Dr Kanchana C.

Research Expert
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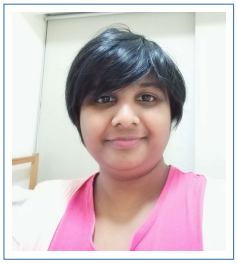
DoB: 10 July 1989



"Mathematics is the music of reason"

- James Joseph Sylvester

Publication summary

Google citation indices	**Since 2017**
citation	492
h-index	14
i10-index	18

- Since 2014 I have been doing research and published 38 papers:

SCImago Journal rank-ing	**No. papers**
Q1	19
Q2	13
Q3	2
Conference proceedings	2
Others	2

- I have delivered talk in 19 national/international conferences/webinars
- I have lectured in 11 workshops and participated in 10 workshops.
- My research work has been presented in 8 national and 15 international conferences/symposium which includes the once held at USA, Malaysia and China.
- I have presented my work at Cambridge University, Cambridge, UK.
- I have collaborated with 10 researchers from India, China, Japan and Malaysia.
- I am a reviewer for Physics of Fluids, Transport in Porous Media, Nonlinear Dynamics, Scientific Report, Journal of Thermal Analysis and Calorimeter, Heat Transfer and International Journal of Applied and Computational Mathematics journals. Reviewed 12 papers since 2017.

Awards

* "Young Scientist Award" at the 61^{st} Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM) organized by Indian Institute of Technology, Kharagpur (IITKh) with the Department of Mathematics, School of Advanced Sciences(SAS), VIT University, Vellore, India during December 11-14, 2016
* "Ph.D. Mobility student" of Institute for Mathematical Research(INSPEM), Universiti Putra Malaysia, Malaysia during February 14-24, 2017
* Rajiv Gandhi National Fellowship for Scheduled Caste Students
* University first rank in M.Sc.
* Received six gold medals in M.Sc.

Post-Doctoral Experience

Research Expert

July 2020 onwards — **Universidad de Tarapacá**, Chile.

Title — *Chaotic hydrodynamics*

Supervisor — Professor David Laroze

Postdoctoral Researcher

Jun.,2017–Jun.,2020 — **Harbin Institute of Technology, Shenzhen**, China.

Title — *Application of fluid dynamics models to study spreading dynamics of complex systems*

Supervisor — Professor Zhao Yi *F.I.M.A. (U.K.)*

Education

Doctor of Philosophy

Oct., 2013–May,2017 — **Bangalore University**, *Bangalore*, India.

Title — *Unconstrained and constrained convection of nanofluids in a rectangular enclosure*

Supervisor — Professor Pradeep G. Siddheshwar *F.I.M.A. (U.K.), F.N.A.Sc.*

Master of Science

2010–2012 — **Bangalore University, Central College Campus**, *Bangalore*, *India*.

University first rank (91.9%), Recipient of six gold medals

Bachelor of Science

2007–2010 **Government Science College**, *Bangalore*, *India*.
First class (78.9 %)

Visits abroad

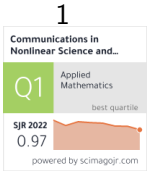
1 Guilin, China to present a paper in International Conference on "Partial Differential Equations" during July 19 - 21, 2019

2 **Cambridge University**, UK, to attend summer school on "Fluid Dynamics of Sustainability and the Environment" during 27 August - 7 September 2018

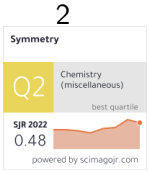
3 Institute for Mathematical Research(INSPEM), Universiti Putra Malaysia, Malaysia as a Ph.D. mobility student during February 14-24, 2017

4 Hawaii, USA to present a paper in the first "Pacific Rim Thermal Engineering Conference (PRTEC)" during March 13 - 17, 2016

Publications

1 

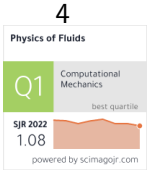
P. G. Siddheshwar, C. Kanchana and D. Laroze, 2023, "Influence of symmetric/asymmetric boundaries on axisymmetric convection in a cylindrical enclosure in the presence of a weak vertical throughflow", Communication in Nonlinear Science and Numerical Simulation (Elsevier, Impact Factor:3.9), 126, 107495.

