## CURRICULUM VITAE TEMPLATE



Position/Designation: Associate Professor of Mathematics<br>Department:DMPS<br>College: CAS<br>University of Nizwa, Sultanate of Oman

## Personal Information

Name: Dr. Mahmood Khalid Jasim
Marital Status: Married
Email Address: mahmoodkhalid@unizwa.edu.om
Contact Numbers: 0096895786740
Academic Qualifications
O Ph.D. Applied Mathematics, Indian Institute of Technology Roorkee (IITR) (formerly University of Roorkee), India, 1999
O M. Sc. Mathematics, Indian Institute of Technology (IITK), Kanpur, India, 1990
O B. Sc. Mathematics, College of Education, Baghdad University, Baghdad, Iraq, 1982
O Credential Evaluation and Authentication Report, WES, USA, Ref\# 2116997/aag dated 31/01/2008" USA Equivalency: Earned doctorate (Ph. D.) in Mathematical Physics from regionally accredited institution.

## Teaching Activities, Current/Previous Experience

## A2. TEACHING

## A2.1 Instruction and Project supervisors

(a) Credit courses at University of Nizwa

| No. | Course Code | Course Name | Credit <br> Hours | No of <br> registered <br> students | Semester |
| ---: | ---: | :--- | ---: | ---: | ---: |
| 1. | MATH221 | Foundation of <br> Mathematics | 3 | 14 | Fall 2008-2009 |
| 2. | MATH492 | Topic in Math II | 3 | 9 | Fall 2008-2009 |
| 3. | MATH315 | Partial Diff. Equations | 3 | 3 | Spring 2008-2009 |
| 4. | MATH354 | Numerical Analysis | 3 | 4 | Spring 2008-2009 |





| 71. | MATH354/CHPE403 | Numerical Analysis | 3 | 9 | Summer 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 72. | MATH312 | Differential Equations for Engineering | 3 | 28 | Summer 2015 |
| 73. | MATh325 | Linear Algebra\& Multi variant Calculus | 3 | 18 | Summer 2015 |
| 74. | MATH215 | Ordinary Differential Equation | 3 | 8 | Fall 2015-2016 |
| 75. | MATH325 | Linear Algebra\& Multi variant Calculus | 3 | 28 | Fall 2015-2016 |
| 76. | MATH325 | Linear Algebra\& Multi variant Calculus | 3 | 16 | Spring 2015-2016 |
| 77. | LOGI100 | Introduction to logic | 3 | 5 | Spring 2015-2016 |
| 78. | MATH259 | Calculus III | 3 | 13 | Spring 2015-2016 |
| 79. | MATH420 | Project in Mathematics | 2 | 1 | Spring 2015-2016 |
| 80. | MATH354/CHPE403 | Numerical Analysis | 3 | 18 | Summer 2016 |
| 81. | MATH325 | Linear Algebra \& Multi variant Calculus | 3 | 17 | Summer 2016 |
| 82. | MATH312 | Differential Equations for Engineering | 3 | 53 | Summer 2016 |
| 83. | MATH215 | Ordinary Differential Equation | 3 | 4 | Fall 2016-2017 |
| 84. | MATH325 | Linear Algebra \& Multi variant Calculus | 3 | 15 | Fall 2016-2017 |
| 85. | MATH354/CHPE403 | Numerical Analysis | 3 | 22 | Spring 2016-2017 |
| 86. | MATH325 | Linear Algebra \& Multivariate calculus | 3 | 8 | Spring 2016-207 |
|  | MATH212 | Calculus II | 3 | 59 | Spring 2016-2017 |
| 88. | MATH354/CHPE403 | Numerical Analysis | 3 | 10 | $\begin{aligned} & \text { Summer 2016- } \\ & 2017 \end{aligned}$ |
| 89. | MATH1 16 | Pre-calculus | 4 | 27 | $\begin{aligned} & \text { Summer 2016- } \\ & 2017 \end{aligned}$ |
| 90. | MATH325 | Linear Algebra \& Multivariate calculus | 3 | 7 | Fall 2017-2018 |
| 91. | MATH212 | Calculus II | 3 | 65 | Fall 2017-2018 |



