



Dr. Praveen Kumar

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Nagpur, Maharashtra, India- 440016

HOME ADDRESS Plot No.-09, Manohar Vihar, Hazari Pahad, Nagpur, Maharashtra, India-440007

CAREER OBJECTIVE To contribute to the best of my knowledge and efforts in the progress of the organization and lead a disciplined and successful work as well as social life.

ELIGIBILITY QUALIFICATION **CSIR-NET Examination Qualified with 11th AIR (all over India ranking) in Mathematical Science at CSIR-NET Exam June-2016 conducted by Council of Scientific and Industrial Research (CSIR), New Delhi, India**

RESEARCH INTERESTS General Relativity and Cosmology, high energy physics in various dimensions and Alternative theories of Gravitation, Modified Theories of Gravity.

AT A GLANCE	1. Education Qualification	2. Member of learn Societies-(09)
	3. Distinct Fellowship Received-(13)	4. Abroad Visited-(07)
	5. Teaching Experience-(07 years)	6. Accolades for Teaching-(04)
	7. Graduate Coursework Taught-(19)	8. Invited Talk-(02)
	9. Invitation Letters (09)	10. Research Publications-(13)
	11. Paper Presented in Conferences-(12)	12. Conference/Workshop/Seminar Organized (04)
	13. Seminar/Webinar Attended-(21)	14. Workshop/School Attended-(18)
	15. Short-Term /FDP Attended-(06)	16. Coursera Online Courses-(06)
	17. Research Institute Visited-(08)	18. Portfolio Held-(05)
	19. Responsibility Held-(11)	20. Honors and Awards-(09)
	21. Extracurricular activities-(07)	22. Software Skills
	23. Key strengths/skills	24. Personal Details
	25. Hobbies/ Interest	26. References-(04)

¹EDUCATION QUALIFICATION **Ph.D. in, Mathematics from Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur**

Awarded Ph.D. degree in Mathematics (Date of Registration: 03-01-2017)

- Dissertation Topic: "Study of (2+1)-Dimensional Cosmological Model of the Universe through General Theory of Relativity".
- Advisor: Dr. G. S. Khadekar, Professor, Department of Mathematics
- Place of Research: PGTD Department of Mathematics

Council of Scientific and Industrial Research (CSIR), India

CSIR-NET Examination Qualified in Mathematical Science 19th June- 2016

- 11th AIR ranking in CSIR-NET Exam June 2016 in all over India ranking

M.Sc. in Mathematics from Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

- Year: July 2011 to May 2013 with 76.7%.
- Principal Subjects: Real Analysis, Algebra, Complex Analysis, Topology, Dynamical System, Functional Analysis, Fluid Dynamics.
- Specialization Subjects: Integral Equation & Integral transform, General Relativity & Cosmology, Operational Research.

B.Sc. in Mathematics from S.F.S. College/Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

- Year: July 2005 to June 2008 with 59.77%.
- Principal Subjects: Principle studies included: Physics, Electronics and Mathematics. Electronics taken as specialization.

Bachelor of Education (B.ed) from K.C. Bajaj B.ed College/Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

- Year: May 2016.
- Subject: Mathematics, Physics

² MEMBER OF LEARN SOCIETIES (09)

Member for Board of Studies of Mathematics Kavikulaguru Kalidas Sanskrit University, Ramtek

London Mathematical Society (Member since 01 January 2021)

Institute of Mathematics and its Applications (IMA) (Member-P0043364 since 20 Jan 2020)

Institute of Physics (IOP) (Member-80084318 since 01 January 2019)

Astronomical Society of India, Bangalore (Associate Member-A1065 since August 2018)

Calcutta Mathematical Society, Calcutta (Life Member since 14 August 2018)

Indian Mathematical Society, Chennai (Life Member-L/2018/51 since September 2018)

Indian Association for General Relativity & Gravitation, Pune (Life Member-L204 since July 2018)

The Indian Science Congress Association, Kolkata (Life Member-L33206 since July 2017)

³ DISTINCTIONS AWARDS SCHOLARSHIP RECEIVED (13)

Awarded "The Benevolent Fund and Covid-19 fellowship" from Institute of Physics (IOP) London, United Kingdom – Rs. 5,50,000/- (5334.25 GBP).

Awarded DAC-Funding Support from Department of Applied Mathematics to attend "workshop of the Computational Complex analysis (CATW03)," held at the Isaac Newton Mathematical Institute Cambridge University, United Kingdom from 09th Dec to 13th Dec 2019 – Rs. 2,84,628.95/- (3079.7 GBP).

Awarded Foreign Funding Support from Institute of Physics (IOP) Fund to attend "workshop Neutron Physics in neutrino Astronomy" which was held on 08 Nov 2019 at Kings College, London, United Kingdom – Rs. 11066/- (119.65 GBP).

Awarded DAC-Funding Support from Department of Applied Mathematics to attend "workshop of the Complex analysis in mathematical physics and applications (CATW02)," held at the Isaac Newton Mathematical Institute Cambridge University, United Kingdom from 28th Oct to 01st Nov 2019 – Rs. 1,75,170/- (1895.35 GBP).