2 

P. G. Siddheshwar, Mahesha Narayana, D. Laroze and C. Kanchana, 2023, "Brinkman–Bénard convection with rough-boundaries and third-type thermal boundary conditions", Symmetry (MDPI, Impact Factor:2.7), 15, 1506.

3 

P. G. Siddheshwar, Ruwaidiah Idris, C. Kanchana and D. Laroze, 2023, "Rayleigh–Bénard convection of water-copper and water-alumina nanofluids based on minimal- and higher-mode Lorenz models", International Journal of Bifurcation and Chaos (World Scientific, Impact Factor:2.2), 33, 2350104.

4 

Kanchana, P. G. Siddheshwar, C. and D. Laroze, 2023, "Comparison of the effect of suction-injection-combination on Rayleigh–Bénard convection in the case of asymmetric boundaries with those of symmetric ones", Physics of Fluids (AIP, Impact Factor:4.6), 35, 053615.

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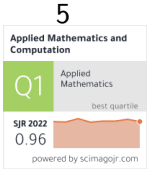

P. G. Siddheshwar, C. Kanchana and D. Laroze, 2022, "Weakly nonlinear stability analysis and study of chaotic Darcy-Bénard convection of a combusting fluid", Applied Mathematics and Computation (Elsevier, Impact Factor:4), 445, 127821.

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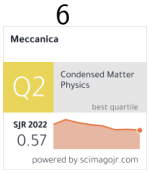

P. G. Siddheshwar, C. Kanchana, D. Laroze and Veena B. N. 2022, "Rayleigh-Bénard convection of water-aluminum and water-AA7075 nanoliquids in a vertically vibrated very-shallow cylinder", Meccanica (Springer, Impact Factor: 2.7), 57(12), 2963-2979.

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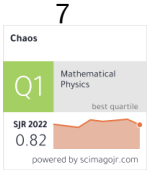

C. Kanchana, J. A. Vélez, L. M. Pérez, D. Laroze and P. G. Siddheshwar, 2022, "Influence of higher-order modes on ferro-convection", Chaos: An Interdisciplinary Journal of Nonlinear Science (American Institute of Physics, Impact Factor: 2.9), 32(8), 083129.

8

P. G. Siddheshwar, D. Laroze C. Kanchana and K. M. Lakshmi, 2022, "Two-dimensional Rayleigh-Bénard convection of viscoelastic liquids in cartesian and cylindrical coordinates - Regular and chaotic regimes", European Physical Journal Plus (Springer, Impact Factor: 3.4), 137, 922.

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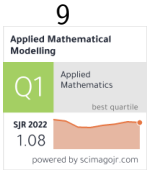

C. Kanchana, D. Laroze and P. G. Siddheshwar, 2022, "Study of primary and secondary instabilities arising due to a chemical reaction in a two-component Rayleigh-Bénard system", Applied Mathematical Modelling (Elsevier, Impact Factor:5), 111, 534-553.

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P. G. Siddheshwar, C. Kanchana, and D. Laroze, 2022, "Rayleigh-Bénard convection in a radiating fluid", ASME Journal of Heat Transfer, (American Society of Mechanical and Engineers Impact Factor: 2.1), 144, 102601.

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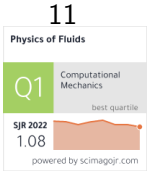

C. Kanchana, D. Laroze and P. G. Siddheshwar, 2022 "Study of Rayleigh–Bénard convection in a chemically reactive fluid using a generalized Lorenz model and the cubic–quintic Ginzburg–Landau equation", Physics of Fluids (American Institute of Physics, Impact Factor:4.6), 34, 023607

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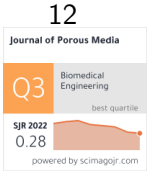

