

CURRICULUM VITAE

Dr. SHAILAJA.M

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EDUCATIONAL QUALIFICATION:

Degree	Subject & Specialization	University & Year
M.Sc.	Mathematics Number Theory	Bangalore University, 1995
M.Phil.	Mathematics Domination Theory	Alagappa University, 2007
Ph.D.	Mathematics Astronomy	Dravidian University, 2018

AREAS OF INTEREST: **Research: Astronomy and Indian Mathematics**

TEACHING EXPERIENCE: 26 YEARS

Position Held	Name of the Institute	Name of the University	Period (from -to)
Lecturer	KLE's S. Nijalingappa College, Rajajinagar, Bangalore	Bangalore University	1995-1997
Lecturer	Sri Aurobindo First Grade College for Women, Rajajinagar, Bangalore	Bangalore University	1997-2007
Lecturer	R.N.S. Pre University College, Vijayanagara, Bangalore	Dept. of Pre University	2007-2009

Assistant Professor	University College of Science, Tumkur	Tumkur University	2009-2011
Assistant Professor	Government First Grade College, Vijayanagara, Bangalore	Bangalore University	2011- till date

RESEARCH EXPERIENCE: 12 YEARS

RESEARCH PAPERS PUBLISHED

Sl. No	Title of the Paper	Title of the Journal	Int./National/ Peer reviewed	Volume/ Issue/ year
1.	The phenomena of retrograde motion and visibility of interior planets in Bhāskara's works	<i>Ganita Bharati</i> Vol.37, No1-2, , pp 69-82,	International ISSN-0970-0307 Impact Factor-0.561	June-December (2015)
2.	True positions of Planets according to <i>Karaṇakutūhala</i>	<i>Ganita Bharati</i> Vol.37, No1-2, , pp 83-96	International ISSN-0970-0307 Impact Factor-0.561	June-December (2015)
3.	A brief study of heliacal rising, setting and circumpolar stars	<i>Proceedings of RTPME-2015</i> , pp 274-278	National ISBN-978-81-930115-1-5	Feb 2015
4.	Lunar occultation's of stars	<i>Proceedings of RTPME-2015</i> , pp 269-273	National ISBN-978-81-930115-1-5	Feb 2015
5.	Application of continued fractions in planetary phenomena	<i>Proceedings of NC SER-2016</i> , pp 83-86	National ISBN-978-93-85629-14-3	Jan 2016
6.	Moon's passage through apogee and Super Moon	<i>Proceedings of NC SER-2016</i> , pp 136-140	National ISBN-978-93-85629-14-3	Jan 2016
7.	Flower waste management in pilgrim centres of India	<i>Proceedings of Multi disciplinary National Seminar on Environmental</i>	National ISBN 978-81-910657-9-4	March-2016

		<i>degradation for sustenance of life</i> , pp 424-427		
8.	Transmission of Numeral System across the Borders- An Overview	<i>REACH- an IN-HOUSE Journal of GFGCVB</i> , pp 121-124,	National ISBN-978-81-930080-9-6	May-2016
9.	Fourier analysis of equation of centre https://www.ijser.org/onlineResearchPaperViewer.aspx?Fourier-Analysis-of-Equation-of-Centre.pdf	<i>International Journal of Scientific and Engineering Research (IJSER)</i> , pp 69-76	International ISSN-2229-5518, Impact Factor-5.156.	May 2017
10.	Application of Mathematics to Eclipse analysis https://www.ijser.org/researchpaper/Application-of-Mathematics-to-Eclipse-Analysis.pdf	<i>International Journal of Scientific and Engineering Research (IJSER)</i> , pp 92-99	International ISSN-2229-5518, Impact Factor-5.156.	May 2017
11.	Angular Diameters (bimba) of the Sun, Moon and Earth's Shadow-cone in Indian Astronomy: A Comparative Study https://insa.nic.in/writereaddata/UploadedFiles/IJHS/Vol52_2_2017_Art01.pdf	<i>Indian journal of History of Science (IJHS)</i> , Volume 52, Issue 2, pp 117-123,	International ISSN-2454-9991, Impact Factor-2.74.	June 2017
12.	Peripheries of epicycles in Grahalaghava http://www.narit.or.th/files/JAHH/2017JAHHvol20/2017JAHH...20..341R.pdf	<i>Journal of Astronomical History and Heritage (JAHH)</i> , Volume 20, Number 3, pp 341-348	International ISSN-1440-2807	Nov/Dec 2017
13.	IPR- History of Mathematics in India	<i>Dynamics of Intellectual Property Rights- A Compendium of Articles</i>	National ISBN-978-81-940537-1-2	March 2019
14.	A comparative Study of the moon at perigee and apogee https://ijcrt.org/viewfull.php?&p_id=IJCRT2205273	<i>International Journal of creative research thoughts (IJCRT)</i> Volume10,Issue 5 pp 467-473	International ISSN-2320-2882 Impact Factor-7.97	May 2022

