metallurgy and Materials, Brno, Czech Republic, **2019**, EU, ISSN:2694-DOI:https://doi.org/10.37904/metal.2019.924

17. **M.F Ijaz**, B. Viguier, D. Poquillon, 18th International Conference on the Strength of Mat. (ICSMA 18), 07/15/2018 - 07/19/2018 OH, Ohio State University, Columbus, Ohio, **USA**). "Studying the mechanisms for pore annihilation during Hot Isostatic Pressing of Nickel based superalloys single crystals". http://www.icsma18.org/icsma18/downloads/ICSMA18_Abstract_Book.pdf,

18. **M.**F**Ijaz**, B. Viguier, D. Poquillon *et al.*, "EBSD-FIB assisted experimental investigation for elucidating the pore closure mechanism after Hipping treatment of Single crystalline CMSX4 super alloy "2.Plasticité conférence 2018 [Nancy **France**]: https://plasticite2018.sciencesconf.org, (Oral and Poster presentation, Abstract page #40 and 61)

19. Vojtěch K, Monika L, Jan Š, Kateřina K, **M.F Ijaz** " Influence of processing technologyon fracture feature of Ti6Al4V"IOP Conference Series; iopscience.iop.org/journal/1757-899X Materials Science and Engineering [IOP. Conference proceedings]. (2019) 012046 [PHD Supervision]

20. **M.F Ijaz**, Kim HY, Hosoda H, Miyazaki S, Effect of Sn addition on the superelastic properties of Ti-Nb-3Mo-(0-1.25) Sn alloys, The Japanese institute of Metals and Materials (日本金属学会講演概要. (2012) 年春期大会、横浜国立大), 193-0152. [Conference proceedings]

21. **M.F Ijaz**, Kim HY, Hosoda H, Miyazaki S. Effect of heat treatment temperature on microstructure and superelasticproperties of Ti-Nb-3Mo-(0-1.25) Sn alloys Japanese in TheJapanese institute of MetalsandMaterials(日本金属学会講演概要. (2012) 年秋期大会、愛媛大学), 595-0410. [Conference proceedings]

22. **M.F Ijaz**, Kim HY, Hosoda H, Miyazaki S. "Superelastic properties of Ti-Zr-Mo-SnAlloys" The Japan-Korea Joint Workshop on Superelastic Technologies (TICMS-2013), 10. [Conference proceedings]

23. **M.F Ijaz**, Kim HY, Hosoda H, Miyazaki S. "Superelastic properties of (Ti-50Zr)-Mo-Sn alloys" The Japanese institute of Metals and Materials (日本金属学会講演概要.2013年秋期大会、金沢大学), 328-0450. [Conference proceedings]

C. Workshops and Seminar Participation:

1. The Education and Training Evaluation Commission (ETEC), represented by the National Center for Academic Accreditation and Evaluation (NCAAA) is pleased to invite you to attend a webinar entitled: "From Vision to Success: Designing Impactful Learning Outcomes" October 25, 2023,Riyadg Saudi Arabia.
2. Workshop by National Center for Assessment (NCA) in Riyadh (one of the centers of the Education and Training Evaluation Commission (ETEC))"Developing Questions for Engineering and Architecture Disciplines Workshop". Riyadh on Wednesday 27/9/2023 G
3. Scientific Lectures Program "Natural Fibers/Polymer Composites for Various Applications" The Deanship of Scientific Research, KSU, 6-7 March 2022, Saudi Arabia.
4. Workshop on "Preparation of Accreditation requirement"; Deanship of Skills Development, College of Engineering, KSU, 24-27 March 2022, Saudi Arabia.

5. Effective Academic Teaching Workshop, KSU, 5-6 December 2020, Saudi Arabia.

6. OBE workshop: Introduction to OBE Engineering" Sep 22, 2021 01:00 PM Riyadh, Saudi Arabia.

7. How to write a Project Proposal/Research Paper: Workshop October 4 ,2021 The Centre for Writing in English at the College of Arts at King Saud University Saudi Arabia.