Awarded Foreign Funding Support from Institute of Physics (IOP) Fund to attend "Physics in the Spotlight Conference," from 22nd-25th October 2019 and IOP N & B Meeting on the 07th Nov.2019 held at the Institute of Physics (IOP) London, United Kingdom – Rs. 67,573.61/- (731.15 GBP).

Awarded Foreign Funding Support from International Union of Pure and Applied Physics (IUPAP) and IOP C R Barber Trust Fund, Institute of Physics to attend "22nd International Conference on General Relativity and Gravitation/ 13th Edoardo Amaldi Conference on Gravitational Waves" held at the Valencia, Spain from 7th to the 12th July 2019 – Rs. 1,01,039 (Euro 950 & 300 GBP).

Award fully funded from Astronomical Society of India to present paper in the XXXVII Meeting of Astronomical Society of India held at Christ (Deemed to be University), Bengaluru from 18th - 22nd February 2019 – Rs. 15,000.

Award fully funded from The Inter-University Centre for Astronomy and Astrophysics (IUCAA), to attend the International Conference on *FORMATION AND EVOLUTION OF STAR CLUSTERS* held at Maulana Azad National Urdu University, Gachibowli, Hyderabad, India during January 21-24, 2019 – Rs. 10,000.

Awarded Foreign Travel Grant from ICTP-International Centre for Theoretical Physics to attend "The First Sharjah International Conference on Particle Physics, Astrophysics and Cosmology (FISICPAC)" held at the University of Sharjah (UoS), Sharjah, United Arab Emirates from November 11 to 13, 2018 – Rs. 1,00,110 (\$ 14,10 USD).

Award fully funded from CSTT MHRD, New Delhi to present paper in the National Conference on Modeling, Optimization and Computing for engineering Problems Use of Technical Hindi Terminology organized by Department of Mathematics, IIT Roorkee from 12th to 14th October 2018 – Rs. 07,000.

Awarded Foreign Travel Grant from Centro Residenziale Universitario di Bertinoro, Italy to attend the training workshop "NS Merger Training Workshop-Electromagnetic counterparts of gravitational wave sources data training" from November 12-16, 2018 – Rs. 48,468 (\$ 600 USD).

Awarded Foreign Travel Grant from Rencontres du Vietnam, Quy Nhon, Vietnam to attend "Windows on the Universe" from 04/08/2018 to 12/08/2018 – Rs. 1,17,150 (\$ 16,50 USD).

Award fully funded from AICTE to attend QIP short-term course on *Mathematical Modelling and Numerical Simulation of Various Engineering Problems in Transport Phenomena* held at QIP Centre, IIT Roorkee (Uttarakhand) from 02nd to 06th July 2018.— Rs. 15,100.

Total Grant Received (Individual) – Rs. 15,02,304 (\$ 20,611.61 USD).

⁴ ABROAD
VISITED
(07)

- | | |
|---|--|
| <input type="checkbox"/> London, Cambridge-UK | <input type="checkbox"/> Guangzhou-China |
| <input type="checkbox"/> Aberystwyth, Wrexham, Cardiff-
(Wales) UK | <input type="checkbox"/> Thimphu, Paro-Bhutan |
| <input type="checkbox"/> Valencia, Madrid-Spain | <input type="checkbox"/> Kathmandu, Sanoli-Nepal |
| <input type="checkbox"/> Sharjah, Dubai-UAE | <input type="checkbox"/> Quy Nhon, Hanoi, Ho Chi Minh City-Vietnam |

⁵ TEACHING
EXPERIENCE
(09 YEARS)

Working as an *Assistant Professor (Adhoc)* in G. H. Rasoni College of Engineering, Nagpur from 18th February 2021 to till date.

Working as an *Assistant Professor (CHB)* in Government Engineering College, Nagpur from July 2017 to February 2021 (Reason for Leaving-The post is not regular basis).

Working as an *Assistant Professor (CHB)* in Shivaji Science College, Nagpur from July 2018 to February 2021 (Reason for Leaving-The post is not regular basis).

Worked as an *Assistant Professor (CHB)* in Shri Lemdev Patil Mahavidhalya, Mandhal, Nagpur from July 2016 to April 2017 (Reason for Leaving-The post is not regular basis).

Worked as an *Assistant Professor (UGC Approved)* in Abha Gaikwad-Patil College of Engineering, Nagpur from January 2014 to March 2016 (Reason for Leaving-The Institute suffered a huge financial crisis).

⁶ ACCOLADES
FOR TEACHING
(04)

Letters of appreciation given by the Principal, Government Engineering College, Nagpur for the excellent feedback in the year 2017, 2018 from the students for the subjects : Applied Mathematics-I, II, III, IV.

Letters of appreciation given by the Principal, Government Engineering College, Nagpur for the highest result achieving in Applied Mathematics-I, II, III & IV for academic year 2017-18.