PAPERS PRESENTED

Sl. No.	Title of the paper	Name of the Conference	Organising Institute	Level	Date
1.	Planetary positions according to <i>Makaranda Sāriṇī</i> - a Comparative Study	One day National Workshop on History of Astronomy and Mathematical Sciences of India (HAMSI)	Chennai Mathematical Institute (CMI), Chennai	National	26 th December 2013.
2.	<i>Vyatipata</i> and <i>Vaidhrti</i> (parallel aspects) as discussed in Bhaskara's Works	International Conference 'Bhaskara 900'	Vidya Prasarak Mandal, Thane, Maharashtra	Inter national	18 th to 21 st Sept 2014.
3.	The phenomena of retrograde motion and visibility of interior planets in Bhaskara's works	International conference on History and Development of Mathematics (ICHDM 2014)	Department of Mathematics, S.P. University, Pune Maharashtra	Inter national	November 27-30, 2014
4.	The phenomena of retrograde motion and visibility of planets in Bhaskara's works	National Workshop on Life and works of Bhaskaracharya – II	Rashtriya Sanskrit Vidyapeeta, Tirupati	National	8 th -12 th December 2014
5.	A brief study of heliacal rising, setting and circumpolar stars.	National conference on Recent trends in Physics, Mathematics and electronics, RTPME-2015,	Sarada Vilas College, Mysore	National	20 th and 21 st Feb 2015
6.	The heliacal phenomena of planets and stars as in Bhaskara's works	UGC sponsored one day state level seminar	JSS College for women, Chamarajanagar	National	7 th March 2015
7.	Application of continued	UGC Sponsored National	Basaveshwara College, Bangalore	National	29 th -30 th January

	fractions in planetary phenomena	Conference NCSER-2016			2016
8.	The phenomenon of Parallel aspects and heliacal rising and setting of planets as discussed in Bhaskara's Works	Two days National conference on "Life and works of Bhaskaracharya II"	Karnataka state Women's University, Vijayapura	National	22 nd and 23 rd August 2016
9.	Fourier analysis of equation of centre	UGC Sponsored National Conference RAIMS-2017	Government Science College, Bangalore	National	9 th -10 th February 2017.
10.	Computation of dates of some planetary phenomena by using Scilab as per modern astronomy	UGC-sponsored one day National Conference on Student and Faculty research in Mathematical Sciences	Government Science College, NT Road Bangalore	National	24 th April 2018.
11.	Equation of time in Indian classical astronomy vis-à-vis modern astronomy	National Conference on Recent trends and explorations in Mathematics	National College Jayanagar, Bangalore	National	4 th October 2018.
12.	"Karana kutuhala sarini- its importance and analysis"	Annual Conference on History and development of Mathematics (CHDM-2018)	Sri Chandrashekara Saraswati Vishwa Mahavidyalaya Kanchipuram, Tamilnadu	National	24 th to 26 th November 2018.
13.	IPR- History of Mathematics in India	One day Multidisciplinary National seminar on Dynamics of Intellectual Property Rights	Government First Grade college, Vijayanagara, Bangalore	National	13 th March 2019
14.	Elevation of Moon's cusps as in siddhāntic	International Symposium on Astral sciences in	IIT, Mumbai, Maharashtra	International	24 th to 26 th January 2019.

