Curriculum Vitae

Position/Designation: **Associate Professor**

Department: **Department of Mathematical and Physical Sciences**

College: **Arts and Sciences**

University of Nizwa, Sultanate of Oman

Personal Information

Name: **Dr. Sunil Kumar Maurya**
Marital Status: **Married**
Email Address: sunil@unizwa.edu.om
Contact Numbers: +968-96502745

Academic Qualifications

- Ph. D, in Mathematics, IIT Roorkee – India, March 2013
- M.Sc. in Mathematics, BHU – India, 2008
- B.Sc. in Mathematics and physics, Lucknow University – India, June 2006

Teaching Activities, Current / Previous Experience

TEACHING

A1.1 COURSES TAUGHT AT THE UNIVERSITY OF NIZWA

No.	Course Code	Course Name	Credit Hours	No. of registered students	Actual Hours	Semester
1	MATH-116	Pre-calculus	12	197	21 Hr/Week	Fall 2014-2015
2	MATH-211	Calculus-I	4	32	3 Hr/Week	Fall 2014-2015
3	MATH-116	Pre-calculus	4	60	11 Hr/Week	Spring 2014-2015
4	MATH-211	Calculus-I	8	62	10 Hr/Week	Spring 2014-2015

5	MATH-215	Differential Equations	3	5	4 Hr/Week	Spring 2014-2015
6	MATH-211	Calculus-I	4	40	7.5 Hr/Week	Summer- 2015
7	ECON-227	Mathematical Economics	3	20	6 Hr/Week	Summer- 2015
8	MATH-116	Pre-Calculus	11	180	21 Hr/Week	Fall-2015-2016
9	MATH-221	Foundation of Mathematics	3	15	4 Hr/Week	Fall-2015-2016
10	MATH-116	Pre-Calculus	4	90	9 Hr/Week	Spring-2015-2016
11	ECON-227	Mathematical Economics	3	36	4 Hr/Week	Spring-2015-2016
12	MATH-323	Foundation of Analysis	1	3	2 Hr/Week	Spring-2015-2016
13	ECON-227	Mathematical Economics	3	28	10 Hr/Week	Summer- 2016
14	MATH-212	Calculus-II	4	70	14 Hr/Week	Summer- 2016
15	MATH-211	Calculus-I (Lab)	1	53	4 Hr/Week	Summer- 2016
16	MATH-116	Pre-calculus	5	181	7 Hr/Week	Fall 2016-2017
17	MATH-221	Foundation of Mathematics	3	13	4 Hr/Week	Fall-2016-2017
18	MATH-340	Introduction to Number theory	3	8	4 Hr/Week	Fall-2016-2017
19	MATH-116	Pre-calculus	5	90	9 Hr/Week	Spring 2016-2017
20	MATH-211	Calculus-I	5	51	5 Hr/Week	Spring 2016-2017
21	ECON-227	Mathematical Economics	3	47	4 Hr/Week	Spring 2016-2017

22	MATH-211	Calculus-I	4	41	7.5 Hr/Week	Summer 2016-2017
24	MATH-215L	Differential Equations Tutorial	1	36	4 Hr/Week	Summer 2016-2017
25	MATH-212	Calculus-II	3	22	5 Hr/Week	Summer 2016-2017
26	MATH221	Foundation of Mathematics	3	47	4 Hr/Week	Fall-2017-2018
27	ECON 503	Mathematical Economics for master	3	4	4 Hr/Week	Fall-2017-2018
28	MATH-211	Calculus-I	4	23	3 Hr/Week	Spring 2017-2018
29.	MATH-315	Partial Differential Equations	3	24	4 Hr/Week	Spring 2017-2018
30.	MATH-212L	Calculus-II	1	37	2 Hr/Week	Spring 2017-2018
31	MATH-211	Calculus-I	4	50	5 Hr/Week	Fall 2018-2019
32	MATH-116	Pre-calculus	4	90	5 Hr/Week	Fall 2018-2019
33	MATH-315	Partial Differential Equations	3	13	4 Hr/Week	Fall 2018-2019
34	MATH221	Foundation of Mathematics	3	99	4 Hr/Week	Fall 2018-2019
35	MATH-340	Introduction to Number theory	3	1	4 Hr/Week	Fall 2018-2019
36	MATH-116	Pre-calculus	5	93	7 Hr/Week	Spring 2018-2019
37	MATH221	Foundation of Mathematics	3	77	4 Hr/Week	Spring 2018-2019