8. 9th International conference on Water Resources and Arid Environments 29-31 March, 2021. https://icwrae-psipw.org, Saudi Arabia.

9. Eighth Undergraduate Virtual Research Competition, held on Tuesday, June 8, 2021, Tuesday, June 8, 2021. URC Team, Abu Dhabi University. https://www.adu.ac.ae/urc.

10. Workshop; New methods of Damage and Failure Analysis of Structural Parts 2018, September 10 – 14, 2018 Ostrava, **Czech Republic**

11. Workshop [Chantier du STAE-C=VM2]: Ageing of metallic aeronautical materials and structures, Feb 2018: INP-ENSIACET **France**.

12. 24th International Symposium on Metastable, Amorphous and Nanostructured Materials, Spain, June 18-23, 2017. San Sebastian, **Spain**. (ISMANAM 2017, APPLICATIONS (Abstract page # 267 Oral and Poster presentation)

13. 5th Workshop on Materials Science; NIMS-UR1-CNRS-Saint Gobain (11-13thOctober 2015) INSA, **France**.https://ipr-2018.univ-rennes1.fr/archives/8403(Oralpresentation; Abstract page #47).

14. 5th International seminar on Metallic Biomaterials, (October 2017), NUST, MiSIS, **Russia.** (Oral presentation)

15. 4th International seminar on Metallic Biomaterials (October 2016), NUST, MiSIS, **Russia.**
(Oral presentation)
16. THERMIC 2016. International conference on processing and manufacturing of advanced materials (May 29-June 3, 2016) GRAZ, **Austria**. (Oral presentation abstract)

17. Tsukuba International conference on material Science (TICMS 2013, July 31, 2013) Abstract Page number 24, University of Tsukuba, **Japan**. (Oral presentation)

18. The 9th Pacific Rim International Conference on Advanced Materials and Processing (PRICM9: 2016), Kyoto International Conference Center, **Japan**. (Oral presentation)

D. THESIS and Proposal JURY MEMBERSHIPS

1. Engr. Talal.Ahmed Alshamri, Influence of Cu/Mg ratio and pre-deformation on the mechanical properties of aged Al-Cu-Mg-Ag alloys. Supervisor Name: Dr. Hamad F. Alharbi, College of Engineering at King Saud University 2020.
2. Engr. Abdullah Saleh Alshammari, Investigation of The Fabrication of 3D Microand Nanostructures of Photosensitive Materials with Femtosecond Laser, Supervisor Name: Dr. Zeyad A. Almutairi . College of Engineering at King Saud University 2020.
3. Engr. Mohammed Saeed Al-Amri, Influence of different ageing treatment and temperature on the mechanical properties and wear behavior of 6063Al-15vol.%B4C composite, Supervisor Name: Dr. Magdy Elrayes. College of Engineering at King Saud University 2021.
4. Engr. Naif Saud Alowaysi, Synthesis and Development of Porous Titanium Alloys using Powder Metallurgy Technique for Orthopedic and Dental Applications, Supervisor Name: Prof. M.S. Soliman. College of Engineering at King Saud University 2021.
5. Engr. Bandar Almeshari, Development of Thermoplastic composite as fused deposition medelling (FDM) Filament, Supervisor Name: Prof. Abdulhakim A. Almajid. College of Engineering at King Saud University 2022.
6. Engr. Yassir Bahri, Development and Characterization of Ti- Zr-Ta-Sn Alloys for Biomedical Applications, Supervisor Name: Prof. Hamad F Harbi. College of Engineering at King Saud University 2022.