| 113. | MATH211 | Calculus I | 4 | 46 | FALL 2020-2021 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | MATH222 | Discrete Mathematics | 3 | 70 | FALL 2020-2021 |
| 115. | MATH492 | Topic in Mathematics II (Numerical Modeling) | 3 | 11 | FALL 2020-2021 |
|  | MATH212 | Calculus II | 3 | 75 | Spring 2020-2021 |
|  | MATH211 | Calculus I | 4 | 37 | Spring 2020-2021 |
|  | MATH222 | Discrete Mathematics | 3 | 54 | Spring 2020-2021 |
| 119. | MATH492 | Topic in Mathematics III (Tensor Calculus) | 3 | 22 | Spring 2020-2021 |
| 120. | MATH211 | Calculus I | 4 | 42 | $\begin{aligned} & \text { Summer 2020- } \\ & 2021 \end{aligned}$ |
| 121. | MATH222 | Discrete Mathematics | 3 | 44 | $\begin{aligned} & \text { Summer 2020- } \\ & 2021 \end{aligned}$ |
| 122. | LOGI100 | Introduction to logic | 3 | 48 | $\begin{aligned} & \text { Summer 2020- } \\ & 2021 \end{aligned}$ |
| 123. | MATH211 | Calculus I | 4 | 30 | Fall 2021-2022 |
|  | MATH222 | Discrete Mathematics | 3 | 45 | Fall 2021-2022 |
|  | MATH212 | Calculus II | 3 | 57 | Fall 2021-2022 |
|  | MATH211 | Calculus I | 4 | 87 | Spring 2021-2022 |
|  | MATH222 | Discrete Mathematics | 3 | 67 | Spring 2021-2022 |
|  | MATH212 | Calculus II | 3 | 41 | Spring 2021-2022 |
| 129. | ECON503 | Mathematicl Economic (Master course) | 3 | 2 | Spring 2021-2022 |
| 130. | MATH421 | Graduate Project | 6 | 12 | Spring 2021-2022 |


| - As a community services, several workshops and school visits have been conducted to sever schools at Nizwa, Ibra and Snaoo. <br> - Basic Mathematics (coordinator) <br> - Workshops |  |  |  |
| :---: | :---: | :---: | :---: |
| No | Title of Workshops | Date | Venue |
| 1 | Teaching Skill Improvement Workshop- Nizwa University | January 2010 | Al-Shaba UON |
| 2 | On Knots and Manifolds | $\begin{array}{ll} \hline 29 & \text { February } \\ 2012 & \\ \hline \end{array}$ | 15L, UON, OMAN |
| 3 | Solutions of Differential Equations from Transforms Techniques (SDET ${ }^{2}$ ) | $\begin{aligned} & 30 \text { January- } 1^{\text {st }} \\ & \text { February, } 2014 \end{aligned}$ | COMSTECH, Pakistan |
| 4 | On Knots and Manifolds | 15 May, 2014 | 15L, UON, OMAN |
| 5 | The use of OER to Enhance the Quality of Teaching and Learning | 20/April, 2017 | Higher College of  <br> Technology $(\mathrm{HCT})$, <br> Muscat, Oman  |

## (C) Postgraduate students at the University of Nizwa/ Supervisor

Guided more than 50 Master students at UoN as a $3^{\text {rd }}$ supervisor

## Supervised Graduation Projects at UON

| No. | Name of the Student | Name of the Project | Year |
| :---: | :---: | :---: | :---: |
| 1. | May Suleem Hamdan Al-Abri | On Similarity Transformation Method with an Application to Shallow Water Equations | 2009 |
| 2. | Aisha Rashid Mohammed AlHashmi | Monge's Method: Theory and Application | 2011 |
| 3. | Ashwaq Mahfoodh Hamed AlRwahi | Monge's Method: Theory and Application | 2011 |
| 4. | Maythaa Salim Mubarak AL- <br> Shauili | Numerical Methods: Theory and Application | 2012 |




(d) Team or collaborative efforts at the University of Nizwa

- Delivering several jointly seminars
- Development the curriculum of the mathematics degree plan
- Proposed and actively involved in the volunteer projects to the University of Nizwa.
- Actively involved in the culture week
- Chairing sessions of Education conferences at University of Nizwa
- Program Chair of ACIT2014 conferences.
- Development of strategic plan of Mathematical \& physical Sciences Department and Asst. Dean for Graduate Studies \& Research at University of Nizwa.
- Proposed two new programs for education department (B.Ed. basic education).
- Prepare a new Master program in Applied Mathematics at University of Nizwa (Approved 2020 by Ministry of Higher Education)


## (e) Experience prior to joining Nizwa University

## A- Dubai University/UAE

1- Teaching (Pre Math I- Pre Math II, Math's for business I , Math for business II,
Math for sciences)
2- Academic Advisor for students
3- Member of the General education department board.
B- University of Al-Mustansiryha - College of Engineering \& Sciences / IRAQ