	texts	Asia			
15.	A Mathematical study of the manuscript – Grahalaghava sarini	National Conference on Emerging Trends in Applied Mathematics	SJB institute of Technology, Bangalore	National	4 th May 2019
16.	Academic audit and quality assurance in Higher education	National Seminar on Academic and Administration audit- A benchmark in Quality enhancement in Higher education	Government First Grade College, Vijayanagara, Bangalore	National	18 th Sept 2019
17.	Importance of equation of time in Astronomy	International Conference on Mathematics and its applications	Dept. of Mathematics, Bangalore University	International	28 th & 29 th 2020

GENERAL ARTICLES PUBLISHED

Sl. No.	Title of the Article	Published in	Level	Volume/ Issue	Date/ Year
1	Avadhana mayachowkagalu	Vijnana Sangathi, Kannada University, Hampi	National ISSN-0971-6769	samputa-18, sanchike-9, pp 18-19	July 2013
2	Sankhya mantrika Sri.D.R. Kaprekar	Shikshana Shilpi, Karnataka Jnana Vijnana Samiti	State RNI Number KARKAN/2013/55377	samputa-2, sanchike-6, pp 7-9	June 2014
3	Bharathada prasiddha ganita shastrajna Prof . Prashanta Chandra Mahalonobis	Vijnana Sangathi, Kannada University, Hampi	National ISSN-0971-6769	samputa-20, sanchike-8, pp 25-28	June 2015
4	Bharathada prasiddha ganita shastrajna Prof T.Vijaya Raghavan	Vijnana Sangathi, Kannada University, Hampi	National ISSN-0971-6769	samputa-21, sanchike-8, pp 25-26.	June 2016
5	Bharathada prasiddha ganita shastrajna Sri .D.R. Kaprekar	Vijnana Sangathi, Kannada University, Hampi	National ISSN-0971-6769	samputa-21, sanchike-10, pp 26-28.	August 2016
6	Bharathada prasiddha ganita shastrajna Prof.P.L.Bhatnagar	Vijnana Sangathi, Kannada University, Hampi	National ISSN-0971-6769	samputa-22, sanchike-3 pp 29-33.	August 2016,
7	Sankhyalokadinda tantrajnanavemba	Vijnana Sangathi, Kannada	National ISSN-0971-6769	samputa-25, sanchike-1,	August 2017

	mantrika lokadavaregu Ganitashastrada belavanige	University, Hampi.		pp 163-174.	
8	Mathematical Modelling- Applications	VIBHAVA, Mysore Science Foundation(R), Mysore.	State	Volume-01, Issue-01 pp 17-20	October- December 2017
9	Mathematical Modeling and its Applications	VIBHAVA, Mysore Science Foundation(R), Mysore.	State	Volume-01 &02, pp 48-51	Jan-June 2021

BOOKS PUBLISHED/EDITED

Sl. No.	Title of the Book	Publisher	ISSN/ ISBN No.	Year
1.	Bharathada suprasidda Ganitajnaru (Kannada)	Bhavan's Gandhi Centre of Science & Human Values, Bangalore	ISBN-978-81- 89220-43-3	Dec 2012
2.	Maya chowkagala swarasya (Kannada)	Nava Karnataka publications, Bangalore	ISBN-978-81- 8467-351-7	June 2013
3.	Bharathadalli sankhya paddhathi mattu rekha ganith (Kannada)	Nava Karnataka publications, Bangalore	ISBN-978-81- 8467-366-1	June 2013
4.	Sankhya sampannaru (Kannada)	Karnataka Rajya Vijnana Parishat, Bangalore	ISBN-978-93- 83212-25-5	August 2016
5.	Bijjadabeedada Bhaskaracharya- Ganakachakra chudamani (Kannada)	Bhavan's Gandhi Centre of Science and Human Values, Bangalore	ISBN-978-81- 89220-64-8	November 2019
6.	History and development of Mathematics in India	National Mission for Manuscripts, IGCNA, NewDelhi	ISBN-978-93- 80829-70-8	March 2022

RESEARCH PROJECTS

Sl. No.	Title of the Research Project	Position in the project	Name of the Funding agency	Year of sanction	Completed/ Ongoing
1	Mathematical Analysis of Astronomical Tables	Principal Investigator	UGC	2014	Completed
2	Comprehensive study of "Grahaghava Sarini"	Principal Investigator	Indian National Science Academy (INSA), New Delhi	2019	Completed