E. Research Grants and Significant International Collaborators

1. Co-Principal Investigator in the project submitted to the British council under the auspices *of UK-Saudi Challenge Fund 2021-22 – Call.* The title of the project to be submitted is the "Synthesis of High Entropy

alloys for Potential in Energy Conversion and Storage: A Theoretical and Experimental Approach". https://www.britishcouncil.sa/en/programmes/education/UK-Saudi-Challenge [submitted]

2. Principal Investigator in the project submitted to the Saudi Standards, Metrology and Quality Organization (SASO), Subject number (7-12), "*Investigating and evaluating the effect of corrosion or scratching of the coating layer of painted household cooking utensils products (Teflon and granite) in the Saudi market*". [submitted on 19-3-2022]
3. Principal Investigator in the project submitted to the King Salman Center for Disability Research, KSRG-2022-033, The title of the project is the "Artificial Implant for Handicapped Patients". [Accepted on 22-5-2022, Reference KSRG-2022-033]
4. Principal Investigator under the auspices of "Project to the IFDSR _Deanship of Scientific Research KSU" entitled "*Realization of highly efficient ferroelectric hot carrier solar cells (HCSC) via plasmonic assisted carrier injection and slow carrier cooling for solar cell*s". Status Accepted on June 2022. [https://ifdsr.ksu.edu.sa, Reference KSUDR_E175]
5. Co-Investigator under the auspices of "M-ERA.NET" European Commission France par l'ANR (CNRS projects ANR15-MERA-000-03 and ANR15-MERA-0003-04) in the framework of MICROPORES–dedicated for elucidating the mechanism related with the annihilation of micropores during hot isostatic pressing in single-crystal nickel-base super alloys. www.cirimat.cnrs.fr/spip.php?rubrique6&membre=698
6. Co –Investigator/ research fellowship under the financial support of European Commission research project "BIOMIMETIS" financially supported by the French National Research Agency (project ANR-13-IS09-0008-01) and by a research grant from the Romanian Ministry of National Education, CNCS-UEFISCDI(projectPN-II-ID-20-RO-FR-2014). [https://www.insa-rennes.fr/themes-recherche/laboratoires/iscr-cm/publications/print.html]
7. Winner of open international grant competition for Young Scientist Award, grant number: № K4-2016-56 (<<MiSIS>> 2016) dedicated to Materials and technologies for improving the human life span and overall quality of life. [http://science.misis.ru/ru/top100/konkurs/detail.php?ID=14007]
8. Junior researcher/co supervisor for PhD student; International Mobility Academic Researcher- Center of Advanced Innovation Technologies (F207), The European structural and investment (EU Operational Program for Research, Development and Education) in the framework of New materials for biomedicine–dedicated for designing 3D printed bone prostheses and scaffolds for orthopedic application. https://info.sso.vsb.cz/cz.../New-Mat_Biomedicine-VR_Aktivita%201_ENG

F. Integrated Academic Recognition & Awards

1. **Japan** 2015: THE PROVOST'S MEDAL RECIPIENT for outstanding achievement in doctoral thesis, Division of material science, University of Tsukuba, Japan.

   Ph.D. Thesis title: *Improvement in Superelastic and mechanical properties of β-Ti alloys through alloying elements modifications and microstructure control*.

   Date and place of the PhD defense: 16th Feb, 2015; University of Tsukuba, Japan. *https://tsukuba.repo.nii.ac.jp/?action=repository_uri&item_id=34880&file_id=17&file_no= 1*

   Committee (Distinguished Jury): Prof. Y. Mitarai [NIMS Japan], Prof. S. Miyazaki, Prof. H.Y. Kim, Prof. T. Kyono, Prof. Y. Suzuki. [University of Tsukuba, Japan].

   [http://sma.ims.tsukuba.ac.jp/img/achievement_3_15_1.jpg]

   Japan 2012: Graduate foreign student representative for the Division of Material Science, University of Tsukuba, Japan. [http://www.global.tsukuba.ac.jp/masters/materials-science-and-engineering?language=en]

   Master thesis title: Effect of composition and heat treatments on the superlastic properties of Ti-15Nb-3Mo alloy.