S. Shekhar, R. Ragoju and C. Kanchana, 2022 "Effects of three types of gravity modulation on rotating Rayleigh–Bénard convection in a sparsely packed porous layer in the presence of throughflow", Journal of Porous Media (Begell house, Impact Factor:2.3), 25, 79-92

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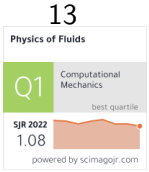

P. G. Siddheshwar, C. Kanchana and D. Laroze, 2021 "A study of Darcy–Bénard regular and chaotic convection using a new local thermal non-equilibrium formulation", Physics of Fluids (American Institute of Physics, Impact Factor:4.6), 33, 044107

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C. Kanchana, P. G. Siddheshwar, B. Shanker and D. Laroze, 2021 "Convective heat and mass transports and chaos in two-component systems: Comparison of results of physically realistic boundary conditions with those of artificial ones", Journal of Thermal Analysis and Calorimetry (Springer, Impact Factor: 4.4), 147, 3247-3266.

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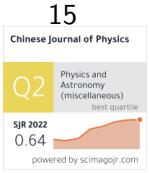

C. Kanchana, Yongqing Su and Yi Zhao, 2020 "Study of the effects of three types of time-periodic vertical oscillations on the linear and nonlinear realms of Rayleigh-Bénard convection in hybrid nanoliquids", Chinese Journal of Physics (Elsevier, Impact Factor:5), 68, 542-557.

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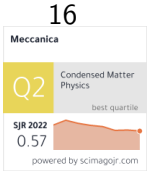

P. G. Siddheshwar, B. R. Revathi and C. Kanchana, 2020 "Effect of gravity modulation on linear, weakly-nonlinear and local-nonlinear stability analyses of stationary double-diffusive convection in a dielectric liquid" Meccanica (Springer, Impact Factor: 2.7), 55, 2003-2019.

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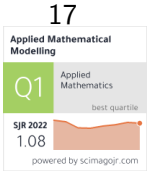

C. Kanchana, P. G. Siddheshwar and Yi Zhao,2020 "The effect of boundary conditions on the onset of chaos in Rayleigh–Bénard convection using energy-conserving Lorenz models" Applied Mathematical Modelling (Elsevier, Impact Factor: 5), 88, 349-366.

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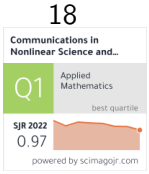

C. Kanchana, P. G. Siddheshwar and Yi Zhao,2020 "Study of primary and secondary instabilities in water and water-copper nanoliquid" Communications in Nonlinear Science and Numerical Simulation (Elsevier, Impact Factor: 3.9), 90, 105392.

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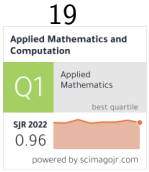

C. Kanchana, Yi Zhao and P. G. Siddheshwar 2020 'Study of Küppers-Lortz instability in homogeneous and heterogeneous nanoliquids using experimental inputs on thermophysical properties", Applied Mathematics and Computation (Elsevier, Impact Factor:4), 385, 125406.

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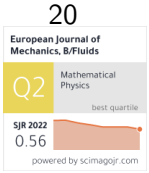


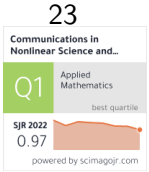
C. Kanchana, P. G. Siddheshwar and N. M. Arifin, 2020 "Brinkman-Bénard convection in water with a dilute concentration of single-walled carbon nanotubes", European Journal of Mechanics-B/Fluid (Elsevier, Impact Factor: 2.6), 83, 175-189.

21 

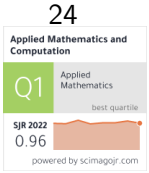
C. Kanchana, Om P. Suthar and P. G. Siddheshwar, 2020 "A study of Rayleigh-Bénard-Taylor convection in very-shallow, shallow, square and tall enclosures", International Journal of Applied and computational Mathematics (Springer), 6, 78.