RESOURCE PERSON:

Sl. No.	Title of the talk	Title of the event	Organised by	Level	Date
1.	Contributions of Brahmagupta"	Indian Mathematics and Astronomy	Bharatiya Vidya Bhavan, Bangalore	State level Workshop	21 st & 22 nd January 2011
2.	Computation of Panchanga by using modern parameters	Indian Mathematics and Astronomy	Bharatiya Vidya Bhavan, Bangalore	State level Workshop	22 nd to 24 th September 2011
3.	True positions of Sun, Moon and Planets by Surya Siddhanta	Indian Mathematics and Astronomy	Marathi Vidyaan Parishad -Goa	State level Workshop	28 th & 29 th January 2012
4.	Ganitha Kshetradalli Mahileyaru	State level Science Conference For Women	KRVP, Bangalore at Mandya	State level	28 th September 2012
5.	Women Mathematicians	State level Science Conference on the occasion National year of Mathematics by Vision Group	Bharatiya Vidya Bhavan, Bangalore	State level	11 th December 2012
6.	Women Mathematicians	State level Science Conference on	SDM College, Ujire, DK	State level	15 th December 2012

		the occasion National year of Mathematics by Vision Group			
7.	Women Mathematicians	State level Science Conference on the occasion National year of Mathematics by Vision Group	BLDE College for Science & Arts, Bijapur	State level	22 nd December 2012
8.	Indian Calendar- Panchanga	Symposium	MS RAMAIAH college of Arts & Science, Blore	Symposium	26 th August 2013
9.	Indian Calendar- Panchanga	Indian Mathematics and Astronomy	Bharatiya Vidya Bhavan, Bangalore	State level Workshop	17 th Sept 2013
10.	Bhaskaracharya- II- Mathematician of 12 th century	Indian Heritage in Science-the Scientists of yore	BNES College,Blore	Dr.Raja Ramanna Memorial Science Day	24 th Sept 2013
11.	Examples from Lilavati	Mathematics and Astronomy of Bhaskaracharya- II	Nehru Planetarium Bangalore	State	13 th July 2014
12.	Bhaskaracharya II & his works	State level Workshop	MES degree college of Arts, Commerce & science	State	6 th Feb 2015
13.	Bhaskaracharya II & his works	State level Workshop jointly organized with IAPT, Kanpur(UP)	Smt.Allum Sumangalammemori al College for Women, Bellary	State	14 th Feb 2015
14.	Indian contribution to mathematics and astronomy	One day state level UGC sponsored workshop	AES National degree college Gauribidanur	state	24 th Feb 2015
15.	Applications of differential equations	Department Activity	St.Anne's First Grade College for women, Bangalore	Local	11 th March 2016
16.	Parallel aspects and phenomena in Bhaskara's Works	Two days National Conference on "Life and works of	Karnataka State Women's University, Vijayapura	National	22 nd & 23 rd August 2016

		Bhaskaracharya II”			
17.	Problems from Bhaskara’s Leelavathi	Department Activity	MES Degree College of Arts, Commerce and Science, Malleswaram, Bangalore	Local	23 rd February 2017
18.	Contributions of Indians to Mathematics	Department Activity	Sri Aurobindo College for women, Bangalore	Local	4 th March 2017
19.	Contributions of Indians to Mathematics	Department Activity	Indo Asian Academy group of Institutions, HRBR Layout Bangalore	Local	30 th March 2017
20.	Problems from Bhaskaracharya’s Lilavati	Workshop organized to benefit Mathematics teachers	Mysore Science Foundation, Mysore	State	22 nd October 2017
21.	Problems from Bhaskaracharya’s Lilavati	Workshop organized to benefit Mathematics teachers of Mandya	Mandya Science and Environment Academy, Mandya	Regional	11 th Nov 2017
22.	Indian Mathematics	UGC-Autonomous sponsored Workshop	Smt. VHD Central Institute of Home Science, Bangalore	Local	16 th March 2018
23.	Statistical Processing of AP, GP, Convergent and Divergent series	Special lecture for PG students	PG Dept. of Economics Maharani women s Arts, commerce and Management. College, Bangalore	University	15 th November 2018
24.	Statistical Processing of regression ethos, techniques and regression analysis	Special lecture for PG students	PG Dept. of Economics Maharani women s Arts, commerce and Management. College, Bangalore	University	19 th November 2018
25.	Contributions of Indians to Mathematics and wonders of Magic squares”	Inaugural function of Mathematics Club INFINITY & National Mathematics Day	Bangalore North University, Kolar	University	22 nd December 2018