1. Associate Prof. of Mathematics, College of Engineering, Al-Mustansiryha University, 20052007
2. Associate Prof. of Mathematics, College of Science, Al-Mustansiryha University, 20032005
3. Head of Mathematics Department, college of Science, Al-Mustansiryha University, 20022003
4. Asst. Dean of student's welfare, College of Engineering, Al-Mustansiryha University, 20012002
5. Manger of Scientific Affairs, College of Engineering, Al-Mustansiryha University, 20002001
6. Lecturer then Asst. Prof., College of Engineering, Al-Mustansiryha University, 1992-2002
7. Chairing several committees at Department, College and University level as well as at the Ministry level.
8. Teaching many courses for undergraduate as well as postgraduate like( Tensor analysis, Differential equation for engineering, ODE and PDE, Mathematical physics, Mathematical modeling, Mathematical methods, etc)
9. Supervised Ph. D students at Baghdad University, Al-Mustansiryha University, Iraq and MANONMANIAM SUNDARANAR UNIVERISY, India:
i. "Some relativistic models of charged fluid spheres in terms of differential equations", Athraa Ausama Kawam Al-Klldaar, Baghdad University, 2004.
ii. "Some exact spherical symmetric fields and core solutions in general relativity" Dhuha Majeed Saleh Al-Yassiri, College of Science, Al-Mustansiryha University, 2005.
iii. Some Exact Solutions for Fluid Spheres in General Relativity", Smitha TT, MANONMANIAM SUNDARANAR UNIVERISY, India, 2014
10. Supervised several M Sc thesis at Al-Mustansiryha University, and Babylon University, Iraq:
i. "Some exact solution for the spherically symmetric four-fold of Class one" Farah Yaseen, Al Mustansiryha University, Baghdad, IRAQ,(2006- 2009)
ii. "SERIES SOLUTION METHOD WITH APPLICATION TO SPHERICAL SYMMETRIC MODEL OF CLASS TWO" Arwa A Abdul Malik, Al Mustansiryha University, Baghdad, IRAQ, (2006-2009)
iii. "Handwritten Numeral Recognition using Fuzzy Logic", Anwar Hassan Mahdy, College of Science, Al-Mustansiryha University, 2005
iv. "Monge's Methods with its application to radiating fluid spheres in general relativity", Mohammed A. H. Sarhan Al-Ani, College of Science, Al-Mustansiryha University, 2005
v. "Artificial Neural Networks for face recognition application", Muna Abdul AlHussain, College of Science, Al-Mustansiryha University, 2004
vi. "Symmetry methods for solving second order ordinary differential equations", Abdul Hakim Abdullah Ahmed (On leave study, Yemen), College of Science, AlMustansiryha University, 2004
vii. "On similarity solutions of second order differential equations", Ahmed Najim Abdullah, College of Education, Babylon University, 2003
A2.2 CURRICULUM DEVELOPMENT AND CONFERENCES MANAGING

1- Developed the curriculum of the mathematics section plan degree at UON. (2009, 2010, 2012, 2013, 2014, 2020)
2- Proposed Master degree and revised its curriculum, 2020.
3- Program chair of International Arab Conference on Information Technology (ACIT2014) Dec. 911, 2014, University of Nizwa, OMAN.
4- Vice chair of the $4^{\text {th }}$ International Conference of the Department of Education and Cultural Studies in Collaboration with the Scientific Society of Colleges of Education in Arab Universities. Conference Title: The Teacher: preparation and lifelong learning in a changing world, 1-3/March, 2016, University of Nizwa, Oman
5- Vice chair of the $1^{\text {st }}$ International Conference of the Department of Arabic Languages, $28^{\text {th }}$ - $30^{\text {th }}$ of Nov., 2016, University of Nizwa, Oman

## A2.3 SCHOLARSHIP IN TEACHING

$>$ Several lecture notes have been prepared for several courses.
$>$ Actively involved in teaching and research.
$>$ The evaluations of teaching quality achieve an average of more than $80 \%$

## A2.4 Teaching outside of the course/ classroom

$>$ I have assigned office hours for the students as well as assign some extra hours for help and support our students.
$>$ Actively involved in advising my students as well as support others. In addition, I served as college academic advisor from 2011-2016.
$>$ Actively involved in all DMPS, College as well as University activities.
$>$ Conduct several workshops, lectures and seminars to the community.

## A2.5 STUDENTS EVALUATIONS

The average of student evaluation for the past three years above $81 \%$

| No. | Semester | Total <br> Enrolled <br> Students | Participating <br> Rate | Overall Average |
| :--- | :--- | :--- | :--- | :--- |
| 1 | Summer <br> $2020-2021$ | 213 | 86.47 | $80.61 \%$ |
| 2 | Spring <br> $2020-2021$ | 396 | 96.2 | $76.67 \%$ |


| 3 | Fall 2020- <br> 2021 | 397 | 90 | $80.8 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| 4 | Summer <br> $2019-2020$ | 122 | 49.9 | $78.8 \%$ |
| 5 | Spring <br> $2019-2020$ | 398 | 81.01 | 81.59 |
| 6 | Fall 2019- <br> 2020 | 396 | 82.76 | $82.81 \%$ |
| 7 | Spring <br> $2020-2021$ | 339 | 77.93 | $85.59 \%$ |
| 8 | Fall 2020- <br> 2021 | 290 | 84.96 | $81.92 \%$ |
| 10 | The Average for last Three years | $\mathbf{8 1 . 0 9 8 \%}$ |  |  |

## Research Activities

(includes but not limited to research interests, conference attendance, conference presentations and publications: refereed journal, articles, books, etc.)