38	MATH-315	Partial Differential Equations	3	26	4 Hr/Week	Spring 2018-2019
39	MATH-116	Pre-calculus	4	88	5 Hr/Week	Fall 2019-2020
40	MATH221	Foundation of Mathematics	3	45	4 Hr/Week	Fall 2019-2020
41	MATH-315	Partial Differential Equations	3	47	4 Hr/Week	Fall 2019-2020
42	MATH-491	Topics in Mathematics-I	3	4	4 Hr/Week	Fall 2019-2020
43	MATH-116	Pre-calculus	3	92	3 Hr/Week	Spring 2019-2020
44	MATH221	Foundation of Mathematics	3	40	4 Hr/Week	Spring 2019-2020
45	MATH-315	Partial Differential Equations	3	60	4 Hr/Week	Spring 2019-2020
46	MATH-491	Foundations of Analysis	1	39	2 Hr/Week	Spring 2019-2020

A1.2 COURSES TAUGHT BEFORE JOINING AT THE UNIVERSITY OF NIZWA

No.	Course Code	Course Name	Credit Hours	No of registered students	Hr/ Week	Semester
1.	ASL-101	Engineering -Mathematics-I	4	90	8	Fall 2012-2013
2.	SML-105	Business-Mathematics	4	40	5	Fall 2012-2013
3.	MTH112	Engineering -Mathematics-I	4	120	8	Spring 2012-2013
4.	MTH103	Probability and Statistics	4	52	5	Spring 2012-2013
5.	MTH219	Operations Research	4	62	5	Spring 2012-2013
6.	MTH112	Engineering -Mathematics-I	4	120	5	Summer 2012-2013

7.	MTH113	Engineering -Mathematics-II	4	120	5	Summer 2012-2013
8.	MTH217	Engineering -Mathematics-III	4	80	5	Summer 2012-2013
9.	MTH112	Engineering -Mathematics-I	4	87	7	Fall 2013-2014
10.	MTH-201	Discrete Mathematics	4	60	5	Fall 2013-2014
11.	MTH219	Operations Research	4	45	5	Fall 2013-2014
12.	MTH113	Engineering -Mathematics-II	4	85	7	Spring 2013-2014
13.	MTH115	Bio-Mathematics-II	8	62	5	Spring 2013-2014
14.	MTB-208	Modern algebra	4	5	5	Spring 2014-2015

Engineering Mathematics-I: Differential Calculus, Integral Calculus, Ordinary differential equations and Fourier series.
Engineering Mathematics-II: Vector calculus, Partial Differential Equations and Laplace transforms.
Engineering Mathematics-III: Matrix, Vector space and Complex analysis.

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

Research interests:

Differential Equations, Similarity Transformations Method (Lie Group of Transformation Method), Exact Solutions of Einstein's Field Equations, Mathematical Physics, Applied Mathematics, General relativity and Cosmology, Modelling of Compact stars, Astronomy and Astrophysics.

Conference presentations:

1. Paper presentation in ''4th International conference on Astrophysics and Particle Physics'' San-Antonio, USA from 13-15 Nov. 2017 .
2. Paper presented in "*INTERNATIONAL CONFERENCE ON MODELLING, OPTIMISATION AND COMPUTING (ICMOC – 2012)",* NI University, Kumaracoil, Nagercoil , Tamilnadu , INDIA.

Conference attendance:

3. Participated in "*INTERNATIONAL CONGRESS OF MATHEMATICIANS 2010*" held at Hyderabad, India from 19 – 27 August 2010.

4. "*ON GENERALIZATION OF VAIDYA-TIKEKER SUPER-DENSE STAR IN GENERAL RELATIVITY*" Poster Presented at International Conference & Homboldt Kolleg held at Lucknow, India from 24 – 27 February 2010.

5. Participated in the Workshop on "*Study Group Meeting on Industrial Problems*" held at Indian Institute of Technology Roorkee organized by Department of Mathematics, IIT Roorkee in collaboration with IMG, IIT Bombay and OCCAM, U.K. (March 16-21, 2009).