		celebrations			
26.	Elevation of Moon's cusps as in siddhāntic texts	International Symposium on Astral sciences in Asia	IIT, Mumbai, Maharashtra	International	24 th to 26 th January 2019.
27.	Contributions of Indians to Mathematics	Special lecture for UG students	Government First Grade college, Kadugudi, Bangalore	Local	13-02-2019
28.	Introduction to Classical Indian mathematics and astronomy	Two days Workshop for Engineering Students	RV College of Engineering, Bangalore	Local	22 nd & 23 rd Feb 2019
29.	Development of Differential calculus and equations that changed the scientific ideas	Department activity	St. Anne's Degree College for Women, Halasuru, Bangalore	Local	25.01.2020
30.	ICT tools in Advanced teaching and Learning Management System	Department activity	IT committee in association with IQAC & dept. Computer Science, GFGCVB	Local	06.02.2020
31.	Role of IPR in Scientific research	Department activity	St. Anne's Degree College for Women, Halasuru, Bangalore	Local	02.03.2021
32.	Development of Differential calculus and equations that changed the scientific ideas	Department activity	The National College(Autonomous) Jayanagar, Bangalore-70	Local	27.08.2021
33.	Contribution of Bhaskara II	Six days online Workshop on "Introduction to Indian Mathematics and Astroomy"	Global Academy of Technology, Rajarajeshwarinagar, Bangalore	Local	05-10-2021
34.	Development of Mathematics through the centuries	Induction Programme for B.Sc Students	RPA First Grade College, Rajajinagar, Bangalore	Local	13.10.2021

FDP/RC/OP /SC ATTENDED

Sl. No	Name of the course	Place	Duration		No. of days	Name of the Institution where program is conducted
			From	to		
1.	Orientation Programme	Bangalore	01-08-2011	29-08-2011	28	ASC, Bangalore University
2.	Teacher empowerment training	Bangalore	11-03-2012	17-03-2012	07	DCE, Govt. of Karnataka
3.	Refresher course	Bangalore	27-01-2014	15-02-2014	21	ASC, Bangalore University
4.	Refresher course	Bangalore	18-01-2018	08-02-2018	21	HRDC, Bangalore University
5.	Life Skills Training Workshop	Bangalore	09-06-2019	15-06-2019	07	NIMHANS, Bangalore.
6.	Refresher course	Bangalore	18-11-2019	30-11-2019	12	HRDC, Bangalore University
7.	FDP	Online	27-07-2020	31-07-2020	06	KPRIET, Coimbatore
8.	FDP	Online	31-08-2020	04-09-2020	05	SJBIT, Bangalore
9.	FDP	Online	19-07-2021	24-07-2021	06	GFGC& PG center, Chintamani
10.	FDP	Online	09-08-2021	13-08-2021	05	Ramaiah Institute of Technology, Bangalore
11.	Short Term course(FDP)	Online	27-09-2021	04-10-2021	06	HRDC, Bangalore University
12.	FDP	Online	14-03-2022	18-03-2022	05	Presidency University, Karnataka

MEMBER OF BOARD OF STUDIES/ BOARD OF EXAMINER/ QUESTION PAPER SETTING:

Sl.No	BOS/BOE/QP setting	Bangalore University/ Institution	YEAR	Course	Title of the paper
1	QP setting	Indian Academy Degree College(Autonomous)	Nov 2016	I Sem BBA	Quantitative methods for Business-I
2	BOE Member	NMKRV College for Women (Autonomous)	2018-19	UG Mathematics	---