22 

C. Kanchana, P. G. Siddheshwar and Yi Zhao, 2020 "Regulation of heat transfer in Rayleigh-Bénard convection in Newtonian liquids and Newtonian nanoliquids using gravity, boundary temperature and rotational modulations", Journal of Thermal Analysis and Calorimetry (Springer, Impact Factor: 4.4), 142, 1579-1600.

23 

C. Kanchana, Yongqing Su and Yi Zhao, 2020 "Regular and chaotic Rayleigh-Bénard convective motion in real Newtonian liquids", Communications in Nonlinear Science and Numerical Simulation (Elsevier, Impact Factor: 3.9), 83, 105129.

24 

P. G. Siddheshwar, B. N. Shivakumar, Yi Zhao and C. Kanchana, 2020 "Rayleigh-Bénard convection in Newtonian liquids bounded by rigid isothermal boundaries", Applied Mathematics and Computation (Elsevier, Impact Factor:4), 371, 124942.

25 

P. G. Siddheshwar, Om P. Suthar and C. Kanchana, 2019, "Finite amplitude ferro-convection and electro-convection in a rotating fluid", SN Applied Sciences (Springer, Impact Factor:2.6), 1542, 1-11.

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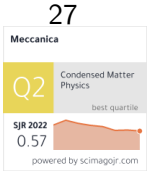
C. Kanchana, P. G. Siddheshwar and Zhao Yi, 2019 "A study of Rayleigh-Bénard convection in hybrid nanoliquids with physically realistic boundaries", The European Physical Journal Special Topic (Springer, Impact Factor: 2.8), 228, 2511-2530.

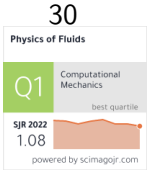
27 

P. G. Siddheshwar and C. Kanchana, 2019 "Effect of trigonometric sine, square and triangular wave-type time-periodic gravity-aligned oscillations on Rayleigh-Bénard convection in Newtonian liquids and Newtonian nanoliquids", Meccanica (Springer, Impact Factor: 2.7), 54, 451-469.

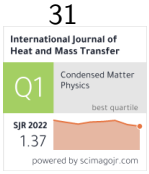
28 C. Kanchana and P. G. Siddheshwar, 2019 "Transforming analytically intractable dynamical systems with a control parameter into a tractable Ginzburg-Landau equation: few illustrations", The Nepali Mathematical Sciences Report, ISSN 2392-411X, 35, 35-44.

29 

Ragoju Ravi, C. Kanchana, G. Janardhana Reddy and Hussain Basha, 2018 "Study of Soret and Dufour effects and secondary instabilities on Rayleigh-Bénard convection in a couple stress fluid", European Physical Journal Plus (Springer, Impact Factor:3.4), 133, 1-14.

30 

C. Kanchana, Zhao Yi and P. G. Siddheshwar, 2018 "A comparative study of individual influences of suspended multiwalled carbon nanotubes and alumina nanoparticles on Rayleigh-Bénard convection in water", Physics of Fluids (American Institute of Physics, Impact Factor:4.6), 30, 084101.

31 

C. Kanchana and Zhao Yi, 2018, "Effect of internal heat generation/absorption on Rayleigh-Bénard convection in water based nanoliquids", International Journal of Heat and Mass Transfer(Elsevier, Impact Factor:5.2), 127, 1031-1047.

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P. G. Siddheshwar and C. Kanchana, 2018, "A study of unsteady, unicellular Rayleigh-Bénard convection of nanoliquids in enclosures using additional modes" Journal of Nanofluids (American Scientific Publishers, has been Scopus indexed since 2017), 7, 791-800.

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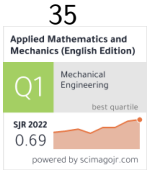
P. G. Siddheshwar and C. Kanchana, 2017, "Rayleigh-Bénard convection in nanoliquids occupying enclosures : New findings", International Journal of Mechanical Sciences (Elsevier,Impact Factor: 7.3), 131-132, 1061-1072.