## RESEARCH INTERESTS:

GRG, Modeling, Astrophysics and Space Sciences, ANN, Fuzzy Logic, Numerical Analysis, Mathematical Physics, etc.

## CONFERENCE PRESENTATIONS:

1. Mahmood K Jasim, "Numerical simulations of charged analogues of isentropic super-dense star model" The $2^{\text {nd }}$ International Conference on Numerical analysis and Optimization (NAO11), 36/ Jan. 2011.
2. Mahmood K Jasim, "On Lie's reduction theorem through an application non-conformal accelerating and shearing fluid spheres" presented at international conference on Analysis and Applications (ICAA2010), Muscat, OMAN. http:llwww.squ.edu.om/portals/87/conference/ICAA10/conference2010/ICAA10.html.
3. Dhuha M Salih, Mahmood K Jasim, Smitha T, "On Lie's reduction theorem through an application for a relativistic radiating fluid spheres model" presented at international conference on computing organized by advanced computing research society at IDSA, New Delhi, India, $27^{\text {th }}-28^{\text {th }}$ Dec. 2010.
4. Mahmood K Jasim," A generalized exact solution for a spherical symmetric perfect fluid model of embedding class two "poster at $3^{\text {rd }}$ Astrophysics of Neutron stars workshop, August $31^{\text {st }}-$ Sept. $4^{\text {th }}, 2009$, Istanbul, Turkey.
5. M K Jasim, Arwa A , "Some exact solution of fluid spheres model of class two", presented in the $3{ }^{\text {rd }}$ international conference, Al Ain, UAE, 2008.
6. Mahmood K Jasim, Shatha Sami, "On the symmetry solution of Vaidya-Tikekar isentropic super dense star" Published in the proceeding of Six Jordanian International congress of Mathematics (SJICM), 2004.
7. Dhiaa Wajid Abood, M K Jasim ,"On the internal design of controlled heating of building" published in the proceeding of the second symposium on scientific research outlook in the Arab World, 24-27 March, Sharjha, UAE, 2002.
8. M K Jasim, "On hyperboloid models for super dense star" published in the proceeding of the national conference on recent development in math's, Sep. 28-29, Al-Mustansiryha University, Iraq, 2001.
9. Gupta Y K, M K Jasim ,"Some non-conformally perfect fluid solutions of imbedding class one" published in the proceeding of the national conference on recent development in gravitation and cosmology, Aug. 31-Sep. 2, AMU, India, 1999
10. Gupta Y K, M K Jasim, "Some similarity solutions for accelerating fluid plates of imbedding class one" published in the proceeding of the national symposium on current trends in gravitation and cosmology, Jan.20-21, DDU, India, 1999
11. Gupta Y K, M K Jasim, "On conformally flat radiating fluid spheres" published in the proceeding of the international conference GR15, Dec.16-21, Pune, India, 1997.
Gupta Y K, M K Jasim, "Most general exact solution for V-T isentropic super dense star" published in the proceeding of the international conference GR15, Dec.16-21, Pune, India, 1997

## CONFERENCE ATTENDANCE:

1. The IIT Kanpur conference, India, 1989
2. Iraqi conference on math's, Iraq, 1993
3. Iraqi conference on Engineering, Iraq, 1995
4. Math's conference, Roorkee, India, 1996
5. Recent development of math's analysis in industrial problems, BHU, India, 1998
6. Recent development of Relativity and cosmology, AMU, India, 1999
7. National Symposium on current trends in Gravitation and Cosmology, India, 1999
8. Summer University, Lebanon, 2001
9. Iraqi conference on math's, Iraq, 2001, 2002
10. The Six Jordanian International congress of Mathematics (SJICM), 2004
11. The $3^{\text {rd }}$ international conference, Al Ain, UAE, 2008
12. International Conference on Analysis and Applications (ICAA2010) at Sultan Qaboos University (Muscat, Oman, January 24-26, 2010)
13. International Conference on Numerical Analysis and Optimization (NAO11) at Sultan Qaboos University (Muscat, Oman, January 03-06, 2011)
14. International Workshop on Solution of Differential Equations from Transform Techniques SDETT-2014 (30 Jan - 1 Feb' 2014) Islamabad, PAKISTAN
15. Program chair of International Arab Conference on Information Technology (ACIT2014) Dec. 911, 2014, University of Nizwa, OMAN.
16. International Arab Conference on Information Technology (ACIT2015), Dec. 15-17, 2015, Isra University/ Jordan.
17. National Conference on Information System Trends (NIST 2016), $11^{\text {th }}$ Feb. 2016, University of Nizwa, Oman.
18. Vice chair of The $4^{\text {th }}$ International Conference of the Department of Education and Cultural Studies in Collaboration with the Scientific Society of Colleges of Education in Arab Universities. Conference Title: The Teacher: preparation and lifelong learning in a changing world, 1-3/March, 2016, University of Nizwa, Oman
19. Vice chair of the 1st International Conference of the Department of Arabic Languages, $28^{\text {th }}-30^{\text {th }}$ of Nov.,2016, University of Nizwa, Oman
20. Virtual international seminar (VIS 2020), 1-2, September, 2020
21. Keynote speaker of 3rd Al-Noor International Conference for Science and Technology (3NICST2021), Technology University, 12, August 2021

