

## HANAN ALOLAIYAN

### *CONSULTANT IN QUALITY AND STRATEGIC PLANNING AND ASSOCIATE PROFESSOR IN MATHEMATICS*

- WORK HISTORY**
- VICE DEANSHIP OF QUALITY AND DEVELOPMENT, FOR QUALITY AFFAIRS, KING SAUD UNIVERSITY**  
**2020- NOW**
  - CONSULTANT IN THE NATIONAL CENTER OF ACADEMIC ACCREDITATION AND EVALUATION, SA**  
2011-2019.
  - VICE DEAN OF QUALITY AND DEVELOPMENT DEANSHIP - KING SAUD UNIVERSITY**  
2005-2011.
  - VICE DEAN COLLEGE OF SCIENCE - KING SAUD UNIVERSITY**  
2004-2008.
  - ASSOCIATE PROFESSOR –MATHEMATICS- KING SAUD UNIVERSITY**

- Scientific Activities
1. Alolaiyan, H, Maqbool, K, Yousaf, Razaq, A. On quasi-irresolute characterization of topological loops. SCIENCE PROGRESS, Q2. 2021.
  2. Alolaiyan, H, Razaq, A, Yousaf, A, Zahra, R, A Comprehensive Overview on the Formation of Homomorphic Copies in Coset Graphs for the Modular Group, JOURNAL OF MATHEMATICS, Q2. 2021.
  3. Ali, G; Alolaiyan, H; (...); Lateef, A, A Novel MADM Framework under q-Rung Orthopair Fuzzy Bipolar Soft Sets, Mathematics, Q1. 2021.
  4. Alolaiyan, H; Alshehri, HA; (...); Gulzar, M, A Novel Algebraic Structure of (alpha, beta)-Complex Fuzzy Subgroups, ENTROPY, Q2. 2021.
  5. Alolaiyan, H; Mateen, MH; (...); Arslan, F, A Certain Structure of Bipolar Fuzzy Subrings, SYMMETRY-BASEL Q2. 2021.

6. Rauf, HT; Lali, MIU; Alolaiyan, H; Irfan, R, Time series forecasting of COVID-19 transmission in Asia Pacific countries using deep neural networks, PERSONAL AND UBIQUITOUS COMPUTING, Q2. 2021.
1. Yousaf, A; Alolaiyan, H; Nadeem, M; Razaq, A, Topological analysis of carbon and boron nitride nanotubes , SCIENTIFIC REPORTS, JUN 16 2020.
2. Alolaiyan, H ; Riaz, A; Razaq, A; Saleem, N; Zeeshan, A; Bhatti, MM, Effects of Double Diffusion Convection on Third Grade Nanofluid through a Curved Compliant Peristaltic Channel, COATINGS, FEB 2020.
3. Shuaib, U; Alolaiyan, H; Razaq, A; Dilbar, S; Tahir, F , On some algebraic aspects of eta-intuitionistic fuzzy subgroups, JOURNAL OF TAIBAH UNIVERSITY FOR SCIENCE, 2020.
4. Yousaf, MA; Alolaiyan, H; Ahmad, M; Dilbar, M; Razaq, A , Comparison of Pre and Post-Action of a Finite Abelian Group Over Certain Nonlinear Schemes, IEEE ACCESS, 2020.
5. Razaq, A; Alolaiyan, H; Ahmad, M; Yousaf, MA; Shuaib, U; Aslam, W; Alawida, M , A Novel Method for Generation of Strong Substitution-Boxes Based on Coset Graphs and Symmetric Groups, IEEE ACCESS, 2020.
6. Yousaf, A ; Alolaiyan, H ; Razaq, A; Younis, M, Evolution of ambiguous numbers under the actions of a Bianchi group, JOURNAL OF TAIBAH UNIVERSITY FOR SCIENCE, 2020.
7. Shuaib, U; Razaq, A; Alolaiyan, H; Saif, MS; Rafiq, A, On Gamma-Interval Valued Fuzzification of Lagrange's Theorem of Gamma-Interval Valued Fuzzy Subgroups, IEEE ACCESS,2020.
8. Riaz, A ; Alolaiyan, H; Razaq, A, Convective Heat Transfer and Magnetohydrodynamics across a Peristaltic Channel Coated with Nonlinear Nanofluid, COATINGS, DEC 2019.
9. Nadeem, M; Yousaf, A; Alolaiyan, H; Razaq, A, Certain polynomials and related topological indices for the series of benzenoid graphs, SCIENTIFIC REPORTS, JUN 24 2019.
10. Hanan Alolaiyan, Awais Yousaf, M. Ameer and Abdul Razaq ,“Non-conjugate graphs associated with finite groups”, IEEE, Access, 2019.
11. Hanan Alolaiyan, Basit Ali, and Mujahid Abbas, “Characterization of a b-metric space completeness via the existence of a fixed point of Ciric-Suzuki type quasi-contractive multivalued operators and applications”, Analele Stiintifice ale Universiteit Ovidius Constanta, 2019.
12. Arshad Riaz, Hanan A. Al-Olayan, Ahmad Zeeshan," Mass Transport with Asymmetric Peristaltic Propulsion Coated with Synovial Fluid", Coatings, 16 November 2018.
13. LAILA LATIF, UMER SHUAIB, HANAN ALOLAIYAN, AND ABDUL RAZAQ “On Fundamental Theorems of t-Intuitionistic Fuzzy Isomorphism of t-Intuitionistic Fuzzy Subgroups”, IEEE, Access, 2018.