34 P. G. Siddheshwar, R. K. Vanishree and C. Kanchana, 2017, "Study of Rayleigh-Bénard-Brinkman Convection Using LTNE Model and Coupled, Real Ginzburg-Landau Equations", International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering, 11, 1197 - 1204

35 

Ragoju Ravi, C. Kanchana and P. G. Siddheshwar, 2017 "Effects of second diffusing component and cross diffusion on primary and secondary thermoconvective instabilities in couple stress liquids", Applied Mathematics and Mechanics (Springer,Impact Factor: 4.4), 38, 1579-1600.

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P. G. Siddheshwar, C. Kanchana, Y. Kakimoto and A. Nakayama, 2016, "A study of Rayleigh-Bénard convection in nanoliquids using a two phase model - A theoretical answer to the nanoliquid controversy", ASME Journal of Heat Transfer, (American Society of Mechanical and Engineers Impact Factor: 2.1) 139(1), 012402-1-8.

37 P. G. Siddheshwar, C. Kanchana, Y. Kakimoto and A. Nakayama, 2016, “Study of heat transport in Newtonian water-based nanoliquids using two-phase model and Ginzburg-Landau approach", Proceedings of Vignana Bharathi Golden Jubilee Volume, Bangalore University with ISSN No. 0971-6882, 1(2), 93-110.

38 P. G. Siddheshwar and C. Kanchana, 2014, “Power series solution of Newel Whitehead Segel Equation with a Time Periodic Coefficient", Proceedings of International Conference on Emerging Trends in Computational and Applied Mathematics (ICCAM-2014), ISBN:978-93-81212-76-9, 343-347.

Collaboration

1 Dr David Laroze, Professor, Instituto de Alta Investigación, Universidad de Tarapacá, Chile

2 Dr Zhao Yi, Professor, College of Science, Harbin Institute of Technology, Shenzhen, China

3 Dr Pradeep G. Siddheshwar, Professor, Department of Mathematics, Bangalore University, Bangalore, India

4 Dr Akira Nakayama, Professor, Department of Mechanical Engineering, Shizuoka University 3-5-1 Johoku, Naka-ku, Hamamatsu, 432-8561, Japan

5 Dr Norihan Md. Arifin, Associate Professor, Institute for Mathematical Research, Universiti Putra Malaysia, UPM Serdang, 43400, Malaysia

6 Dr Y. Kakimoto, Associate Professor, Department of Mechanical Engineering, Shizuoka University 3-5-1 Johoku, Naka-ku, Hamamatsu, 432-8561, Japan

7 Dr Ragoju Ravi, Associate Professor, Department of Humanities and Sciences, National Institute of Technology Goa, Ponda, Goa, 403 401, India

8 Dr R. K. Vanishree, Associate Professor, Department of Mathematics, Maharani’s Science College for Women, Bangalore, India.

9 Dr Om P. Suthar, Assistant Professor, Department of Mathematics, Vellore Institute of Technology, Vellore, India.

10 Dr R. B. Revathi, Assistant Professor, Department of Mathematics, NITTE Meenakshi Institute of Technology, Bengaluru, India.

11 Dr Bandari Shanker, Professor, Department of Mathematics, CVR College of Engineering, India.

12 Dr Lakshmi K. M., Post Doctoral Researcher, Instituto de Alta Investigación, Universidad de Tarapacá, Chile.

Invited Talk

1 "Mathematics in real world applications" at Bahra University, Shimla, India held during the occasion of Inauguration of Mathematical Club on September, 15th 2022

2 "Understanding of chaos and hyper-chaos in fluid dynamics through the use of Lyapunov exponents" at 2nd International Conference on Applied Mathematics and Computer Sciences (ICAMCS) organized by DIT University, Dehradun, India held on October 12th - 14th, 2022

3 "Vital role of mathematics for understanding Data Science and Machine Learning", at Maharani Cluster University, Bangalore, India held on September, 3rd 2022

4 "Regular convective and chaotic motions in the Rayleigh-Bénard system", in International Conference on Recent Trends in Theoretical and Computational Mathematics (ICRTTCM), PSGR Krishnammal College for Women, Coimbatore, India held on February, 24 and 25, 2022