Best Teacher Award given by Director, Gaikwad-Patil Group of Institution, Nagpur for the highest result achieving in Applied Mathematics-III & IV for academic year 2014-15.

Letters of appreciation given by the Principal, Abha Gaikwad-Patil College of Engineering, Nagpur for the excellent feedback and the highest result achieving in Applied Mathematics-III & IV for academic year 2014-15.

⁷GRADUATE
COURSEWORK
TAUGHT (19)

- | | |
|--|---|
| <input type="checkbox"/> Real Variables | <input type="checkbox"/> Differential Geometry |
| <input type="checkbox"/> Complex Variables | <input type="checkbox"/> Differential Calculus |
| <input type="checkbox"/> Linear Algebra | <input type="checkbox"/> Matrices |
| <input type="checkbox"/> Ordinary Differential Equations | <input type="checkbox"/> Vector Integral Calculus |
| <input type="checkbox"/> Partial Differential Equations | <input type="checkbox"/> Topology |
| <input type="checkbox"/> Numerical Analysis | <input type="checkbox"/> Modern Algebra |
| <input type="checkbox"/> Integral Calculus | <input type="checkbox"/> General Relativity |
| <input type="checkbox"/> Calculus of Variation | <input type="checkbox"/> Statistics |
| <input type="checkbox"/> Vector Differential Calculus | <input type="checkbox"/> Applied Mathematics |
| <input type="checkbox"/> Probability Theory | |

⁸INVITED TALK
(02)

Invited as a Guest Lecture for the topic *How to Crack IIT-JAM Examination 2019* in the B.b Arts N.b Commerce & B.p Science College, Arni, Yavatmal on 22 September 2018.

Invited as a Guest Lecture for the topic *How to Crack NET, SET Examinations in Mathematical Sciences* in the Mahatma Gandhi Arts, Science College, Armori on 21st January 2017.

⁹INVITATION
LETTERS
(09)

Invitation to participate in the Winter School on SFT 2019 - Lectures on Statistical Field Theories from Feb 04 2019- Feb, 15 2019 at the Galileo Galilei Institute for Theoretical Physics in Florence.

Invitation to participate in BASIC 2019 - a conference on elementary particle physics, astrophysics, and cosmology, held on Long Island, The Bahamas from 06- 12 Jan 2019 organized by Bahamas Advanced Study Institute and Conferences 2019, Stella Maris, The Bahamas.

Invitation to participate in the Fourth International Conference on Particle Physics and Astrophysics held in Russia, Moscow from 22nd -26th October 2018 organized by National Research Nuclear University "MEPhI".

Invitation to participate in the "ESAC Data Analysis and Statistics(EDAS) workshop held at European Space Astronomy Centre near Madrid in Spain from October 8th-11th, 2018.

Invitation to participate in the workshop titled "The Universe as a Quantum Lab" held in the Laboratoire Astroparticules et Cosmologie in Paris from 18th -22nd September 2018.

Invitation to participate in the Summer School on Operator Algebras, Spectral Theory and Applications to Topological Insulators at Tbilisi State University, Tbilisi, Georgia from 16 to 22nd September 2018.

Invitation to participate in the 6th INPE's Advanced School: "21 cm Cosmology in the 21st century" held at INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS, Sao Jose dos Campos, Brasil from 13th- 16th August 2018.

Invitation to participate in the XVII Brazilian School of Cosmology and Gravitation (BSCG) held in the period from 16th -21st July 2018 at the Brazilian Center for Research in Physics(CBPF).

Praveen Kumar, G. S. Khadekar and V. J. Dagwal, "*Two fluids Cosmological in $(2 + 1)$ -dimensional Saez-Ballester Scalar-Tensor Theory of Gravitation*" accepted for publication to Journal of Dynamical Systems and Geometric Theories.

Safiqul Islam and Praveen Kumar, "*Gravitational Model of Compact Spherical Reissner-Nordstrom-Type Star Under $f(R, T)$ gravity*" accepted for publication to Journal of Dynamical Systems and Geometric Theories.

Praveen Kumar, G. S. Khadekar and G. B. Malbiya, "*Holographic Dark Energy with Scalar field in Higher Dimensional Space-time*" accepted for publication to Journal of Dynamical Systems and Geometric Theories.

G.S. Khadekar, N. A. Ramtekkar and Praveen Kumar, "*Entropy corrected interacting holographic dark energy model with extended Chaplygin gas in higher dimension*" Communicated to the IOP Journal of Physics: Conference Series (JPCS).

Rupali Talole, Praveen Kumar and G. S. Khadekar, "*Extended Chaplygin Gas Equation of State with Viscous Dissipative New Holographic Dark Energy*" Communicated to Journal of Dynamical Systems and Geometric Theories.

Saroj R. Kumbhare, Praveen Kumar and Safiqul Islam, "*Five Dimensional Spherically Symmetric Space Time with Strange Quark Matter attached to String Cloud in General Relativity*" communicated to Journal of Astrophysics and Astronomy.