6. Participated in the *''Workshop on Differential Geometry"* held at Banaras Hindu University, Varanasi organised by *DST- Centre for Interdisciplinary Mathematical Science (DST-CIMS), BHU* (May 02-11, 2011).

7. Participated in the Workshop on *"Linear and Nonlinear Systems*" held at Banasthali Vidyapith,Varanasi organized by Centre for Mathematical Science (CMS)- Banasthali Vidyapith (Dec. 15-19, 2011).

8. Participated as an organizer in " *15th international Arab Conference on Information Technology (ACIT2014)*" University of Nizwa- Oman, College of Computing and Information Society (CCIS) on December 9-11, 2011.
9. Organized a Workshop on *''UoN e-Research Management''* in University of Nizwa on 17 Nov. 2016.

Publications:

REFEREED JOURNAL PAPERS:

1. **K. N. Singh, S. K. Maurya, A. Errehymy, F. Rahaman, M. Douad**, Physical properties of class I compact star model for linear and Starobinsky f(R,T) functions, accepted for publication in Physics of Dark Universe (2020), Elsevier (Netherlands) , Impact factor: 5.66 **(Quartile: Q1)**
2. **S. K. Maurya,** Extended gravitational decoupling (GD) solution for charged compact star model, European Physical Journal C, Vol. 80, 429 (2020), Springer Verlag (Germany) Impact factor: 4.843 **(Quartile: Q1)**
3. **S. K. Maurya, K.N Singh, B. Dayanandan**, Non-singular solution for anisotropic model by gravitational decoupling in the framework of complete geometric deformation (CGD), European Physical Journal C, Vol. 80, 448 (2020), Springer Verlag (Germany) Impact factor: 4.843 **(Quartile: Q1)**
4. **S.K. Maurya, F. Tello-Ortiz,** Decoupling gravitational sources by MGD approach in Rastall gravity, Physics of Dark Universe, Vol. 29, 100577 (2020) (Elsevier, Netherlands) Impact factor: 5.66 **(Quartile: Q1)**
5. **S. K. Maurya, A.Banerjee, F.Tello -Ortiz**, Buchdahl model in f (R, T) gravity: A comparative study with standard Einstein's gravity, Physics of Dark Universe, Vo. 27 (2020) 100438, Elsevier (Netherlands) Impact factor: 5.66 **(Quartile: Q1)**
6. **S.K. Maurya , F. Tello-Ortiz**, Charged anisotropic compact star in f (R, T) gravity: A minimal geometric deformation gravitational decoupling approach, Physics of Dark Universe, Vo. 27, 100442 (2020), Elsevier (Netherlands) , Impact factor: 5.66 **(Quartile: Q1)**

7. **S.K. Maurya , F. Tello-Ortiz,** Anisotropic fluid spheres in the framework of f (R, T) gravity theory, Annals of Physics, Vol. 414, 168070 (2020), Elsevier (United States) Impact factor: 2.267 **(Quartile: Q1)**
8. **S. K. Maurya, S. D. Maharaj, Jitendra Kumar, A. K. Prasad:** Effect of pressure anisotropy on Buchdahl-type relativistic compact stars, General Relativity and Gravitation Vol 51, 86 (2019), Impact factor: 1.515 (Springer-Verlag, United states) **(Quartile: Q2)**
9. **K. N. Singh, R. K. Bisht, S. K. Maurya, Neeraj Pant**: Static fluid spheres admitting Karmarkar condition, Chinese Physics C Vol. 44, 035101 (2020), IOP Science (United Kingdom) Impact factor: 5.861 **(Quartile: Q1)**
10. **M.K. Jasim, S.K. Maurya, Amina Said Mohammed Al-Sawaii**, A generalised embedding class one static solution describing anisotropic fluid sphere, Astrophysics Space Science, Vol. 365, 9 (2020), Impact factor: 1.681 **(Quartile: Q3)**
11. **B. Dayanandan, Smitha T.T., S. K. Maurya,** Embedding class I spherically symmetric charged compact star model, Astrophysics Space Science, Vol.365,20 (2020), Impact factor: 1.681 **(Quartile: Q3)**
12. **F. Tello-Ortiz, S.K. Maurya ,Y. Gomez-Leyton**, Class I approach as MGD generator, European Physical Journal C, Vol. 80, 324 (2020) , Springer Verlag (Germany) Impact factor: 4.843 **(Quartile: Q1)**
13. **K. N. Singh, S. K. Maurya, M. K. Jasim, F. Rahaman**, Minimally deformed anisotropic model of class one space-time by gravitational decoupling, European Physical Journal C, Vol. 79, 851 (2019) Impact factor: 4.843, Springer Verlag (Germany) **(Quartile: Q1)**
14. **K. N. Singh, S. K. Maurya, F. Rahaman, F. Tello-Ortiz,** A generalized Finch–Skea class one static solution**,** European Physical Journal C, Vol. 79, 381 (2019) Impact factor: 4.843, Springer Verlag (Germany) **(Quartile: Q1)**
15. **F. Tello-Ortiz1, S. K. Maurya, A. Errehymy, K. N. Singh, M. Daoud**, Anisotropic relativistic fluid spheres: an embedding class I Approach, European Physical Journal C, Vol. 79, 885 (2019) **(Quartile: Q1)**
16. **J. Kumar, S. K. Maurya, A.K. Prasad and A. Banerjee**, Relativistic charged spheres: compact stars, compactness and stable configurations, Journal of Cosmology and Astroparticle physics Vol. 2019 (11), 005 (2019) IOP Science, impact factor: 5.524, (United Kingdom) **(Quartile: Q1)**