5 "Differential Equations: Engineering Aspects", in virtual Webinar organised by Department of Mathematics, Sapthagiri College of Engineering, Bangalore, India held on February, 4, 2022

6 "Differential Equations: Engineering point of view", in virtual Webinar organised by Centre of Excellence - Modeling of dynamical systems, CMR Institute of Technology, Bangalore, India held on January, 31, 2022

7 "The role of nanoparticles on Rayleigh-Bénard convection in Newtonian liquids", in virtual national conference on Recent Trends in Pure and Applied Mathematics organised by Department of Mathematics, Kristu Jayanti College, Bangalore, India held on November 11-12, 2021

8 "Mathematical modelling and engineering applications of nanofluids", in national webinar organized by Department of Mathematics, RV College of Engineering, Bangalore, India on June 22nd and 26th, 2021

9 "Breakdown of regular convective motion to chaotic one at a threshold Eigen value in hydrodynamics", in International conference on New Trends in Differential Equations And Applied Mathematics(ICNTDEAM), organized by Department of Mathematics, Sri Vidya Mandir Arts and Science College(Autonomous), Tamil Nadu, India during April 12-13, 2021

10 "Regular and chaotic hydrodynamics: Influence of working medium", in International science friction conference organized by Bangalore University, Bengaluru, India during December 7-9, 2020

11 "Chaotic hydrodynamics", in 5-day Faculty develop program on Recent trends on fluid dynamics organized by Sapthagiri College of Engineering in association with CMTI, Bengaluru, India during November 17-21, 2020

12 "Manifestation of Küppers-Lortz instability in rotating Rayleigh-Bénard convection in hybrid nanoliquids bounded by rigid isothermal boundaries", in International Conference on Recent Advances in Algebra, Analysis and Applications, held at Mohanlal Sukhadia University, Udaipur, Rajasthan, India during 20-22nd December, 2019

13 "Mathematical methods and its applications" one day lecture at Maharani Cluster University,Bengaluru, India on 10 December, 2019

14 "A variational method for differential equations (BVPs)" one day lecture at Bangalore University, Bengaluru, India on 14 December, 2019

15 "Effect of internal heat generation/absorption on Rayleigh-Bénard convection in water well-dispersed with nanoparticles or carbon nanotubes", Current and future directions in applied mathematics, PSGR Krishnammal college for Women, Coimbatore, India on 21st, February, 2018

16 "Heat transfer enhancement in Rayleigh-Bénard convection due to nanoliquids", Recent Development in Applied Mathematics, New Horizon College of Engineering, Bangalore, India on 6th, February, 2018

17 "A theoretical study of enhanced heat transfer in nanoliquids with heat source/sink", at Manipal University, Jaipur, Rajasthan, India on 26th, February, 2018

18 "Study of Rayleigh-Bénard convection in nanoliquids - Is it different from that in Newtonian liquids?" in an International Conference on Fluid Dynamics and its Applications held at Department of Mathematics, B.N.M. Institute of Technoloqy, Bangalore, India during July 12-14, 2017

19 "A study of Rayleigh-Bénard convection in nanoliquids using Ginzburg-Landau model derived from Lorenz model" at Institute of Mathematical Research (INSPEM), Universiti Putra Malaysia, Malaysia on 24th, February, 2017

Presentations

1 "Küppers-Lortz instability in rotating Rayleigh-Bénard convection of nanoliquids", in the 3rd International Conference on Partial Differential Equations (ICPDE) held at Grand link Hotel, Guilin, China during July 19-21, 2019

2 "Effect of different types of modulation on Rayleigh-Bénard convection in nanoliquids", in the 2nd International Conference on Emerging trends in Engineering, Sciences and Management (ICEESM) held at R.G.M. College of Engineering and Technology, Nandyal, Andhra Pradesh, India during December 21-22, 2018

3 "A study of Eckhaus instability in nanoliquids using Newell-Whitehead-Segel equation", in the 63rd Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM) (International Conference) held at Dayananda Sagar University, Bangalore, Karnataka, India during December 20-23, 2018