## PUBLICATIONS:

1. Study on anisotropic star in extended teleparallel gravity with minimal matter coupling, Accepted for Publication Chinese Journal of Physics, (Elsevier journal, Scopus, Impact No. 3.237), 2022
2. Structural properties of charged compact stars with color-flavour-locked quarks matter, Published Modern Physics Letters A Vol. 36, No. 32, 2150227 (2021) (Word Scientific Publishing Company, SCOPUS, SCI), (Impact Factor: 2.066) https://doi.org/10.1142/S0217732321502278
3. Embedding Class I solution in 5D Einstein-Gauss-Bonnet gravity, Published Modern Physics Letters A VOL. 36, NO. 32, (Word Scientific Publishing Company, SCOPUS, SCI), 2150231, 2021, (Impact Factor: 2.066) https:/DOI: 10.1142/S021773232150231X
4. Anisotropic Strange Star in 5D Einstein-Gauss-Bonnet Gravity, published Entropy 2021, 23, 1015 (MDPI, SCIE, Scopus, Impact Factor : 2.524).
5. Wormholes in $f(R, T)$ gravity satisfying the null energy condition with isotropic pressure, Published Annals of Physics Journal, 433, 2021, 168575. https://doi.org/10.1016/j.aop.2021.168575, (Elsevier journal, Scopus, SCI, Impact No. 2.73)
6. Anisotropic quark stars in R2 gravity, published in Physics letter B Journal, Volume 817, 10 June 2021, 136330, (Elsevier journal, Scopus, Impact No. 4.384) 2021 https:// doi.org/ 10.1016/ j.physletb . 2021 . 136330.
7. Isotropic compact stars in 4D Einstein-Gauss-Bonnet gravity, Classical and Quantum Gravity, Volume 38, Number 3 035002, 2021, Published 17 December 2020 (ISI, Scopus, Impact No. 3.487)
8. Charged strange star model with Tolman V metric potential in the Einstein-Maxwell space time, Results in Physics Journal https://doi.org/10.1016/j.rinp.2020.103648, 2021. (ISI, Scopus, (Elsevier's Journals), Impact Factor: 4.476)
9. An EGD model in the background of embedding class I space-time, Eur. Phys. J. C (2020) 80 (10) 1-17: 918 (Springer- Verlag), Impact factor - 4.59, H index - 198 (Germany), 2020, 2020 https://doi.org/10.1140/epjc/s10052-020-08491-w
10. Conformally symmetric traversable wormholes in $f(R, T)$ gravity, Annals of Physics Journal 422 168295, 2020 (Elsevier journal, Scopus, Impact No. 2.73)
11. Conformally symmetric traversable wormholes in modified teleparallel gravity, Phys. Rev. D 101 (8), 084012 (2020) (American Physical Society, H Index: 395, United states) Impact Factor: 5.296, (SCI , Scopus)
12. Cytotoxic and antimicrobial potential of different leaves extracts of R. fruticosus used traditionally to treat diabetes, Toxicology Reports (Elsevier's journals), 7 (2020) 183-187, (impact no 4.81).
13. A generalised embedding class one static solution describing anisotropic fluid sphere, published Astrophysics and Space Science (Springer- Verlag), 365 (1) 1-14, 9 January 2020 (Impact Factor: 1.83).
14. Analytical model of dark energy stars, published MPLA Journal (Word Scientific Publishing Company), Vol. 35 (10), 2050071, 2020, (Impact factor: 2.066).
15. Anisotropic Compact stars in the Buchdahl model: A comprehensive study, PHYSICAL REVIEW D 99, 044029 (2019) (Impact Factor: 5.296, H-index 396, United States, American Physical Society)
16. Minimally deformed anisotropic model of class one space-time by gravitational decoupling, Eur. Phys. Journal C (EPJC) (2019) 79:851, https://doi.org/10.1140/epjc/s10052-019-7377-0 Impact factor -4.59 , H index - 198 (Germany), Nature Indexed
17. Anisotropic strange stars in Tolman-Kuchowicz spacetime, Eur. Phys. J. C (2018) 78:603, https://doi.org/10.1140/epjc/s10052-018-6072-x, (Springer- Verlag), Impact factor: 4.59, H index - 198 (Germany), Nature Indexed
18. Relativistic anisotropic models for compact star with equation of state $\mathrm{p}=\mathrm{f}$ (row), International Journal of Modern Physics D, Vol. 26 (2017) 1750002 (22 pages), (Impact Factor: 2.46), World Scientific Publishing Company, DOI: 10.1142/S021827181750002X
19. Well-behaved Anisotropic Compact Star Models in General Relativity, Astrophysics and Space Sci (2016) 361:352, Springer. (Impact Factor: 1.83), DOI 10.1007/s10509-016-2940-8
20. A New Model for Charged Anisotropic Compact Star, Astrophysics and Space Sci (2016) 361:163 Springer, (Impact Factor: 1.83), DOI 10.1007/s10509-016-2747-7
21. Relativistic Modelling of Stable Anisotropic Super-Dense Star, Reports on Mathematical Physics Journal Elsevier, Vol. 76 (2015), REPORTS ON MATHEMATICAL PHYSICS , Elsevier, (Impact No. 0.72)
22. Some New Similarity Solutions of Einstein Field Equations for Spherical Symmetric Fluid Spheres Model of Class Two, Applied Mathematics and Computation 253 (2015) 242-247, Elsevier (Impact Factor: 4.019)