17. **S. K. Maurya,** A completely deformed anisotropic class one solution for charged compact star: a gravitational decoupling approach, European Physical Journal C, Vol. 79, 958 (2019) Springer Verlag (Germany) Impact factor: 4.843 **(Quartile: Q1)**

18. **S. K. Maurya et al.:** Study of anisotropic strange stars in f (R;T) gravity: An embedding approach under the simplest linear functional of the matter-geometry coupling, Physical Review D, Vol.100, 044014 (2019), (American Physical Society), Impact Factor: 4.394, H-Index-301 (United States), **(Quartile: Q1)**

19. **S.K. Maurya, Debabrata Deb, Saibal Ray, P.K.F. Kuhfittig**, A study of anisotropic compact stars based on embedding class one condition", International Journal of Modern Physics D (World Scientific), Impact factor – 2.17, H index – 65 (Singapore) (2019) **(Quartile: Q1)**

20. **S. K. Maurya, Ayan Banerjee, M. K. Jasim, J. Kumar, A. K. Prasad, and Anirudh Pradhan,** Anisotropic compact stars in the Buchdahl model: A comprehensive study, Physical Review D (American Physical Society), Impact Factor: 4.394, H-Index-301 (United States), (2019) **(Quartile: Q1)**

21. **S. K. Maurya, S. D. Maharaj, D. Deb.:** Generalized anisotropic models for conformal symmetry, Accepted with revision European Physical Journal C, Vol. 79, 170 (2019) Impact factor – 4.843, (Springer- Verlag), (Germany) (2019) **(Quartile: Q1)**

22. **S. K. Maurya et al.:** Study of charged compact stars with class 1 metric under general relativity, Canadian Journal of Physics, Vol. 97, 1323-1331 (2019) Impact factor – 0.983, H index – 46 (Canada) (2019) **(Quartile: Q3)**

23. **D. Deb, S.V. Ketov, S.K. Maurya, M. Khlopov, P. Moraes, S. Ray:** Exploring physical features of anisotropic strange stars beyond standard maximum mass limit in gravity, Monthly Notices of the Royal Astronomical Society, Vol. 485, 5652–5665 (2019) impact factor: 5.231 (Oxford university press, United Kingdom) **(Quartile: Q1)**

24. **S.K. Maurya, Francisco Tello-Ortiz:** Generalized relativistic anisotropic compact star models by gravitational decoupling, European Physical Journal C (Springer- Verlag), Vol. 79, 85, Impact factor – 5.172, H index – 139 (Germany) (2019) **(Quartile: Q1)**

25. **A.K. Prasad, J. Kumar, S.K. Maurya, B. Dayanandan**, Relativistic model for anisotropic compact stars using Karmarkar condition, Astrophysics Space Science, Vol. 364, 66 (2019), Impact factor: 1.681 **(Quartile: Q3)**

26. **S. K. Maurya, Saibal Ray, Abdul Aziz, M. Khlopov, P. Chardonnet: A study on charged compact stars, International Journal of Modern Physics D (World Scientific), Vol. 28, 1950053, Impact factor – 2.17, H index – 65 (Singapore) (2019) (Quartile: Q1)**