4 "An analytical study of primary and secondary instabilities in nanoliquids", in a National Conference on Recent Advances in Mathematical Sciences (RAMS) held at Department of Mathematics, Government Science College, Bangalore, India during February 9-10, 2017

5 "A study of Rayleigh-Bénard convection in MWCNTs using Ginzburg Landau model derived from Lorenz model", in an International Conference on Computational Mathematics and Statistics(ICCM) held at Department of Mathematics, Banasthali University , Rajasthan, India during January 24-26, 2017

6 "A study of modulated nonlinear Rayleigh-Bénard-Taylor convection in nanoliquids occupying rectangular enclosure", in an International Conference on Mathematical Modelling(ICMM) held at Don Bosco Institute of Technology, Bangalore, India during December 23-24, 2016

7 "A study of Rayleigh-Bénard convection in nanoliquids using Ginzburg Landau model derived from Lorenz model", in the award session of the 61^{st} Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM) and received *Young Scientist award* in the conference organised by the Department of Mathematics, School of Advanced Sciences (SAS) held at VIT University, Vellore, India during December 11-14, 2016

8 "A study of finite-amplitude Rayleigh-Bénard convection in nanoliquids", in IV National conference on emerging trends in fluid mechanics organized by Department of Mathematics held at Christ University, Bengaluru, India during April 29-30, 2016

9 "Study of the effect of gravity modulation on Rayleigh-Bénard convection in nanoliquids using Buongiorno Model", in the first Pacific Rim Thermal Engineering Conference (PRTEC) held at Waikoloa Beach Marriott Resort and Spa 69-275, Waikoloa Beach Drive, Waikoloa Beach, Hawaii 96738 USA during March 13-17, 2016

10 "A study of Eckhaus instability in nanoliquids using Newell-Whitehead-Segel equation", in the 60th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM) (International Conference) held at Malaviya Institute of Technology(MNIT), Jaipur, Rajasthan, India during December 16-19, 2015

11 "Effect of adiabatic lateral boundaries and inclination on Rayleigh-Bénard convection in nanoliquid", in the 59th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM) (International Conference) held at Alliance University, Bangalore, Karnataka, India during December 17 -21, 2014

12 "Power series solution of Newell-Whitehead-Segel equation with a time periodic coefficient", in the International Conference on Emerging Trends in Computational and Applied Mathematics (ICCAM) Organized by Department of Applied Science held at ITM University, Gurgaon, Haryana, India during June 2-4, 2014

13 "Convergent power series solution of Abel equation of first and second kinds", in the National Conference, jointly organized by Bharata Ganita Parisad and the Department of Mathematics and Astronomy, University of Lucknow, Lucknow, Uttar Pradesh, India during November 29-December 1, 2013

14 “Convergent power series solution of Riccati and Aris equations" in the National Conference MMEA, organised by Department of Mathematics held at Government Sri Krishnarajendra Silver Jubilee Technological Institute (SKSJT), K. R. Circle, Bengaluru -560001, Karnataka, India on October 25-26, 2013

Workshops and symposiums

1 Participated in a mini workshop on "computational physics" held at Universidad de Tarapaca, Arica, Chile on 26th November, 2022

2 Delivered a series of talks in one week workshop on "Mathematics and its applications" held at University of Kashmir, Jammu and Kashmir, India during 16-22 September, 2022

3 Delivered a series of talks in a Faculty Development Program (FDP) on "Hands on training in modelling fluid flow problems - HTMF" held at VIT, Vellore, India during 20-26 June, 2022

4 Delivered a talk in a 3-day workshop on "Important of methodology for a good Research paper" held at APS College of Arts and Science, Bangalore, India during 17-19 June, 2021

5 Delivered a talk in a 2-day workshop on "Methods for nonlinear dynamical systems and chaos" held at MNIT Jaipur, India during 23-27 December, 2019

6 Delivered a talk in a 2-day workshop on "Mathematical methods for fluid dynamics problems" held at CVR College of Engineering, Hyderabad, India during 13-14 December, 2019