Rupali Talole, Praveen Kumar, Safiqul Islam and G. S. Khadekar, "*Viscous Modified Ghost Scalar Field Dark Energy Models with Varying G* " communicated to International Journal of Modern Physics A.

G.S. Khadekar and Praveen Kumar, "*Holographic Dark Energy with Modified Chaplygin Gas and Scalar Field in $(2+1)$ -Dimensional Spacetime*" communicated to International Journal of Geometric Methods in Modern Physics.

Praveen Kumar, G.S. Khadekar and Safiqul Islam, " *$(2 + 1)$ -Dimensional Starbinky Cosmological Models in $f(R)$ Gravity with $\Lambda(R, T)$* " communicated to Journal of Astrophysics and Astronomy.

Safiqul Islam, Praveen Kumar, G.S. Khadekar and Tapas Kumar Das, " *$(2 + 1)$ dimensional cosmological models in $f(R, T)$ gravity with $\Lambda(R, T)$* " published in the IOP Journal of Physics: Conference Series (JPCS) 1258 012026 (2019).

G. S. Khadekar, Praveen Kumar and Safiqul Islam, "*Modified Chaplygin gas with bulk viscous cosmology in FRW $(2 + 1)$ -dimensional spacetime*" published in the Journal of Astrophysics and Astronomy 40 40 (2019).

Praveen Kumar, G. S. Khadekar and Safiqul Islam, "*FRW bulk viscous cosmology with modified Chaplygin gas in flat space in $(2 + 1)$ -dimensional space*" Communicated to International Conference Proceedings "Windows 2018-Windows on the Universe": Vietnam 25th anniversary of the Rencontres du Vietnam at ICISE Center, Quy Nhon, Vietnam.

S. G. Georgiev, G.S Khadekar and Praveen Kumar "*Two Dimensional Integral Inequalities on Time Scales*" communicated to Electronic Journal of Qualitative Theory of Differential Equations (EJQTDE).

¹¹ORAL/
POSTER PAPER
PRESENTED IN
CONFERENCES
(12)

Paper presented on "*Holographic Dark Energy with Scalar field in Higher Dimensional Spacetime*" in the 26TH INTERNATIONAL CONFERENCE OF INTERNATIONAL ACADEMY OF PHYSICAL SCIENCES on Advances in Relativistic Astrophysics and Cosmology held at Department of Mathematics, S.L.I.E.T., Longowal during December 18-20, 2020.

Paper presented on "*(2+1)-Dimensional Starbinky Cosmological Models in $f(R)$ Gravity with $\Lambda(R, T)$* " in the 22nd International Conference on General Relativity and Gravitation & 13th Edoardo Amaldi Conference on Gravitational Waves from 7th to 12th July 2019 Held in (Valencia) Spain.

Paper presented on "*Holographic Dark Energy with Modified Chaplygin Gas in $(2+1)$ -Dimensional Spacetime*" in the National Conference on Cryptography, Thermoelasticity and General Relativity (CTGR-2019) organized by Department of Mathematics, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur on 27th March 2019.

Paper presented on "*Two Fluids $(2+1)$ -Dimensional Cosmological Model in Scalar-Tensor Theory of Gravitation*" in one day Inter-disciplinary national conference on "Recent Trends in Mathematical Modeling, Simulation Methods, Computations, and Physical Sciences" (MMSCP-2019) organized by Department of Physics, Mathematics and Computer Science, Hislop College, Nagpur on 11th March 2019.

Paper presented on "*FRW Cosmological Model with Modified Chaplygin Gas and Dynamical System $(2+1)$ -Dimensional Spacetime*" in the National Conference On Recent Advances in Theoretical and Computational Mathematics with Its Applications in Science held at Late Rajkamalji Bharti Arts, Commerce & Smt. Shushilabai R. Bharti Science College, Arni, Yavatmal on 22nd 2019.

Paper presented on "*Modified Chaplygin gas cosmology with bulk viscosity in $(2+1)$ -dimensional spacetime*" in the XXXVII Meeting of Astronomical Society of India held at Christ (Deemed to be University), Bengaluru from 18th - 22nd February 2019.

Paper presented on " *$(2+1)$ dimensional cosmological models in $f(R;T)$ gravity with $\Lambda(R;T)$* " in the First Sharjah International Conference on Particle Physics, Astrophysics and Cosmology (FISICPAC 2018), held at the University of Sharjah, Sharjah, the United Arab Emirates from 11th to 13th of November 2018.

Paper presented on "*FRW viscous cosmology with modified cosmic Chaplygin gas in $(2+1)$ -dimensional spacetime*" in the National Conference on Modeling, Optimization and Computing for engineering Problems Use of Technical Hindi Terminology organized by Department of Mathematics, IIT Roorkee & sponsored by CSTT MHRD, New Delhi from 12th to 14th October 2018.