27. **S.K. Maurya, Francisco Tello-Ortiz: Charged anisotropic strange stars in general relativity,** Published in European Physical Journal C (Springer- Verlag), Vol. 79, 33, **Impact factor – 5.172, H index – 139 (Germany) (2019) (Quartile: Q1)**

28. **S. K. Maurya, Ayan Banerjee , Y. K. Gupta: Exact solution of anisotropic compact stars via. mass function:** Published in Astrophysics and Space science **(Springer-Verlag), Vol. 363, 208 Impact Factor: 1.6, H-Index-56 (Netherlands), (2018) (Quartile: Q3)**

29. **S.K. Maurya, S. D. Maharaj: New anisotropic fluid spheres from embedding,** Published in European Physical Journal A (Springer- Verlag), Vol. **54**, pp. 68, **Impact factor- 2.833, H- Index-74, (Germany) (2018) (Quartile: Q1)**

30. **Jitendra Kumar, Amit Kumar Prasad, S. K. Maurya, Ayan Banerjee**: **Charged Vaidya–Tikekar model for super compact star,** Published in European Physical Journal C (Springer-Verlag), Vol. 78, 540 (2018) **Impact factor – 5.172, H index – 139 (Germany) (2018) (Quartile: Q1)**

31. **S.K. Maurya, Saibal Ray, Shounak Ghosh, Sarbajit Manna, Smitha T.T.**: **A generalized family of anisotropic compact object in general relativity,** Annals of Physics (Elsevier), **Impact factor – 2.46, H index – 82 (United States) (2018) (Quartile: Q1)**

32. **S. K. Maurya, Ayan Banerjee, Phongpichit Channuie: Relativistic compact stars with charged anisotropic matter,** Chinese Physics C (IOP Science), Vol. 42, pp. 055101, **Impact factor - 5.08, H index – 21 (United Kingdom) (2018) (Quartile: Q1)**

33. **S. K. Maurya, Ayan Banerjee, Sudan Hansraj: Role of pressure anisotropy on relativistic compact stars**: Published in Physical Review D (American Physical Society), Vol. 97, page-044022, **Impact Factor: 4.57, H-Index-279 (United States), (2018) (Quartile: Q1)**

34. **S. K. Maurya, M. Govender, A family of charged compact objects with anisotropic pressure,** Published in European Physical Journal C (Springer- Verlag), Vol. 77, page 420 (2017) **Impact factor – 5.331, H index – 131 (Germany) (2017) (Quartile: Q1)**

35. **S.K. Maurya, Farook Rahaman, Y.K.Gupta, Monsur Rahaman, Ayan Banerjee**: **Compact stars with specific mass function,** Published in Annals of Physics (Elsevier), Vol. 385, page-532 **Impact factor – 2.46, H index – 82 (United States) (2017) (Quartile: Q1)**

36. **S. K. Maurya, M. Govender, Generating physically realizable stellar structures via embedding,** Published in European Physical Journal C (Springer- Verlag), **Vol. 77,** 347 **Impact factor – 5.331, H index – 131 (Germany) (2017) (Quartile: Q1)**

37. **S. K. Maurya, S. D. Maharaj, Anisotropic fluid spheres of embedding class one using Karmarkar condition,** Published in European Physical Journal C (Springer- Verlag), **Vol. 77,** 328 **Impact factor - 5.331, H index – 131 (Germany) (2017) (Quartile: Q1)**

38. **S. K. Maurya, B.S.Ratanpal, M. Govender, Anisotropic stars for spherically symmetric space time satisfying the Karmarkar condition,** Published in Annals of Physics (Elsevier), **Vol. 382, 36, Impact factor – 2.46, H index – 82 (United States) (2017) (Quartile: Q1)**

39. **S. K. Maurya**: **Relativistic modelling of compact stars for anisotropic matter distribution:** Published in European Physical Journal A (Springer- Verlag), arXiv:1611.00320**, Vol. 53, 89 Impact factor- 2.833, H- Index- 74, (Germany) (2017) (Quartile: Q1)**

40. **B. Dayanandan, S. K. Maurya, Smitha T.T.: Modeling of Charged anisotropic compact stars in general relativity**, Published in European Physical Journal A (Springer- Verlag), **Vol. 53, page – 141, Impact factor- 2.833 , H- Index- 74, (Germany) (2017) (Quartile: Q1)**