7 Participated in JFM symposium “From fundamentals to applied fluid mechanics" held at Southern University of Science and Technology, Shenzhen, China during November 5-6, 2018

8 Delivered a talk in a 2-day workshop on “Science Academies Lecture workshop on ordinary and partial differential equations" held at Bishop Cotton Women’s Christian College, India during September 23- 24, 2016

9 Participated in a workshop on “Mathematical modelling and its application" organized by Department of Mathematics, NIT, Meghalaya, Shillong, India during August 19-20, 2016

10 Participated in a 10-day workshop on “Computational Mathematics and Finite Element Method" delivered by Professor Karan S. Surana from university of Kansas, Kansas held at National Institute of Technology Goa, Farmagudi, Ponda, Goa during July 1-11, 2016

11 Participated in a one-day workshop on “New curriculum in engineering Mathematics with Scilab and Maxima" as a resource person held at PES Institute of Technology, Bengaluru, India on 8th June, 2016

12 Participated in a one-day workshop on “An elementary introduction to Free Open Source Software (FOSS) Scilab and Maxima" as a resource person held at Christ University, Bengaluru, India on 13th November, 2015

13 Participated in a two-day workshop on “Mathematical practicals (with FOSS tools)" as a resource person held at Maharani Lakshmi Ammani College (MLAC), Bengaluru, India during January 9-10, 2015

14 Participated in a two-day workshop on “New curriculum in engineering Mathematics with Scilab and Maxima" as a resource person held at Jyothi Institute of Technology (JIT), Bengaluru during December 26-27, 2014

15 Participated in a two-week International workshop on “Computational fluid dynamics" organized by the Department of Mathematics, BMS College of Engineering, Bengaluru, India during June 23-July 5, 2014

16 Participated in a“Author workshop" jointly organized by Visvesvaraya Technological University, Belgaum and Springer held at Central College Campus, Bangalore University, Bengaluru, India on February 13, 2014

17 Participated in a Lecture Workshop on “Mathematical modelling using differential equations" organized by Department of Mathematics, Maharani’s Science College for women in association with Central College Mathematical Society, Bangalore University, Bengaluru, India during March 6-7, 2014

18 Participated in a Lecture Workshop on “Conference on Differential Geometry" held at the Department of Mathematics, Bangalore University, Central College Campus, Bengaluru, India on 25th July 2013

19 Participated in a National level workshop on Scilab sponsored by UGC CPE held at the Department of Mathematics, Government Science College, Bengaluru -560001, India during September 8-9, 2011

20 Participated in a State Level Workshop on “Exotic Research work in physics (ERWP)" held at Department of Physics , Government Science College, Bengaluru - 56001, India on March 30th , 2011

21 Participated in a One-day seminar on “Nano technology" organized by Department of Chemistry, Government Science College, Bengaluru, associated with Karnataka Rajya Vignana Parishat (KRVP), held on April 10th 2010

Teaching Experience

2013 – 2016 Taught Latex (a document preparation system) for M.Sc. (4 hrs/week) at Bangalore University, Bengaluru

July 2012 – Nov 2015 Taught Scilab and Maxima (Open source softwares) for M.Sc. (2hrs/week) at Bangalore University, Bengaluru

2012–2014 B.E. courses for four semesters (2hrs/week) at University Visveshwaraya College of Engineering (UVCE), Bengaluru 560001, India

2012 Worked as a guest faculty in Mathematics at Venkateshwara Polytechnique Jungle Palya, Bannerughatta Road Bengaluru 560083, India

Computer Skills

Basic C, C++, *java*, HTML

Intermediate SCILAB, *Maxima*, *Python*, *Mathematica*, *Matlab*, LaTeX, Microsoft Windows

Membership

2013 Life member of the Indian Society of Theoretical and Applied Mechanics (ISTAM)

2016 Member of the Global Initiative of Academic Network (GIAN)

References

1 **Professor Dr. David Laroze**
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I affirm that the information given above is true and correct to the best of my knowledge.

Date : December 27, 2023
Place : Arica, Chile