Paper presented on "*FRW Bulk Viscous Cosmology with Modified Chaplygin Gas in flat space in $(2+1)$ -dimensional spacetime*" in the Rencontres du Vietnam, "Windows on the Universe: 25th anniversary of the Rencontres du Vietnam", held in Quy Nhon, Vietnam from 05th to 11th August 2018.

Paper presented on *Modified Chaplygin Gas Model in $(2+1)$ -Dimension Spacetime*, in Physical Science Section during the 105th Indian Science Congress held at Manipur University, Imphal from March 16 to 20, 2018.

Paper presented on *Charged Perfect Fluid Distribution in $(2+1)$ -Dimensional Theory of Gravitation*, in Annual Young Scholar Conference on 23rd to 24th February 2018, orga-

nized by Internal Quality Assurance Cell(IQAC) at R.T.M.Nagpur University, Nagpur.

Paper presented on *Chaplygin Gas Cosmology with Variable Viscous Fluid in (2+1)-dimension Spacetime* in National Conference on Differential Geometry and General Relativity on 28-29th November 2017, organized by Sardar Patel University, Vallabh Vidyanagar.

¹²CONFERENCE
WORKSHOP
SEMINAR
ORGANIZED
(04)

Chaired as a Convener for a National level lecture series on *Numerous Applications of Number Theory and Algebra-2022* from 21st to 22nd January 2022 at G H Raisonni College of Engineering, Nagpur, India.

Chaired as a Convener for an One Week Online International Faculty Development Program (FDP) on *Mathematical Software Maple with Simulation*", *MSMS- 2021* held from 25th-29th October 2021 at G H Raisonni College of Engineering, Nagpur, India.

Chaired as a Co-Convener for an One Week Faculty Development Program (FDP) on *Mathematical Modeling and Simulation Software Maple (MMSSM-2020)* from 27th-31st July 2020 at Department of Mathematics, Government College of Engineering, Nagpur.

Member of organizing committee for an International Conference on Advances in Physical, Chemical and Mathematical Sciences (ICAPCM-2020) on 13th February, 2020 at RTM Nagpur University, Nagpur.

¹³CONFERENCE
ATTENDED
(07)

International Conference on *Joint APP, HEPP and NP Conference 2021* organized by Institute of Physics(IOP), London, United Kingdom from April 12-15, 2021.

International Conference on *PHYSICS IN THE SPOTLIGHT CONFERENCE* organized by held at Institute of Physics(IOP), London, United Kingdom during 22nd -25th October 2019.

International Conference on *FORMATION AND EVOLUTION OF STAR CLUSTERS* organized by held at Maulana Azad National Urdu University, Gachibowli, Hyderabad, India during January 21-24, 2019.

105th Indian Science Congress, organized by The Indian Science Congress Association held at Manipur University, Imphal from March 16 to 20, 2018

International Conference of International Academy of Physical Sciences on *Symbiotic Development of Mathematical, Physical, Chemical & Computational Sciences* organized by Guru Jambheshwar University of Science & Technology, Hisar during 28-30th October 2017.

National Conference on *Differential Geometry and its Application* organized by Department of Mathematics & Statistics, DDU Gorakhpur University, Gorakhpur from 27-28th January 2017.

International Conference on *Recent Advances in Mathematics (ICRAM)-2014* held from 20th to 23rd January 2014 at Department of Mathematics, R.T.M. Nagpur University, Nagpur.

¹⁴SEMINAR/
WEBINAR
ATTENDED
(21)

International webinar on *Recent Developments in Modified Gravity and Cosmology* organized by the Department of Mathematics, Birla Institute of Technology and Science Pilani, Hyderabad Campus, Hyderabad India during March 09-11, 2021.

IOP Webinar on *Understanding failure processes in ballistically-damaged* organized by Institute of Physics (IOP), UK on 25 May 2021.

IOP Webinar on *Supporting in your career break: planning and returning to a workplace* organized by Institute of Physics (IOP), UK on 19 May 2021.

IOP Webinar on *When The Uncertainty Principle Goes To 11...* organized by Institute of Physics (IOP), UK on 29th April 2021.

IOP Webinar on *C++ part 2: libraries and simulations* organized by Institute of Physics (IOP), UK on 13th April 2021.

IOP Webinar on *Introduction to C++* organized by Institute of Physics (IOP), UK on 12th April 2021.

IOP Webinar on *Exploring career pathways in Medical Physics* organized by Institute of Physics (IOP), UK on 18 Nov & 09 Dec 2020.

International Webinar on *Relativity & Cosmology* organized by Department of Mathematical Sciences, Bodoland University, Kokrajhar, India on 9th August 2020.

"International Webinar Series on Introduction to Cosmology and Recent Developments" organized by VIT, Chennai on 11th July, 2020.

IOP Webinar on *Micropower from Gamma Rays* organized by Institute of Physics (IOP), UK on 02 June 2020.

IOP Webinar on *Quantum Sensors from fundamental Sciences to technology* organized by Institute of Physics (IOP), UK on 27 May 2020.

IOP Webinar on *Diamond Batteries* organized by Institute of Physics (IOP), UK on 26 May 2020.