41. **S. K. Maurya, Y. K. Gupta and S. Ray: All spherically symmetric charged anisotropic solutions for compact star**, European Physical Journal C (Springer- Verlag**), Vol. 77,** 360 **Impact factor - 5.331, H- Index- 131, (Germany) (2017) (Quartile: Q1)**

42. **S. K. Maurya , Y. K. Gupta , Saibal Ray , Debabrata Deb: A new model for spherically symmetric charged compact stars of embedding class one**: Published European Physical Journal C (Springer- Verlag), **Vol. 77, 45 Impact factor - 5.331, H- Index- 131, (Germany) (2017) (Quartile: Q1)**

43. **S. K. Maurya , Y. K. Gupta , Saibal Ray , Debabrata Deb: Generalized model for anisotropic compact stars:** Published in European Physical Journal C (Springer- Verlag), Vol. **76**, 693 **Impact factor - 5.331, H index – 124 (United States) (2016) (Quartile: Q1)**

44. **S. K. Maurya, Y. K. Gupta, Saibal Ray, V. Chatterjee: Chatterjee:** Relativistic electromagnetic mass models in spherically symmetric space-time, Published in Astrophysics and Space Science, (Springer- Verlag) Vol. 361, 351 **Impact factor -1.678, H- index - 53 (Netherlands) (2016) (Quartile: Q3)**

45. **S.K. Maurya, Y.K. Gupta, Baiju Dayanandan, Saibal Ray,** A new model for spherically symmetric anisotropic compact star: Published in European Physical Journal C (Springer- Verlag), Vol:76, 266, Impact factor - 5.331, (United States) (2016) **(Quartile: Q1)**

46. **S.K. Maurya , Smitha T. T., Y.K.Gupta, Farook Rahaman,** A new exact solution for anisotropic compact stars of embedding class one, European Physical Journal A (Springer- Verlag), Vol.52, p. 191, **Impact factor- 2.833, (United States) (2016) (Quartile: Q1)**

47. **Piyali Bhar, S.K. Maurya Y. K. Gupta, Tuhina Manna,** Modelling of anisotropic compact star of emending class one**,** Published European Physical Journal A (Springer- Verlag), Vol 52: 312 (2016), **Impact factor- 2.37 , H- Index- 70, (United States) (2016) (Quartile: Q1)**

48. **S.K. Maurya, Y. K. Gupta, Baiju Dayanandan, M. K. Jasim, Ahmed Al-Jamel:** Generalized relativistic anisotropic models for compact stars, Published in international journal of Modern physics D (World Scientific), Vol. 26, 1750002, **Impact factor- 1.99, (Singapore) (2016)**

49. **S.K. Maurya, M. K. Jasim, Y.K. Gupta, Smitha T.T.,** A new model for charged anisotropic compact star, Published in Astrophysics and Space Sciences , (Springer- Verlag), Vol:361, Iss:5, pp:163 (1-8) **Impact factor -1.678, H- index - 53 (Netherlands) (2016)**

50. **M. K. Jasim, S.K. Maurya, Y.K. Gupta, B. Dayanandan:** Well behaved anisotropic star in general relativity, Astrophysics and Space Science, Vol. 361, 352 (2016) Impact factor -1.678, index - 53 (Netherlands) (2016)

51. **B. Dayanandan, S. K. Maurya, Y. K. Gupta, Smitha T.T.,** Anisotropic generalization of Matese & Whitman solution for compact star models, Published in Astrophysics and Space Sciences , (Springer Verlag), Vol:361, Iss:5, pp:160 (1-9), **Impact facto -1.678, H- index - 53 (Netherlands) (2016)**

52. **S. K. Maurya, Y. K. Gupta and Saibal Ray, Sourav Roy Chowdhury:** Spherically symmetric charged compact star, Published in European Physical Journal C (Springer- Verlag), Vol.75, pp.389, **Impact factor - 4.912, H index – 124 (United States) (2015) (Quartile: Q1)**

53. **S. K. Maurya, Y. K. Gupta, S. Ray and B. Dayanadan:** Anisotropic models for compact stars, Published in the European Physical Journal C (Springer- Verlag), Vol. 75, pp. 225 **Impact factor - 4.912, H index – 124 (United States) (2015) (Quartile: Q1)**