3	QP setting	NMKRV College for Women(Autonomous)	March 2018	VI sem B.Sc	Mathematics Paper-VIII
4	QP setting	Smt. VHD Central Institute of Home Science(Autonomous)	March 2018	VI sem B.Sc	Mathematics Paper-VIII
5	QP setting	Government Science College (Autonomous)	March 2018	VI sem B.Sc	Mathematics Paper-VII
6	QP setting	Government Science College (Autonomous)	September 2018	I sem B.Sc	Mathematics Paper-I
7	QP setting	Smt. VHD Central Institute of Home Science(Autonomous)	September 2018	I sem BCA	Discrete Mathematics
8	QP setting	NMKRV College for Women(Autonomous)	September 2019	V sem B.Sc	Mathematics Paper-VI
9	QP setting	Smt. VHD Central Institute of Home Science(Autonomous)	September 2019	V sem B.Sc	Mathematics Paper-VI
10	QP setting	Bangalore University	October 2019	III sem B.Sc	Mathematics Paper- III
11	BOE Member	NMKRV College for Women (Autonomous)	2019-20	UG Mathematics	—
12	BOE Member	Bangalore University	2020-21	UG Mathematics	-----
13	BOE Member	Bangalore University	2020-21	UG Mathematics(4 years integrated B.Sc.B.Ed)	-----
14	QP setting	KPSC	January 2021	Mathematics PG level	Paper Setter for recruitment to Group B service
15	QP setting	Smt. VHD Central Institute of Home Science(Autonomous)	July 2021	VI sem B.Sc	Mathematics Paper-VIII
16	QP setting	Indian Academy Degree College(Autonomous)	July 2021	VI sem B.Sc	Mathematics Paper-VIII
17	QP setting	Bangalore University	July 2021	VI sem 4 years integrated B.Sc.B.Ed	Mathematics Paper-VI

18	QP setting	Bangalore University	August 2021	IV sem B.Sc	Mathematics Paper- IV
19	QP setting	Maharani's Cluster University	February 2022	PG - III Sem M.Sc	Differential Geometry
20	BOE Member	Bangalore University	2021-22	UG Mathematics(4 years integrated B.Sc.B.Ed)	-----

SEMINARS/WORKSHOP/CONFERENCES ORGANIZED AS ORGANIZING SECRETARY/ CONVENER/ COORDINATOR:

Sl.No.	Title	Level	Sponsorship/ Organised by	Date
1	Two Days International webinar on " Fluid Dynamics and its Applications"	International Webinar	Department of Mathematics, GFGC, Vijayanagara, Bangalore	28.05.2020 & 29.05.2020
2	One day national level online FDP on "Innovations in Digital Education with Technology"	National	Innovation Club & PG Department of Mathematics, GFGC, Vijayanagara, Bangalore	29.05.2020
3	Two Days International webinar on "Computational Mathematics"	International Webinar	Department of Mathematics and Computer Science, GFGC, Vijayanagara, Bangalore	10.02.2021 & 11.02.2021

E-CONTENT DEVELOPED:

SL No.	Title/Module of the e-content	Name of the YouTube/ channel	Date of launching and link
1	Differential Calculus	Jnana Nidhi	19.03.2020 https://youtu.be/mr8xEvJFZTA https://youtu.be/ensHuKezKX0 https://youtu.be/6ZhW8n2jXSA

			https://youtu.be/nthJFJ-rCi0 https://youtu.be/MvhEA9_NO9I
2	Matrices	BUB Mathematics	30.11.2020 https://youtu.be/wr0eJkGZhlI https://youtu.be/hMKE_0KaesQ https://youtu.be/qqcKt-rmi_4 https://youtu.be/SUQwz-KKEQg
3	Mathematics Paper-II	BUB Mathematics	Worked as ECD to develop 56 modules
4	Mathematics Paper-IV	BUB Mathematics	Worked as ACD to develop 56 modules

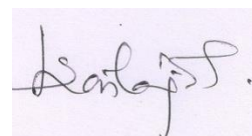
MEMBERSHIP OF PROFESSIONAL BODIES:

Sl.No.	Name of the Society	Year of Membership	Membership details
1.	KGCTA	2011	Member
2.	Bangalore University Mathematics Forum	2011	Member

I affirm that the information given above is true and correct to the best of my knowledge.

Date: 29-05-2022

Place: Bangalore



[Dr. Shailaja.M]