IOP Webinar on *Einstein's Universe: the Dawn of Gravitational Wave Astrophysics* organized by Institute of Physics (IOP), UK on 20 May 2020.

IOP Webinar *Space Batteries* organized by Institute of Physics (IOP) on 19 May 2020.

Webinar on *"Algebra: Historical Development and Applications"* organized by Shri Ramdeobaba College of Engineering and Management, Nagpur on 13th May 2020.

IOP Webinar on *What it's like to a government science advisor in a national emergency* organized by Institute of Physics (IOP), UK on 05th May 2020.

National Science Day -2017 under the theme *Science and technology for Specially Abled Persons* organized by Department of Mathematics, R.T.M Nagpur University, Nagpur on 11th April 2017.

National Science Day -2016 under the theme *Popularization of Mathematics* organized by Department of Mathematics, R.T.M. Nagpur University, Nagpur on 25th Feb 2016.

National Seminar on *General Relativity and Thermo-elasticity* held on 13th -14th February 2015 at Department of Mathematics, R.T.M. Nagpur University, Nagpur.

National Seminar on *General Relativity and Thermoelasticity* held on February 17-18, 2012 at Department of Mathematics, R.T.M. Nagpur University, Nagpur.

National Seminar *Environment and Sustainable Development* on 17th March 2011 Organized by Department of Sociology, R.T.M. Nagpur University, Nagpur.

¹⁵WORKSHOP
ATTENDED
(18)

Workshop on "*HYDW08 : New horizons in dispersive hydrodynamics*," held at the Isaac Newton Mathematical Institute, University of Cambridge, UK from 21st June 2021 to 02 July 2021.

Workshop on "*Summary Meeting (ARAW02)*," held at the Isaac Newton Mathematical Institute, University of Cambridge, UK from 14th June 2021 to 18th June 2021.

Workshop on "*Verified software: tools and experiments(VSOW04)*," held at the Isaac Newton Mathematical Institute, University of Cambridge, UK from 7th June 2021 to 11th June 2021.

Workshop on "*New connections in number theory and physics (NCNW03)*," held at the Isaac Newton Mathematical Institute, University of Cambridge, UK from 24 May to 28 May 2021.

Workshop on "*JUNIPER research meeting' (JUNW02)*," held at the Isaac Newton Mathematical Institute, University of Cambridge, UK on the 17th May 2021.

Workshop on "*Verified software: from theory to practice' (VSOW03)*," held at the Isaac Newton Mathematical Institute, University of Cambridge, UK from 10th May 2021 to 14th May 2021.

Sokendai Asia Winter School 2021 organized by Sokendai (Graduate University for Advanced Studies), Japan from 03-05 Feb. 2021.

An International Virtual Workshop on *Recent Advancement in Astrophysics and Cosmology* organised by P.G. Department of Physics, Tata College, Chaibasa (Kolhan University, Chaibasa), West Singhbhum, Jharkhand on 12th- 13th October 2020.

Program on "*Recent Developments in S-matrix theory (ONLINE)*" which was conducted during 20-31 July 2020 at ICTS International Center for Theoretical Sciences.

Workshop on "*Complex analysis in mathematical physics and its applications (CATW02)*," held at the Isaac Newton Mathematical Institute, Applied Mathematics department of Cambridge University, United Kingdom from 28th Oct-01st Nov 2019.

Workshop on "*Neutron Physics in Neutrino Astronomy*" organized by the Institute of Physics (IoP) astroparticle physics group held at King's College London, United Kingdom on 8th November 2019.

Workshop on "*Linear Algebra and Multivariate Calculus for Science & Engineering Teachers*"(LAMCSET-2019) held at Department of Mathematics, Visvesvaraya National Institute of Technology, Nagpur during Jan 01-05, 2019.

Teachers' Enrichment Workshop on "*Linear Algebra, Group Theory and Enumerative*

Combinatorics” held at Shri Ramdeobaba College of Engineering & Management, Nagpur jointly TIFR and IIT Bombay and founded by National Centre for Mathematics during December 23-28, 2018.

Science Academies Lecture Workshop on *Geometry and Topology* conducted at Indian Institute of Science Education and Research (IISER) Bhopal during January 20-21th, 2018.

Two Days workshop on Mathematics- Celebrating National Mathematics Day held at The National Academy of Sciences, India (NASI) at Allahabad from December 22nd -23rd, 2017.

Indian Women and Mathematics Regional Workshop on *Research and Opportunities* held on October 7-8, 2017 at Indian Institute of Science Education and Research, Bhopal.

National Workshop on Mathematical Software (NWMS-17) organized by Department of Mathematics, RTM Nagpur University, Nagpur from 24th-25th March 2017.

Workshop on Software Programming in Mathematics organized by Department of Mathematics, RTM Nagpur University, Nagpur on 15th March 2017.

¹⁶SHORT-TERM
COURSE/
FDP
ATTENDED
(06)

One week Online International Faculty Development Programme on *”Advanced Materials & Mathematical Tools”* from 10th- 14th July 2020 which was organised by GW CET, Nagpur.