23. Two New Exact Solutions for Relativistic Perfect Fluid Spheres through Lake's Algorithm, Astrophysics Space Sci (2014) 355:2171, Springer. (Impact Factor: 1.83), DOI 10.1007/s10509-014-2171-9
24. Quasi-Compactness in Quasi-Banach Spaces $\ell_{p}$, for $0<p<1$, Journal of Advances in Mathematics, Vol. 4, No 1, Pp 325-341, Council for Innovative Research, India Nov. 2013
25. A Fuzzy Logic based Handwritten Numeral Recognition System, International Journal of Computer Applications, (ISSN: 0975-8887), Vol. 83 - No. 10, Dec. 2013.
26. Invariant Solutions of Einstein Field Equation for Conformally Flat Fluid Spheres of Embedding Class One", International Journal of Theoretical Physics, DOI 10.1007/s10773-013-1708-y, Springer, 2013
27. Dynamic Stability of Charged Isentropic Super-dense Star Model, Journal of Mathematical and Computational Sciences, Vol. 3, No. 1, 266-277, ISSN: 1927-5307 UK, 2013.
28. A fuzzy Based Feature Extraction Approach for Handwritten Characters, IJCSI International Journal of Computer Science Issues, Vol. 10, Issue 4, No 1, ISSN (Print): 1694-0814 | ISSN (Online): 1694-0784, www.IJCSI.org, 2013.
29. Applications of Lie Group Analysis to a Core Group Model for Isentropic Super-dense stars, Journal of Mathematical and Computational Sciences, Vol. 3, No. 1, 22-31, ISSN: 1927-5307 UK, 2013.
30. Mathematical Modeling of Radon Concentrations in Soil, Journal of Mathematical and Computational Sciences, Vol. 3, No. 3, 755-763 ISSN: 1927-5307 UK, 2013
31. Regional Strategic Sensors Characterizations", Journal of Mathematical and Computational Sciences, Vol. 3, No. 2, 401-418, ISSN: 1927-5307, UK, 2013.
32. On Most General Exact Solution of Plasma Sheath Model for a Negatively Biased Probe, Advance Studies in Theoretical Physics, Vol. 6, No. 9, 447-455, 2012
33. A Plasma Emission Controller for Reactive Magnetron Sputtering of Titanium Dioxide Films, Advances in Theoretical and Applied Mechanics journal, Vol. 5, no. 1, 1-10, 2012
34. Generalized Exact Solution for a Spherical Symmetric Perfect Fluid Model of Embedding Class Two, Applied Mathematical Sciences, Vol. 5, no. 16, 763 - 774, 2011
35. A non-linear Supervised ANN Algorithm for Face Recognition Model using Delphi Languages", Contemporary Engineering Sciences Journal, Vol. 4, no. 4, 177 - 186, 2011
36. A New Generating Solution of a Relativistic Radiating Fluid Spheres Model, Applied Mathematical Sciences, Vol. 5, no. 80, 4005 - 4014, 2011
37. An Extensive Study of Mathematical Wastewater Flow Model over Slime Layers", Applied Mathematical Sciences, Vol. 5, no. 80, 3971 - 3979, 2011
38. On Lie's Reduction Theorem through an Application for a Relativistic Radiating Fluid Spheres Model", International Journal of Algorithms, Computing and Mathematics, Vol.4, No.1, Feb. 2011
39. Similarity Solutions for Relativistic Accelerating Fluid Plates of Embedding Class One Using Symbolic Computation", Advances in Theoretical Physics Journal, Vol. 4, no. 10, 449 - 466, 2010
40. On the Monge's method with its Application to the Conformally Space-time Metric", Babylon University Journal, Vol. 12, No.3, 2006
41. On the Exact Solution of a Space-time Metric Conformal to Mainkoskian Manifold", Journal of Al-Nahrain University, ISSN:1814-5922, Vol. 8(1), pp 60-62, 2005
42. On the Stability of Isentropic Fluid Spheres", Al-Nahrain University Journal, ISSN: 1814-5922, Vol. 8(1), pp 57-59, 2005
43. On the Most General Accurate Solutions for Buchdal's fluid Spheres", Astrophysics and Space Science Journal, Vol. 283, No. 3, Page 337-346, Kluwer Academic Publisher, Netherlands, 2003. (Impact no. 1.96).
44. On Most General Exact Solution for Vaidya-Tikekar Isentropic Super-dense Star", Astrophysics and Space Science Journal, Vol. 272, 403-415, Kluwer Academic Publisher, Netherlands, 2000. (Impact no. 1.96)
45. On the Lie's Reduction Theorem with an Application to Isentropic Fluid Spheres", Al-Nahrain University Journal, Vol. 8, 2006
46. On Artificial Neural Network for Face Recognition Application", College of Education Journal, Vol. 2, 2006
47. Mathematical Model of Fixed Growth Biological System", College of Education Journal, Vol. 1,2006
48. New Charged Model Representing the Situation between the Gravitation Attraction and Electrostatic Repulsion", Engineering and Development Journal, Vol.6, No.1, Iraq, 2002
49. On the Most General Exact Solutions for Buchdal's Spheres", Tata McGrawl-Hill, www.tatamcgrawhill.com, 2001.
50. On $G_{3}(2, S)$ Perfect Fluid Distribution of Embedding Class One with Non-vanishing Curvature Tensor", Progress of Mathematics journal, Vol. 32, No. 2 Pp. 63-74, 1998
51. 