14. Abdul Razaq, Hanan Alolaiyan, Atta Ullah, et al, " A Novel Technique for the Construction of Safe a Substitution Boxes Based on Cyclic and Symmetric Groups", SECURITY AND COMMUNICATION NETWORKS, 4 October 2018
15. Hanan Alolaiyan, Basit Ali, Mujahid Abbas, " Fixed point results of Edelstein-Suzuki type multivalued mappings on b-metric spaces with applications", JOURNAL OF NONLINEAR SCIENCES AND APPLICATIONS, 2017
16. Hanan Alolaiyan, Mujahid Abbas, and Talat Nazir " Common fixed points of finite family of setcontraction mappings endowed with a directed graph", in 2018.
17. Hanan Alolaiyan, Naaem Salem, and Mujahid Abbas, "A natural selection of a graphic contraction transformation in fuzzy metric space", Journal of Nonlinear Sciences and Applications (JNSA), Jan. 2018.
18. Hanan Alolaiyan and Mujahid Abbas, "An Application of Stability of Fuzzy Hypergraphs in Medical field", Accepted, Journal of Computational and Theoretical Nanoscience, App. 2017.
19. Hanan Alolaiyan, Imran Zulfiqar, and Muhammad Hussain, "Magic Labeling of Various Line Graphs", Journal of Computational and Theoretical Nanoscience, 2017.
20. Hanan Alolaiyan, "Existence of Coefficient Subring for Transcendental Extension Ring", JOURNAL of Advance on Mathematics, May 2017.
21. Hanan Alolaiyan, Basit Ali, and Mujahid Abbas, "Fixed point results of Edelstein-Suzuki type multivalued mappings on b-metric spaces with applications ", Journal of Nonlinear Sciences and Applications (JNSA), App. 2017.
22. Hanan Alolaiyan, "An Application of Fuzzy Hypergraphs and Linear systems in Medical field", [ICRAPAM 2016] International Conference on Recent Advances in Pure and Applied Mathematics, Turkey, 2016.
23. Hanan Alolaiyan and Ahmad Alghamdi, "On the endomorphism ring of a module with relative chain conditions", British Journal of Mathematics & Computer Science, 2016.
24. Hanan Alolaiyan, "Some Applications of Hypergraphs and Linear systems", 25 the International Workshop on Combinatorial Algorithms, USA, 2015.
25. Ahmad Alghamdi and Hanan Alolaiyan, "The Tensor Product of Semi local Algebras", International Journal of Algebra, 2014.
26. Hanan Alolaiyan, "coefficient subring of a transcendental artinian local ring", proceeding of the 5th Asian Mathematical Conference, Malesia, 2009.
27. Yousef Alkhamees, Hanan Alolaiyan, and Surjet Singh, A Representation theory of chain rings, Colloquium Mathematicum, 2003.
28. Evaluate some research proposals submitted to King Abdulaziz City for Science and Technology (KACST).