Online Faculty development program on *Applications of GeoGebra* organized by Department of Applied Mathematics & Humanities and Department of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur from 1st- 5th June 2020.

AICTE sponsored QIP short-term course on *Mathematical Modelling and Numerical Simulation of Various Engineering Problems in Transport Phenomena* held from 02nd to 06th July 2018(one week) organized by Department of Chemical Engineering and Mathematics at QIP Centre, IIT Roorkee (Uttarakhand).

Pre-Ph.D Course Work (Components C1&C2) organized by C.P.& Berar E.S.College from 01st to 11th June 2017.

Six-month Certificate Course in *Research Methodology in Social Science and Extension* from Department of Continuing Adult Education & Extension, R.T.M.N.U., Nagpur.

Short Term Training Program on *Effective Research Methodology* held from 05th to 16th October 2015 at Priyadarshini Institute of Engineering & Technology, Nagpur.

¹⁷COURSERA
ONLINE
COURSES
(06)

A Certificate Course on *The Data Scientist’s Toolbox* complete from Johns Hopkins University, USA.

A Certificate Course on *Understanding and Visualizing Data with Python* complete from University of Michigan.

A Certificate Course on *Programming for Everybody (Getting Started with Python)* complete from University of Michigan.

¹⁸RESEARCH
INSTITUTE /
EDUCATIONAL
VISITED
(09)

A Certificate Course on *Introduction to Programming with MATLAB* complete from Vanderbilt University.

A Certificate Course on *Data Science Maths Skills* complete from Duke University through Coursera on 31/03/2018.

A Certificate Course on *Learning How to Learn* complete from the University of California, San Diego through Coursera on 10/05/2016.

Harish-Chandra Research Institute (HRI), Allahabad from April 8th-16th 2019.

Sharjah Center for Astronomy and Space Sciences (SCASS) from 11 to 13 of November 2018.

HH Dr. Sultan Alqassimi Center for Gulf Studies (Al Darah), Sharjah, United Arab Emirates from 11 to 13 of November 2018.

ICISE Center (Rencontres du Vietnam) Quy Nhon, Vietnam from 05th August- 11 August 2018.

Harish-Chandra Research Institute (HRI), Allahabad from 8th May-16th May 2018.

Visit Myanmar during 105th Indian Science Congress organized by The Indian Science Congress Association held at Manipur University, Imphal from March 16 to 20, 2018.

Harish-Chandra Research Institute (HRI), Allahabad from 21st December-25th December 2017.

Inter-University Centre for Astronomy and Astrophysics (IUCCA), Pune from 10th June 2017-16th June 2017.

Represent Gaikwad-Patil Group in *The Kathmandu Post Edu Fair-2014* on 25th -27th July 2014, for International admission in India, organized by Kantipur Publications, Kathmandu, Nepal.

Represent Gaikwad-Patil Group in the *5th International Education Fair* from 6th to 7th March 2015 at Changlimithang stadium parking, Thimphu, Bhutan organizes by Bhutan Chamber of Commerce & Industry (BCCI).

¹⁹PORTFOLIO
HELD (05)

Worked as a *Chief-Supervisor* of University Theory Examination Winter-2015.

Co-ordinator, International admission Cell for Nepal, Bhutan, Sri-Lanka etc.

Co-ordinator of organizing an Industrial tour for B.E. students.

Teacher-Guardian of B.E. 1st year & 2nd year students.

Working as a *coordinator* in Training & Placement Cell.

²⁰RESPONSIBILITY
HELD
(11)

World Outreach Co-ordinator for Institute of Physics (IOP), Wales, UK.

Secretary of P.G.D.T. Student's Council, R.T.M. Nagpur University, Nagpur.

U.R. (University representative) of S.F.S.College in Nagpur University for 2007-08.

Worked as *President of the Program-Planning Committee* in the Inter-Departmental Cultural & Sports Competitions 'YUVA-SPANDHAN -2010' organized by P.G.T.D. Student Council, R.T.M. Nagpur University, Nagpur.

Worked in the Inter-Collegiate Cultural Youth Festival as *event coordinator* for debate in the 'YUVARANG 2011' and as a *Co-Incharge* for Poetry Competition in 'YUVARANG 2012' organized by the student council of R.T.M.N.U., Nagpur

During Graduation in B.SC was part of Physics Society of SFS College as *Treasurer* (2005-06), *Secretary* (2006-07) and *President* (2007-08)

Held a position of *Camp senior* in National Integration Camp (NIC), Puducherry and Annual training camp, Nagpur

Event Organizer of CDRESS which conducted Techno-value Fest 2008 at Inter Collegiate level

Supported as a University Examination *invigilator* for both graduation and engineering exams

Did *Valuation & Moderation* for Applied Mathematics-I, II, III, IV in University Engineering Examination

Did *Valuation & Moderation* for B.Sc-Mathematics-I, II, III, IV, V, VI in University Examination.