   Date and place of the Master's defense: 27th Feb, 2012; University of Tsukuba, Japan.

   Research Supervisor: Prof. S. Miyazaki and Prof. H.Y. Kim [University of Tsukuba, Japan].

2. Recipient of Scholarship prize for Graduate studies from The Ministry of Education, Culture, Science and technology (MEXT) Japan [https://www.thenews.com.pk/archive/print/165984-japanese-embassy-reception-for-pakistani-scholarship-holders]

   B S Thesis Title: Development and characterization of Aluminum Alloy (Al-2014 and 2024).

   Research Supervisor: Prof Dr Muhammad Ajmal, UET, Lahore, Pakistan.

G. Reviewer of Scientific Research Journals

1. MDPI Board of Directors, Special Issue Guest Editor Award "Recent Advances in Light Alloys" Crystals (ISSN2073-4352). Materials Science ("Crystalline Metals and Alloys".)19-8-2022 https://www.mdpi.com/journal/crystals/special_issues/J5C34O7847
2. Journal of Alloys and Compounds.
3. Journal of Advanced Research.
4. Journal of King Saud University – Engineering.
5. Solid State Sciences.
6. Member of Editorial board for Journal of Material Science and Technology Research, https://zealpress.com/jms/index.php/jmstr/about/editorialTeam

EXPERIMENTAL SKILLS

1. Macro and Micro structural investigations of metallic alloys

2. Phase constituent and microstructural investigations while using XRD, SEM, TEM, DSC and EPMA analysis.
3. Texture analysis of polycrystalline materials via conventional XRD diffraction and EBSD methods.
4. CCLM technique and Argon Arc melting methods for the development of metallic ingots

Training and Workshops Attended

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1. 2015-2016: Beam line 22, In-Situ synchrotron analysis at the European Synchrotron Radiation Facility, France
2. 2010-2015: Research and Development Engineer, Miyazaki-Kim lab, Japan.
3. 2007-2009: Material Engineer (Designing and co-editor of lab Manual for MM101 course), Faculty of Materials Science and Engineering, GIKI, Pakistan.
4. New Faculty Orientation and Preparation Program, 2020, organized by the Deanship of Skills Development at King Saud University. The main topics covered in this program: Course Design and Construction (9 hours), Effective Teaching Skills for Higher Education (12 hours)
5. Automation and Digital Technology Thakaa Teck Workshop, King Saud University, Feb 13, 2022 08:00 PM Riyadh

MEMBERSHIPS

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1. Member Japanese Institute of Metals.
2. Member Canadian Institute of Mining, Metallurgy and Petroleum.
3. Member American society for Materials.
4. Reviewer of Mechanical Engineering Exams, for National Center for Assessment in Higher Education (Qiyas), Ministry of Education, Saudi Arabia.
5. Registered as Professional Engineer at Pakistan Engineering Council, Reg No. Metal/01828
6. Equivalence of Master of Science in Engineering Degree awarded by Higher education commission Pakistan. Ref. No.8-/HEC/A&A/2018
7. Equivalence of Doctor of Science in Engineering Degree awarded from Higher education commission Pakistan. No.9-/HEC/A&A/2018
8. Member Old Gallian association (Lawrence College Ghora Gali Murree) Pakistan.
9. Coordination Secretary (2010-2011) PSAJ Japan. https://www.psajapan.com

LINGUISTIC Skills

1. English language written, oral and listening proficiency.
2. Fluent in speaking basic Japanese Language.
3. Presently learning French Language.