54. **S. K. Maurya, Y. K. Gupta and M.K. Jasim:** Relativistic modeling of stable anisotropic super-dense star, Published in Reports on Mathematical Physics (Elsevier), Vol. 76, pp. 21-40– **Impact factor (0.87), H index – 27 (United Kingdom) (2015)**

55. **S. K. Maurya, Y. K. Gupta, B. Dayanadan and Smitha T T.:** Three New Exact solutions for Charged Fluid Spheres in General Relativity, Published in Astrophysics and Space Science, (Springer- Verlag), Vol. 356, pp 75-87 **(Impact factor 1.67). H- index - 53 (Netherlands) (2015)**

56. **S. K. Maurya, Y. K. Gupta and M.K. Jasim:** Two new exact solutions for relativistic perfect fluid spheres through Lake's algorithm, Published in Astrophys Space Sci. (Springer- Verlag), Vol. 355, pp. 303-308 (2015) **(Impact factor 1.67), H- index - 53 (Netherlands) (2015)**

57. **S. K. Maurya, Y. K. Gupta:** A new class of relativistic charged anisotropic super dense star models, Published in Astrophysics and Space Science, (Springer-Verlag), Vol. 353, p. 657-665 (2014) **(Impact factor 1.67), H- index – 53, (Netherlands) .**

58. **S. K. Maurya, Y.K. Gupta:** Some New solutions for shear-free fluid spheres with heat flow in general relativity, International Journal of Theoretical Physics: 52:1075–1087 (2013) **(Impact factor 1.18), H- index - 44 , (United States) .**

59. **S. K. Maurya, Y.K. Gupta:** Charged Fluid To Anisotropic Fluid Distribution in General Relativity, Astrophysics and Space Science, (Springer-Verlag), 344:243–251 (2013) **(Impact factor 2.28), H- index – 53, (Netherlands) .**

60. **S. K. Maurya, Y.K. Gupta:** A Family of Anisotropic Super-dense Star Models Using a Space-Time Describing Charged Perfect Fluid Distributions, Physica Scripta, (IOP science) - Vol. 86, 025009 (9pp) (2012) **(Impact factor 1.13), H- index – 46, (United Kingdom).**

61. **S. K. Maurya, Y.K. Gupta:** Well Behaved Charged Generalization of Buchdahl's Fluid Spheres, Published in International Journal of Theoretical Physics, (Springer-Verlag), Vol. 51, 3478–3489, 2012 **(Impact factor 1.18) H- index - 44 , (United States) .**

62. **S. K. Maurya, Y.K. Gupta:** Exact well behaved Solutions of Einstein-Maxwell equations for Relativistic Charged Superdense Star Models, Astrophysics and Space Science, (Springer-Verlag), Vol. 340, p. 323–330, 2012 **(Impact factor 2.28), H- index – 53, (Netherlands) .**

63. **Neeraj Pant, S. K. Maurya:** Relativistic Modeling of Charged Super-dense Star with Einstein-Maxwell Equations in General Relativity, Applied Mathematics and Computation (Elsevier), Vol. 218, p. 8260–8268, 2012 **(Impact factor 1.6), H- index- 100 (United States).**

64. **S. K. Maurya, Y.K. Gupta:** A family of physically realizable perfect fluid spheres representing *a* quark–stars in general relativity, Astrophysics and Space Science, (Springer-Verlag), Vol. 337, p. 151–160, 2012**(Impact factor 2.28), H- index - 53 (Netherlands).**

65. **S. K. Maurya, Y.K. Gupta:** On Charged Analogues of Matese and Whitman Interior Solutions in General Relativity, International Journal of Theoretical Physics, (Springer Verlag), Vol. 51, No. 6, p. 1792–1805, 2012 **(Impact factor 1.18), H- index – 44 (United States).**

66. **S. K. Maurya, Y.K. Gupta:** A new family of polynomial solutions for charged fluid spheres, Nonlinear Analysis: Real World Applications (Elsevier), Vol. 13, p. 677–685, 2012 **(Impact factor 2.52), H- index - 56 (Netherlands).**