²¹HONORS AND
AWARDS
(09)

3rd University rank in M.Sc (Mathematics) Exam -2013 in R.T.M.Nagpur University, Nagpur

Received Best Teacher Award for the year 2015-16 in Abha Gaikwad-Patil CoE, Nagpur

Received Best Student Award for the year 2007-08 in S.F.S. College, Nagpur

Got Best NCC Cadet Award at Nagpur Group level in 2007

Have NCC 'C' Certificate with 'A' grade from No.2 (Mah.) Air Wing, Nagpur

Got the Best mike controller award in National Integration Camp (NIC), Puducherry

Secured 1st Prize in Science exhibition at Intra-college level for 2006-2007

Secured 2nd position in Mathematical Quiz (team) in the Inter-Collegiate Competition

Runner-up position in Personality event in the Inter-Departmental Cultural & Sports Competitions 'YUVA-SPANDHAN -2010' organized by P.G.T.D. Student's Council, Rashtrasant Tukadoji Maharaj, Nagpur University, Nagpur.

²²EXTRA-CURRICULAR ACTIVITIES (07)

Participated in University level workshop of College Student council Secretaries organized by Students Council of R.T.M.N.U., Nagpur

Participated in the Inter-Collegiate Cultural Youth Festival 'YUVARANG 2011' in the event of clay modelling and cartooning organized by the student council of Rashtrasant Tukadoji Maharaj, Nagpur University, Nagpur.

Participated in intercollegiate Math's Quiz competition organized by Maths Society of S.F.S College, Nagpur.

Participated in innovations 'ARTS & SCIENCE EXHIBITION' at Intercollegiate level organized by Physics Society of S.F.S College, Nagpur.

Participated in Indian Air Force Platinum Jubilee Half Marathon conducted by Maintenance Command, Nagpur.

Represented Degree college team in chess and Cross-Country at Inter-Collegiate University level Tournaments.

Attended in one National Integration Camp (NIC) and 4-Annual training camp (ATC) Camps.

²³COMPUTER/SOFTWARE SKILLS

- | | |
|---|--|
| <input type="checkbox"/> Basics knowledge of computers | <input type="checkbox"/> MATLAB 16 |
| <input type="checkbox"/> Operating Systems-Windows-7, Windows-8, Windows-10 | <input type="checkbox"/> MAPLE 18 |
| <input type="checkbox"/> Office Packages-Ms-Office | <input type="checkbox"/> MATHEMATICA 15 |
| <input type="checkbox"/> Advance C-Programming | <input type="checkbox"/> LATEX-Taxstudio/Texnic Center |
| <input type="checkbox"/> Ubandu/ Linex | <input type="checkbox"/> Python 3.2 |
| <input type="checkbox"/> R-Studio | <input type="checkbox"/> Anaconda |
| <input type="checkbox"/> Inkscape | <input type="checkbox"/> Matplot |
| | <input type="checkbox"/> Veusz |

²⁴KEY STRENGTHS /SKILLS

- | | |
|---|---|
| <input type="checkbox"/> Positive Attitude | <input type="checkbox"/> Good interactive skill |
| <input type="checkbox"/> Ready to Accept Any Challenges | <input type="checkbox"/> Self-Motivated |
| <input type="checkbox"/> Capable of handling tough tasks | <input type="checkbox"/> Optimistic |
| <input type="checkbox"/> A flexible approach towards work | <input type="checkbox"/> Adaptive |
| <input type="checkbox"/> Believe in Hardworking | <input type="checkbox"/> Disciplined |

²⁵ PERSONAL DETAILS	Date of Birth: 28-02-1986 Father's Name: Mr. Bijendra Singh Age : 36th years Nationality: Indian Marital Status: Married Passport Details: P.No.-K6784831, DOE-16-10-2022 Aadhar Card Number: 689703655106
RELEVANT SKILLS	Languages Known: English, Hindi & Marathi
²⁵ HOBBIES INTEREST	Activities: Making Friends, Cycling, Traveling & Listening to music
²⁷ REFERENCES (03)	<p>Dr. G. S. Khadekar, Head & Professor, PGTD, Department of Mathematics, MJP Educational Campus, RTM Nagpur University, Nagpur, Maharashtra, India - 440 033, (+91)9011323123, gkhadekar@yahoo.com, gkhadekar@gmail.com .</p> <p>Dr. G. A. Avchar, Head & Associate Professor, Department of Mathematics, Shri Shivaji Science College, Humpyard Road, Congress Nagar, Nagpur, Maharashtra, India- 440012, (+91)9421845390, g.avchar@rediffmail.com.</p> <p>Dr. V. J. Dagwal, Head & Assistant Professor, Department of Mathematics, Government College of Engineering, New Khapri, Nagpur, Maharashtra, India-441108, (+91)9890345496, vdagwal@gmail.com.</p>
DECLARATION	I, hereby, declare that the information furnished above is true to the best of my knowledge and belief.
	Date: Place: Nagpur
	(Dr. Praveen Kumar)