ACADEMIC and Professional Recommendations

1. **Prof. Thierry GLORIANT** (Post-doctoral tenure supervisor)
   Director, Institut des Sciences Chimiques de Rennes,INSA Rennes UMR CNRS 6226 ISCR 20 avenue des Buttes de Coesmes Rennes, France 35043Tel: +33 (0) 2 2323 8241 ,[email: thierry.gloriant@insa-rennes.fr]
2. **Prof. Monika Losertova** (Post-doctoral tenure supervisor) Room A 622, 637 - Department of Non-Ferrous Metals, Refining and Recycling, FMMI - Faculty of Metallurgy and Materials Engineering,VŠB-Technical University of Ostrava, 17. listopadu 15, 70833,Ostrava – Poruba, Czech Republic.Tel: +42 (0) 597 325 473, [email: mlosertova@vsb.cz]
3. **Prof. Philipe CASTANY** (Co investigator/supervisor)
   Institut des Sciences Chimiques de Rennes, INSA Rennes UMR CNRS 6226 ISCR 20 avenue des Buttes de Coesmes Rennes, France 35043.Tel: +33 (0) 2 2323 86 34, [email: Philippe.Castany@insa-rennes.fr]
4. **Prof. Shuichi MIYAZAKI** (Master and Ph.D. course supervisor Japan) Miyazaki-Kim Lab, Division of Material science, Graduate school of Pure and Applied Sciences, University of Tsukuba,Ibaraki ken, Japan 305-8573. Tel: +81 (0) 29 853 5283,[email: miyazaki@ims.tsukuba.ac.jp , smiyazaki@gmail.com
5. Prof Bernard VIGUIER (ATER: France) Principal Researcher, CIRIMAT - INP/ENSIACET, Universite de Toulouse4, allée Emile Monso - BP 4436231030 TOULOUSE Cedex 4, France. Tel: 33 (0)5 34 32 34 31, Fax : (+33) 5 34 32 33 99, [email : Bernard.Viguier@ensiacet.fr]
6. Prof Dr. Yulia Zhukova (Project coordinator) Principal Researcher, National University of Science and Technology "MISIS", Center of Nanomaterials and Nanotechnologies, 119049 Leninskiy 4 Moscow, Russian Federation. Tel: +7 (495) 638-46-29 [email: yulia.s.zhukova@gmail.com]
7. Dr. Hamad F. Alharbi (Chairman ME department, KSU University) Mechanical Engineering Department, College of Engineering, King Saud University, PO Box 800, Riyadh 11421, Saudi Arabia
   Email: harbihf@ksu.edu.sa

Appendix

OLD record of Salient Employment History and Professional affiliations [prior to 2019]

Name of Organization	Designation	Scale	Job Profile	Duration Time of contract		
				Dates		Period
				From	To	YY-MM-DD
Faculty of Metallurgy and Materials Engineering, VŠB-Technical University of Ostrava, **Czech republic**	Mobility academic researcher	Lecturer	Visiting faculty for Erasmus exchange student/research in advanced materials	Aug. 2018	Aug 2019	1-06-13
Centre Inter-universitaire de Recherche et d'Ingénierie des Matériaux - UMR CNRS 5085, **France**	Attaché Temporaire d'Enseignement et de Recherche (ATER)	Research associate	Mechanical Engineering of alloys	June 2017	Aug. 2018	01-04-13
National University of Science and Technology MISiS University in Moscow, **Russia**	Young Scientist award winner	Postdoctoral	In-situ corrosion fatigue testing for biomaterials	Sep 2016	March 2017	0-07-05
INSA Rennes- Institut National des Sciences Appliquées, **France**	BIOMIMETIS	Co-investigator	Development of Allergenic free biomaterials	April 2015	May 2016	1-01-01
GIKI University, KPK, **Pakistan**	Materials Engineer	Lab Engineer	Instructing lab experiments/ co-editor for lab manual MM101	Jun. 2007	Sep. 2009	02-03-01

Permanent address: Gujarkhan (Po box:47850), Distt: Rawalpindi, Pakistan. Skype id: farzik.ijaz1 (FARZIK IJAZ) [kindly make prior email notification/ leave message for scheduling], +966552631767 (What's App)
Date and place of birth: 08-09-1982, Rawalpindi, Pakistan