29. Evaluate 2 research proposals to King Khalid University. Evaluate a research proposal to Jazan University.
30. Hanan Alolaiyan, "Evaluation of learning outcomes for academic programs in higher education", 4th quality forum in Jazan University, April 21, 2016.
31. Hanan Alolaiyan, "Developmental Review: King Saud University experience", scientific research conference in Egypt, 15-17/12/2008

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## MEMBERSHIP IN COMMITTEES

- Member in the academic committee to review and develop postgraduates' programs in department of Mathematics.
- Member in the main committee to restructure college of Languages and Translation in PNU.
- Member of the strategic plan committee for the National Center for Academic Accreditation and evaluation for the years 2015-2019.
- Member of the main committee for academic accreditation in King Saud University.
- Member of the permanent advisory committee to nominate the heads and deputies of departments in the college of science from 2012-Now.
- Member of the advisory committee in quality deanship.
- Head of the female committee for the self-study report for developmental review by NCAAA.
- Head of the internal committee for iso accreditation.
- Head of the internal audit committee in the female center.
- Member of the main committee for the preparation of the institutional self-assessment for King Saud University.
- Head of the female committee for the 3rd international conference for sciences, which took place in King Saud University.

## **PERSONAL SKILLS Leadership**

1. Led more than 30 accreditation review panels for academic programs and institutions in NCAAA for 8 years.
2. Led the strategic plan team to implement the plan in female sections – KSU.
3. Head of many Academic committees.
4. Present more than 150 workshops about Quality Assurance and Learning Outcomes.

### **Strategic planning**

1. Member strategic plan steering committee, King Saud university 2021.
2. Review Strategic and action Plan for Najran university 2020.
3. Review Strategic and action Plan for Jazan university 2020.
4. Review Strategic and action Plan for Alrayan Colleges 2020.
5. Certificate in Strategic Planning using Balance Scour Card from Gorge Washington University, 2017.
6. Member of KSU strategic plan with McKinsey company.
7. Head teams to build strategic plan for some Universities.
8. Present many workshops discuss strategic plans, Action plans, Operational plans, and Balance Scour Card.
9. Head of Balance Scour Card team in female campus- KSU.

### **Academic programs reviewer**

1. Worked as Independent opinion for Institutional self-study report for Yanbu Colleges, 2021.
2. Worked as Independent opinion for program self-study report for Mathematics program in King Faisal University, 2021.
3. Worked as Independent opinion for program self-study report for Mathematics program in Tabuk University 2021 (in progress).
4. Worked as Independent opinion for program self-study report for many programs in Najran University 2020.
5. Worked as Independent opinion for Institutional self-study report for Qassim university 2020.
6. Worked as Independent opinion for program self-study report for many programs in Jazan university 2020.
7. Accreditation consultant for Master of Science in Finance (MSF) in Effat university 2019.

8. Accreditation consultant for Masters of Translation Studies postgraduate program in Effat university 2019.
9. Accreditation consultant for fashion design program in Qassim University, 2017.
10. Accreditation consultant for Computer Science program in King Khaled University, 2018.
11. Accreditation consultant for Computer engineer program in King Khaled University, 2018.
12. Accreditation consultant for Civil engineer program in King Khaled University, 2018.
13. Accreditation consultant for Mechanical engineer program in King Khaled University, 2018.
14. Accreditation consultant for Master of finance in Science program in Effat University, 2019.
15. Accreditation consultant for Master of Translation in Science program in Effat University, 2019.
16. Accreditation consultant for Aleman Mohamad bin Saud University, 2018.
17. Accreditation consultant for Najran University, 2018.
18. Accreditation consultant for Clinical nutrition program in King Abdul-Aziz University, 2017.
19. Accreditation consultant for PSU, 2016.
20. Accreditation consultant for Alyamamah, 2013.
21. Accreditation consultant for KKU, 2016.
22. Accreditation consultant for Tabuk University, 2015.
23. Accreditation consultant for Prince Sattam University, 2015.
24. Accreditation consultant for Taif University, 2014.
25. Accreditation consultant for Taibah University, 2014.
26. Accreditation consultant for Umm Alqura University, 2014.

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## CURRENT

## PROJECTS

1. Supervisor of a project to develop the learning outcomes for all programs in college of Science in KSA.
2. Member in the committee to evaluate the impact of Accreditation on institutions.
3. Owner of the initiative to develop NCAAA's Templates.