## A3.6 GRANT AND CONTRACT SUPPORT

| Research Proposals Accepted/Submitted |  |  |
| ---: | :--- | :--- |
| Research Project Title | Funding Agency | Reference |
| $\begin{array}{l}\text { 1. A comprehensive study of } \\ \text { exact solutions of Einstein's }\end{array}$ | TRC/PI | BFP/RGP/CBS/22/014 |
| field equations in certain |  |  |
| stellar models: An |  |  |$)$

## A3.8 RESEARCH ACTIVITIES:

O Member, Iraqi Society of Mathematics and Physics
O Member, Iraqi Society of Teachers
O Member, GRG International Society

O Member, American Association for Science and Technology (AASCIT)
O Member, Editorial Board of the American Journal of Applied Mathematics (AJAM), http://www.sciencepublishinggroup.com/j/ajam

O Reviewer, Springer Journals
O Reviewer, The International Arab Conference of Information Technology (ACIT'2014)
O Reviewer, several of Elsevier Journals
O Reviewer, Measurements Elsevier Journal
O Reviewer for Malaysian journal of mathematical sciences, Institute for Mathematical Research (INSPEM), UPM, Malaysian

O Reviewer of Mathematics and System Science Journal, ISSN 2159-5291, USA
O Referee for Ph.D. thesis to award of Ph.D. Degree in Mathematics, IIT Roorkee, INDIA, 2012

O Editorial Board of the American Journal of Applied Mathematics (AJAM), http://www.sciencepublishinggroup.com/j/ajam

CONFERENCE/ SEMINAR /WORKSHOP/ SHORT COURSE/TRAINING(AY20-21)

| No. | Title | Date |
| :--- | :--- | :--- |
| 1 | Solving a second-order hypergeometric different equation by two- <br> step method | International webinar <br> ( Al-Mustansiriyah University, <br> Baghdad, Iraq), 19/10/2020 |
| 2 | Gupta-Jasim Two-Step Method: Innovation, theory and <br> application | UoN, 2020-2021 |
| 3 | Anisotropic Compact Stars Model Using Two Steps Method | UoN, 2020-2021(4/3/2021) |
| 4 | Shadow of charged wormholes in Einstein-Maxwell-Dilaton <br> theory | UoN, 2020-2021(15/4/2021) |
| 5 | From the Possibility to the Certainty of a Supermassive Black <br> Hole | The National Academy of <br> Sciences, India (NASI) - Delhi <br> Chapter, 22/3/2021 |
| 6 | Anisotropic Compact Stars Model Using Two Steps Method | International webinar <br> Organized by the Department of <br> Mathematics, The Islamia <br> University of Bahawalpur, <br> Pakistan, 4/3/2021 |

## Faculty Administrative Experience

O Associate Professor of Mathematics, DMPS, College of Arts and Sciences, University of Nizwa, Oman, September 2008 - present

O Department Quality Officer 2021-present
O Assistant Dean, Graduate Studies and Research, College of Arts \& Sciences, University of Nizwa September 2014 - January 22, 2017
O Head of Department, Mathematics and Physics, College of Arts and Sciences, University of Nizwa, December 2012 - September 2014
O College Academic Advisor, College of Arts and Sciences, University of Nizwa, November 2011 - December 2016