67. **S. K. Maurya, Y.K. Gupta:** Extremization of mass of charged superdense star models describe by Durgapal type space-time metric, Astrophysics and Space Science, (Springer-Verlag), Vol. 334, No.2, 301–310, 2011 **(Impact factor 2.28), H- index - 53 (Netherlands).**

68. **S. K. Maurya, Y.K. Gupta:** On a family of well-behaved perfect fluid balls as astrophysical objects in general relativity, Astrophysics and Space Science, (Springer-Verlag), Vol. 334, No.1, p. 145–154, 2011**(Impact factor 2.28), H- index - 53 , (Netherlands) .**

69. **S. K. Maurya, Y.K. Gupta:** A Class of Charged Relativistic Superdense Star Models, International Journal of Theoretical Physics, (Springer-Verlag), Vol.51, No.3, p. 943–953**,** 2011 **(Impact factor – 1.18), H- index - 44 , (United States) .**

70. **S. K. Maurya, Y.K. Gupta:** Charged analogue of Vlasenko-Pronin super-dense star in general relativity, Astrophysics and Space Science, (Springer-Verlag), Vol. 333, No.1, p. 149–160, 2011 **(Impact factor 2.28), H- index - 53 (Netherlands)** .

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72. **Y.K. Gupta, S. K. Maurya:** A class of regular and well behaved charge analogue of Kuchowicz's relativistic super-dense star model, Astrophysics and Space Science, (Springer-Verlag), Vol. 332, No. 2, pp. 415–421, 2011 **(Impact factor 2.28), H- index – 53 , (Netherlands)** .

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76. **S. K. Maurya, Y.K. Gupta:** Analytic well behaved charged relativistic charged super-dense star models, Procedia Engineering, Vol. 38, pp. 1233 – 1240 (2012).

77. **Y.K. Gupta, Alka and S. K. Maurya:** Generalised Buchdahal Solution via Solution Generating Scheme, Procedia Engineering, Vol. 38, pp. 3074 – 3085 (2012).

Faculty Administrative Experience

- DPMS Quality officer (Since Jan. 2020)
- Head of Department, Department of Mathematical and Physical Sciences, CAS, University of Nizwa (March 2017 to Jan. 2018)

Community Services

- Member of final year project committee(DMPS) (2015 to 2018)
- Member of Cultural week since 2014/till date

- Chair of Graduate Studies and Research Committee of Department (2015-2018)
- Chair of Department Annual Report Committee (2015-2019)
- Department representative of Graduate studies and Research at College level Committee (2015-2018)
- Section representative of Post Graduate studies and Research Committee (2015-2018)

Consultancy Activities

Membership in Professional Bodies

Reviewer/ Editorial Member of Reputed Journals:

- Modern Physics Letters A (World Scientific)
- International Journal of Modern Physics A (World Scientific)
- Chinese Journal of Physics (Elsevier).
- Physics of Dark universe (Elsevier).
- European Physical Journal C (Springer - Verlag).
- Classical and Quantum Gravity (IOP science)
- Astrophysics and space sciences (Springer - Verlag).
- International journal of theoretical physics (Springer-Verlag).
- Applied Mathematics and computation (Elsevier).
- Chinese Physics C (IOP science)
- Canadian Journal of Physics
- International Journal of Modern Physics –D
- Journal of Scientific Research and Studies.
- Applications and Applied Mathematics: An International Journal (AAM) - ISSN: 1932-9466.
- Applied Mathematics and Physics (JAMP), Scientific Research Publishing.
- Physical Science International Journal.
- International Journal of Modern Physics and Application.
- Member of International Association of Computer Science and Information Technology (IACSIT) – Member ID: **80349955.**
- **Editorial Board Member** of the International Journal of Modern Physics and Application.
- Editorial member: SCIREA Journal of Mathematics http://www.scirea.org/journal/EditorialBoard?JournalID=11000

Member of organizing committee of '4th International Conference on Astrophysics and Particle Physics', December 03-05, 2018 Chicago, Illinois, USA, https://astrophysics.conferenceseries.com/organizing-committee.php

Profile/Membership link

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Awards and recognitions

- GATE: Qualified with All India Rank-106 (96.13 Percentile) (2008),
- CSIR: National Eligibility Test (NET) Qualified – 2009,
- Senior Research Fellow, IIT Roorkee, Jan. 2011— Aug. 2012
- Junior Research Fellow, IIT Roorkee, Jan.2009 — Jan. 2011