O Adjunct Professor, George Mason University, American University, RAK, UAE, Spring 2008
O Associate Professor, Mathematics, GED, Dubai University, UAE, 2007-2008
O Associate Professor, Mathematics, College of Engineering, Al-Mustansiryha University, 20052007

O Associate Professor, Mathematics, College of Science, Al-Mustansiryha University, 2003-2005
O Head of Department, Mathematics, College of Science, Al-Mustansiryha University, 2002-2003
O Assistant Dean, Students' Welfare, College of Engineering, Al-Mustansiryha University, 20012002

O Manger of Scientific Affairs, College of Engineering, Al-Mustansiryha University, 2000-2001
O Assistant Professor, College of Engineering, Al-Mustansiryha University, 1992-2002
Community Services
CONFERENCE/ SEMINAR /WORKSHOP/ SHORT COURSE/TRAINING(AY20-21)

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| 1 | Solving a second -order hypergeometric different equation by two- <br> step method | International webinar <br> ( Al-Mustansiriyah University, <br> Baghdad, Iraq), 19/10/2020 |
| 2 | Gupta-Jasim Two-Step Method: Innovation, theory and <br> application | UoN, 2020-2021 |
| 3 | Anisotropic Compact Stars Model Using Two Steps Method | UoN, 2020-2021(4/3/2021) |
| 4 | Shadow of charged wormholes in Einstein-Maxwell-Dilaton <br> theory | UoN, 2020-2021(15/4/2021) |
| 5 | From the Possibility to the Certainty of a Supermassive Black <br> Hole | The National Academy of <br> Sciences, India (NASI) - Delhi <br> Chapter, 22/3/2021 |
| 6 | Anisotropic Compact Stars Model Using Two Steps Method | International webinar |


|  |  | Organized by the Department of Mathematics, The Islamia University of Bahawalpur, Pakistan, 4/3/2021 |
| :---: | :---: | :---: |
| $>$ Participation and Contribution in Committees at University, College and Department Levels |  |  |
| $>$ No. | Title | Level |
| 1 | Redesign the M Sc. Mathematics Program and follow up the progress of program till approval | UoN/ 65 /2019 University level |
| 2 | DMPS Quality Assurance Officer: Following all issues related to QA and prepare almost all the related ADRI reports and following OP and its action plan. | Department Level |
| 3 | Department Graduate studies and Research Committee | Department Level |
| 4 | DMPS promotion committee | Department Level |
| 5 | Member of Cultural week and open day organized committee at mathematics section | Department Level |
| 6 | Member of DMPS- Curriculum Review Committee | Department Level |
| 7 | Member of DMPS- Peer Review Committee | Department Level |
| 8 | Member of CAS Quality Assurance committee | College level |
| 9 | CEMIS college promotion committee | University level |
| 10 | More than 28 ADRI reports relevant to different OAAA standards were written, as well as an action plan for the department and the college, which was highly praised by the Dean and CAS QAC. | Department and College level |
| 11 | Preparing a draft of the DMP OP and all of the ADRI reports that go with it. | Department Level |

## PROFESSIONAL SERVICE

Conduct several meetings with Oman Astronomical Society to setup a possibility of research cooperation and center of research at university of Nizwa.

## Consultancy

## Membership in Professional Bodies

O Member, Iraqi Society of Mathematics and Physics

O Member, Iraqi Society of Teachers
O Member, GRG International Society
O Member, American Association for Science and Technology (AASCIT)
O Member, Editorial Board of the American Journal of Applied Mathematics (AJAM), http://www.sciencepublishinggroup.com/j/ajam

O Reviewer, Springer Journals
O Reviewer, The International Arab Conference of Information Technology (ACIT'2014)
O Reviewer, several of Elsevier Journals
O Reviewer, Measurements Elsevier Journal
O Reviewer for Malaysian journal of mathematical sciences, Institute for Mathematical Research (INSPEM), UPM, Malaysian

O Reviewer of Mathematics and System Science Journal, ISSN 2159-5291, USA
O Referee for Ph.D. thesis to award of Ph.D. Degree in Mathematics, IIT Roorkee, INDIA, 2012

O Editorial Board of the American Journal of Applied Mathematics (AJAM), http://www.sciencepublishinggroup.com/j/ajam

Awards and Recognitions
A5 AWARDS AND RECOGNITIONS

| No. | Title of Award | Awarded by |
| :--- | :--- | :--- |
| 1 | Nominate for Abdul Hameed Shoman Arab <br> Researchers Award 2021 | Jordan 2021 |
| 2 | Nominate for TRC 2021 awards for the best <br> published research paper | TRC, Sultanate of Oman 2021 <br> The Reference Number : TRC-AS1348 |
| 3. | A Certificate of Appreciation in recognition of <br> the valuable contribution as the Keynote speaker <br> at 3rd Al-Noor International Conference for Science <br> and Technology (3NICST2021). | University of Technology, Iraq, 11-12 <br> August 2021 |

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